

TARIFF ORDER

Determination of Tariff for FY 2017-18, Annual Performance Review of FY 2016-17 & True-up of FY 2015-16

Petition No. 229/2017

For

Chandigarh Electricity Department (CED)

04th May 2017

संयुक्त विद्युत विनियामक आयोग (गोवा राज्य और संघ शासित प्रदेशों के लिए) JOINT ELECTRICITY REGULATORY COMMISSION

For the State of Goa and Union Territories,
2 तल, वाणिज्य निकुंज, एचएसआईआईडीसी कार्यालय परिसर, उद्योग विहार फेज-V,गुडगांव - 122016 हरियाणा
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Before the Joint Electricity Regulatory Commission For the State of Goa and Union Territories, Gurgaon

QUORUM

Sh. M. K. Goel (Chairperson) Smt. Neerja Mathur (Member)

Petition No. 229/2017

In the matter of

Approval for the True-up of FY 2015-16, Annual Performance Review of FY 2016-17 and Aggregate Revenue Requirement (ARR) and Tariff proposal for the FY 2017-18.

And in the matter of

Chandigarh Electricity Department......Petitioner

ORDER

Dated: 04th May 2017

- a. This Order is passed in respect of the Petition filed by the Chandigarh Electricity Department (CED) for approval for the True-up of the FY 2015-16, Annual Performance Review of the FY 2016-17 and Aggregate Revenue Requirement (ARR) and the Tariff proposal for the FY 2017-18.
- b. After receiving the Petition, the Commission scrutinised its contents and requisitioned further information/clarifications on the data gaps observed in the Petition to take a prudent view of the Petition. The Commission also held a Technical Validation Session to determine its sufficiency. Further, suggestions /comments/objections were invited from the public/stakeholders. Public hearing was held and the stakeholders/Public were heard. The schedule of activities performed in the course of this quasi-judicial process are given below:

| Particulars | Details |
|------------------------------|--------------------------------|
| Date of Admission | 3 rd February 2017 |
| Technical Validation Session | 13 th February 2017 |
| Public Hearing | 16 th March 2017 |

c. The approved tariff for the FY 2017-18, as detailed in the Chapter "Tariff Schedule," shall come into force from 1st April 2017 and shall remain valid till further Orders of the Commission.

- d. The licensee shall publish the revised Tariff Schedule and the salient features of tariff within one week in three daily newspapers in the respective local languages of the region, besides English, having wide circulation in their respective areas of supply. The licensee shall also publish a booklet in Hindi, English and the local language containing all the details of tariff and its applicability for the benefit of consumers and shall be made available for sale to the public at a nominal price.
- e. Ordered as above, read with the attached document giving detailed reasons, grounds and conditions.

-Sd-**नीरजा माथुर** (सदस्य) -Sd-एम. के. गोयल (अध्यक्ष)

संयुक्त विद्युत विनियामक आयोग (गोवा और केंद्र शासित प्रदेशों के लिए)

स्थान : गुडगाँव

दिनांक: 04 मई 2017

(Certified Copy) कीर्ति तिवारी, सचिव

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List of Abbreviations

| Abbreviation | | Full Form |
|------------------|---|--|
| A&G | : | Administrative & General |
| 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 /IEDC | | Joint Electricity Regulatory Commission for the State of Goa and Union |
| Commission/JERC | : | Territories |
| DISCOM/CED | : | Electricity Department of UT of Chandigarh |
| CPSU | : | Central Public Sector Undertaking |
| D/C | : | Double Circuit |
| EA 2003 | : | The Electricity Act, 2003 |
| FAR | : | Fixed Assets Register |
| FC | : | Fixed Charges |
| FPPCA | : | Fuel & Power Purchase Cost Adjustment |
| FY | : | Financial Year |
| GFA | : | Gross Fixed Assets |
| НР | : | Horse Power |
| HT | : | High Tension |
| IPDS | : | Integrated Power Development Scheme |
| IEDC | | Joint Electricity Regulatory Commission for the state of Goa and Union |
| JERC | : | Territories |
| KVA | : | Kilo Volt Ampere |
| KWh | : | Kilo Watt Hour |
| LPS | : | Late Payment Surcharge |
| LT | : | Low Tension |
| LU | : | Lakh Units |
| MU | : | Million Unit |
| MW | : | Mega Watt |
| MYT | : | Multi Year Tariff |
| NAPS | : | Narora Atomic Power Station |
| NDS | : | Non-Domestic Supply |
| NESCL | : | NTPC Electric Supply Company Ltd. |
| NFA | : | Net Fixed Assets |
| NHPC | : | NHPC Limited |
| NPCIL | : | Nuclear Corporation of India Limited |

True-up of FY 16, Review of FY 17 and Retail Supply Tariff for FY 18

| Abbreviation | | Full Form |
|-------------------|---|--|
| NTPC | : | NTPC Limited |
| NTP/Tariff Policy | : | National Tariff Policy |
| NSPCL | : | NTPC-SAIL Power Corporation Limited |
| O/H | : | Over head |
| 0&M | : | Operation & Maintenance |
| PGCIL | : | Power Grid Corporation of India Ltd. |
| PLF | : | Plant Load Factor |
| PX | : | Power Exchange |
| R-APDRP | : | Restructured Accelerated Power Development and Reforms Programme |
| REC | : | Renewable Energy Certificate |
| RoE | : | Return on Equity |
| RPO | : | Renewable Purchase Obligation |
| R&M | : | Repair & Maintenance |
| 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 |
| TVS | : | Technical Validation Session |
| T&D | : | Transmission & Distribution |
| UI | : | Unscheduled Interchange |
| VAR | : | Volt Ampere Reactive |
| VC | : | Variable Charges |

Chapter 1. Introduction

1.1. About JERC

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 02nd May 2005. Later, with the joining of the State of Goa, the Commission came to be known as "Joint Electricity Regulatory Commission for the State of Goa and Union Territories" as notified on 30th May 2008. 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 September 2008. The office of the Commission is located in Gurgaon, Haryana.

1.2. Electricity Regulatory Process in the Electricity Department, Chandigarh

In earlier years, the Chandigarh Electricity Department (CED) had submitted the Tariff and Business Plan Petitions on which the Commission had subsequently issued the following Orders:

| Table 1.1: Details of Tariff and related Petitions submitted by the Petitioner so far & Orders issued |
|---|
| by JERC |

| Sr. No. | For the FY | Filing date | Date of Tariff Order |
|---------|---|---------------------------------|---------------------------------|
| 1. | 2011-12 | 13 th January, 2011 | 16 th July, 2011 |
| 2. | 2012-13 | 30 th December, 2011 | 07 th May, 2012 |
| 3. | 2013-14 | 15 th February, 2013 | 15 th April, 2013 |
| 4. | 2014-15 | 20 th January, 2014 | 11 th April, 2014 |
| 5. | 2015-16 | 10 th March, 2015 | 10 th April, 2015 |
| 6. | Business Plan Order for the 1 st MYT Control Period | 17 th August, 2015 | 28 th December, 2015 |
| 7. | MYT Order for the 1st MYT Control Period | 29 th February 2016 | 28 th April, 2016 |

1.3. Filing and Admission of the Present Petition

The present Petition was filed vide letter dated 18^{th} January 2017, received at the Commission's office on 19^{th} January 2017, admitted on 3^{rd} February 2017 and numbered as Petition No. 229/2017.

1.4. 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 the Secretariat of the Commission responsible for carrying out the technical due diligence and validation of data of the Petitions filed by the Chandigarh Electricity Department (CED), obtaining and analysing information/clarifications received from the Chandigarh Electricity Department (CED), and submitting relevant issues for consideration of the Commission.

The staff held discussions with the Petitioner. Commission's obtained information/clarifications wherever required, and carried out technical validation of the information provided by the Petitioner. The Commission's staff interacted regularly with the Petitioner to seek clarifications and justification on various issues essential for analysis of the Tariff Petition and conducted a Technical Validation Session (TVS) with the Petitioner during which discrepancies in the Tariff Petition were pointed out and additional information sought by the Commission was informed. Relevant dates, including dates of correspondence and interaction with the Petitioner are as follows:

| S.No. | Date | Subject | |
|-------|--|--|--|
| 1. | 22 nd December 2016 | Petitioner's request for condonation of delay in filing Petition | |
| 2. | 10 th January 2017 | Commission's approval for petition submission by 15th January 2017 | |
| 3. | 19 th January 2017 | Receipt of Petition | |
| 4. | 3 rd February 2017 | Admission of the Petition | |
| 5. | 6 th February 2017 | Commission pointed out shortfall in petition fees | |
| 6. | 10 th February 2017 | Data gaps forwarded by the Commission | |
| 7. | 13 rd February 2017 | Technical Validation Session | |
| 8. | 28 th February 2017 | Deficient Petition fees deposited by the Petitioner | |
| 9. | 14 th March 2017 | Response to data gaps by the Petitioner | |
| 10. | 20 th March 2017 | CED Comments on issues raised by the Stakeholders | |
| 11. | 22 nd March 2017 Commission sought response to issues raised by the Stakeholders during Public Hearing verbally | | |
| 12. | 6 th April 2017 | Statutory Audit Report of FY 2015-16 received from Petitioner | |
| 13. | 7 th April 2017 | Audited Balance sheet of FY 2015-16 received from Petitioner | |

Table 1.2: List of interactions with the Petitioner

1.5. Public Hearing process

The Commission directed the Petitioner to publish a Summary of the Tariff Petition in an abridged form to ensure meaningful public participation. Public Notices were published by the Petitioner for inviting suggestions/objections from the stakeholders on the Tariff Petition which are taken into consideration for finalization of the Tariff Petition.

The Public Notices published by the Petitioner are as follows:

Sr. **Date** Name of newspaper Place of circulation No. 8th February 2017 1. Amar Ujala Chandigarh 2. 8th February 2017 Chandigarh Ajit 3. 8th February 2017 **Hindustan Times** Chandigarh 7th March 2017 4. Amar Ujala Chandigarh 7th March 2017 5. Ajit Chandigarh 7th March 2017 6. **Hindustan Times** Chandigarh

Table 1.3: Details of Public Notices published by the Petitioner

The Petitioner also uploaded the Petition on its website www.chdengineering.gov.in and invited objections and suggestions on the Petition. Interested parties/stakeholders were requested to file their suggestions/objections on the Petition to the Commission with a copy to the Petitioner on or before 9th March 2017. Copies of the public notices published by the Petitioner are attached as **Annexure 1** to this Order. The Commission received many suggestions on the Petition, on which the department responded in writing to the stakeholders, with a copy to the Commission.

1.6. Notice for Public Hearing

The Commission also published Public Notices in the leading newspapers as tabled below, giving due intimation to the stakeholders, consumers, and the public at large about the Public Hearing to be conducted by the Commission on 16th March 2017 from 10 AM onwards at the Auditorium Hall, Government Museum and Art Gallery, Sector 10-C, Jan Marg, UT Chandigarh:

| Sr. No. | Date | Name of newspaper | Place of circulation |
|------------|-----------------------------|-------------------|----------------------|
| 1. | 1st March 2017 | Ajit | Chandigarh |
| 2. | 1st March 2017 | Dainik Bhaskar | Chandigarh |
| 3. | 1st March 2017 | Dainik Jagaran | Chandigarh |
| 4. | 1st March 2017 | The Tribune | Chandigarh |
| 5. | 11 th March 2017 | Ajit | Chandigarh |
| 6. | 11 th March 2017 | Dainik Bhaskar | Chandigarh |
| 7. | 11 th March 2017 | The Tribune | Chandigarh |

Table 1.4: Details of Public Notices published by the Commission

Copies of the Public Notices published by the Commission for intimation of the Public Hearing are attached as **Annexure 2** to this Order. This notice was uploaded on Commission's website also.

The major issues raised/indicated during the Public Hearing, along with comments/replies of the utility and views of the Commission thereon, have been summarised in Chapter 2 of this Order.

1.7. Organisation of the Order

This Order is organised into the following chapters:

- **❖ Chapter 1**: Background and brief description of the regulatory process undertaken by the Commission.
- **Chapter 2:** Various suggestions and objections raised by the Stakeholders in writing, as well as during the Public Hearing before the Commission.
- **Chapter 3:** Impact of Change in approach Approval of Gross Fixed Asset
- Chapter 4: True-up for the FY 2015-16.
- **❖ Chapter 5:** Review of FY 2016-17.
- Chapter 6: Approval of various Aggregate Revenue Requirement (ARR) components for the FY 2017-18.
- Chapter 7: Open Access Charges for the FY 2017-18
- **Chapter 8:** Approach of the Commission on tariff principles and design.
- **❖ Chapter 9:** Tariff schedule of the FY 2017-18 and Schedule of Services and Charges approved by the Commission
- **Chapter 10:** Directives of the Commission to Chandigarh Electricity Department.

Chapter 2. Summary of Suggestions/Objections received, Response from the Petitioner and the Commission's Views

2.1. Regulatory Process

On admitting the Petition, the Commission directed the Petitioner to make copies of the Petition available to the public, upload the Petition on the website and also publish in the newspapers in abridged form in the given format duly inviting comments/objections from the public as per the provisions of the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 (herein referred to as Tariff Regulations 2009) and JERC (Multiyear Distribution Tariff) Regulations 2014 (herein referred to as MYT Regulations 2014) as amended from time to time.

The Public Hearing was held on 16th March 2017 at Chandigarh. During the Public Hearing, some of the stakeholders who had submitted their comments in writing also presented their views in person before the Commission. Other participants from the general public, who had not submitted written objections earlier, were also given an equal opportunity to present their views/suggestions in respect of the Petition.

The list of the Stakeholders is attached as **Annexure 3** to this Order.

2.2. Suggestions /Objections, Response of the Petitioner and Commission's Comments

The Commission is appreciative of the efforts of various stakeholders in providing their suggestions/comments/observations to make the Electricity Distribution Sector responsive and efficient. The Commission has noted the concerns of all stakeholders and has tried to address them to the extent possible in the tariff design and directive chapters. The submissions of the Stakeholders, response of the Petitioner and views of the Commission are summarized below:

2.2.1. Interest on Consumer Security Deposit

Stakeholder's Comment:

CED has held consumer's security deposit of Rs. 141.67 crore and booked an interest of Rs. 10.79 crore on it. This amount should not be allowed as expense as it is the amount earned by the CED on the deposits made by the consumers. CED is also paying 14.05% on the amount borrowed by them for Working Capital and hence the same should be paid as interest on consumers' security deposit.

Petitioner's Response:

The Commission adjusts the available security deposit while approving the Working Capital requirement. Thus, this amount on interest on security deposit should be allowed as expense item in ARR.

The interest is paid to the consumers at the prevailing bank rate, which is currently 8.50% and the same is adjusted from Working Capital on which 14.45% interest is paid. Hence there is an interest rate benefit of 5.95% to the consumers.

Commission's View:

The consumer security deposit amount is considered as the amount available with the Petitioner to meet its Working Capital requirement and is accordingly adjusted by the Commission while computing the net Working Capital requirements for the year.

Further, the Commission has considered the treatment of amount of the consumer Security Deposit and interest thereon as per the applicable provisions of the JERC (Electricity Supply Code) Regulations, 2010.

2.2.2. Delay in Filing of Petition

Stakeholder's Comment:

There has been considerable delay in filing of the Petition every year. The Petition is to be filed on or before 30th November of the respective year. However, this year JERC extended the date of submission of Petition till 15th January 2017 on the request of the CED. Even then CED missed the deadline and submitted the Petition to the Commission on 18th January 2017.

Petitioner's Response:

The delay of 3 days in filing the Petition was due to the Municipal Corporation elections in the Chandigarh.

Commission's View:

The Petitioner is directed to file the subsequent tariff Petitions before 30th November of the respective year as per the applicable provisions of the MYT Regulations 2014.

2.2.3. Introduction of Pre-paid Meters

Stakeholder's Comment:

Despite the directions given by the JERC, the consumers have still not been provided an option to install the pre-paid meters and to seek refund of their security. Installing Pre-paid Meters will lead to advance payment being received by the Electricity Department and also reduction in the bad debts. CED can also give advance payment to the suppliers and can get rebate for the same. However, some stakeholders also submitted that since

now smart meters are being installed, exercise on installation of pre-paid meters should be halted.

Petitioner's Response:

Pre-paid metering is an inbuilt feature of the smart meters. A pilot project for installation of 30,000 smart meters with allied infrastructure has already been awarded. Further, the DPR for the Smart Grid for Chandigarh has already been approved by the Distribution Reforms Committee and has been forwarded to the Ministry of Power on 02^{nd} December 2016.

Commission's View:

The Petitioner is advised to expedite the process of procurement and installation of smart meters. The Commission directs the Petitioner to implement the mechanism of advance payment rebate without further delay under intimation to the Commission.

2.2.4. Prompt Payment Rebate

Stakeholder's Comment:

CED has not implemented provision for rebate for prompt payment despite the directions given by JERC. CED should also do a publicity exercise for the same.

Petitioner's Response:

The prompt payment rebate has already been started from December 2016 and is reflecting in the electricity bill of consumers.

Commission's View:

The Petitioner is advised to take appropriate actions for wider publicity of the benefits available to the consumers on this account as this will also help them in early recovery and ensure liquidity.

2.2.5. Introduction of separate Single Point Supply Sub-category

Stakeholder's Comment:

The Commission had approved the Single Point Supply (SPS) under the DS category for JJ clusters/unauthorized colonies/ slum dwellers in the Tariff Order of the FY 2014-15. However, tariff for this sub category was not demanded by the CED in subsequent Tariff Orders.

CED is not supplying power to the houses constructed outside Lal Dora on agricultural land although they have a copy of registered sales deed of the land. Similarly CED is not releasing power connection to JJ Clusters despite them having legal documents and applying for the electrical connections.

Further, now the Petitioner has proposed to release such connections under a leading person/contractor. These leading persons have no ownership of land as mandated in the supply code and they charge bill at a higher rate than that is determined by the JERC. Many such leading persons are defaulters of CED. There should be no change in category of consumer conditions of supply or applicable tariff for such consumers.

The Stakeholders also submitted that the CED has completely failed in removing the unauthorized kundi connections. There are massive kundi connections in the colonies spread in and around Chandigarh. The burden of theft through kundi connection is transferred to law abiding citizens. JERC should direct CED to take strict measures to curb this nuisance to save the losses.

Petitioner's Response:

JERC in its MYT Order dated 28th April 2016 has not allowed continuation of SPS category for residents of JJ Clusters/unauthorized colonies/Residents outside Lal Dora. Due to absence of SPS category CED can't supply power connection to such residents as they don't have occupancy certification for the premises under question. Further CED also can't lay distribution system for such consumers as they can be removed anytime. The CED is regularly removing kundi connection but they resurface again and thus has become a law and Order problem.

Hence JERC should approve SPS for outside Lal Dora and permits CED to use leading person to collect bill amount.

Commission's View:

As per clause 14 of Electricity Act 2003,

"Provided also that in a case where a distribution licensee proposes to undertake distribution of electricity for a specified area within his area of supply through another person, that person shall not be required to obtain any separate licence from the concerned State Commission and such distribution licensee shall be responsible for distribution of electricity in his area of supply."

Therefore even if the Petitioner decides to supply electricity through another person, the responsibility for distribution of electricity still lies with the Petitioner. Further, the Electricity Act does not envisage changes in terms and conditions of supply due to such arrangements opted by the Distribution Licensee. The Commission also suggests that adequate assistance of law enforcement agency should be taken to curb the kundi connection as such activities lead to higher T&D Losses. The Commission has already fixed the target T&D Losses for the Petitioner and the impact of any additional losses is to be borne by the Petitioner as per the provisions of the MYT Regulations 2014

This issue of tariff for separate SPS category has been dealt in detail in the "Tariff Principles and Design" Chapter.

2.2.6. Tariff Recovery at Domestic Category

Stakeholder's Comment:

As per Order of the CGRF dated 27th July 2012, Domestic Misuse Category (DMC) had to be converted to Non Residential Supply (NRS) category. However, CED has converted DMC consumers to Domestic category consumers and they are being charged tariff accordingly, though such consumers are using power for commercial purposes. Similarly Temporary category consumers are being charged tariff as per NRS Category. This wrong categorization is leading to huge revenue loss to the department.

It is also submitted that DMC was being charged 3-4 years back. Many commercial institutes are functioning from upper floor of Shop Cum Flats (SCF) and are being charged domestic tariff whereas the use is not domestic. Similarly, the commercial activities like beauty parlors, tuition centers etc. should be charged tariff for commercial category. Even many persons use domestic supply to charge batteries which are used either for portable lightening purpose in night-time by various vendors or for ice-cream stalls having battery operated fridge. Strict action should be taken by CED against such persons and heavy fines should be levied on them.

Petitioner's Response:

The conversion of DMC consumers to domestic consumers has been done as per the JERC Order dated 15th April 2013. As per the said Order if anybody is misusing power in the domestic category, the connection would not be converted into NRS category automatically. For the same, statutory requirements like No Objection Certificate (NoC) from the Pollution Board would be required to conduct commercial activities from residential houses.

Commission's View:

The treatment of such type of domestic premises is already detailed in notes to "Applicability of Domestic Supply" in the "Tariff Schedule" which is reiterated below:

"NOTES:

- a. Where a portion of the dwelling is used for the mixed load purposes the connection shall be billed for the purpose for which the tariffs is higher.
- b. Hostels shall be considered as one unit and billed under domestic supply tariff without compounding.
- c. Private education institutions not recognized by the Chandigarh Administration shall be billed under Non Domestic Tariff.
- d. STD/PCO, shops attached to Religious Institutions will be billed under Non- Domestic Tariff.
- e. 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."

The Commission directs the Petitioner to ensure that the enforcement team should be more vigilant so that consumers don't use power under domestic category for commercial purpose.

2.2.7. Manpower Requirement

Stakeholder's Comment:

CED should inform the status of additional manpower deployment as per the study carried out according to the direction of the JERC. There is no action on the proposal since last 2-3 years.

Petitioner's Response:

The case regarding manpower study as recommended by JERC in its Order dated 29th December 2014 has been sent to Ministry of Power for final approval and the same has been sent to the Ministry of Finance for its concurrence. In Order to properly execute works of the licensee, 50 Lower Divisional Clerks, 23 Linemen and 147 Assistant Line Men (ALM) have been recruited on outsourcing basis. Further selection of 46 ALM has been completed and they will report to duty on 01st April 2017. The selection of 23 ALM is under process.

Commission's View:

Directive is being issued to the Petitioner in this regard as detailed in Para 10.1.6 of this Order.

2.2.8. Tariff for Solar Projects

Stakeholder's Comment:

There is a large difference in the electricity Tariff on the net surplus exported units to the grid on net metering basis, and the Tariff applicable on Gross Metering. CED should evolve an innovative approach to promote the Solar energy by reducing fixed connection charges based on maximum fixed load.

Petitioner's Response:

Roof Top Solar Plants don't generate power round the clock and hence CED is supposed to supply power as per the sanctioned load when there is no/less generation by the solar plants. Further the Commission can decide on Tariff Policy for solar plants.

Commission's View:

The formulation of Tariff Policy for solar plants is not the prerogative of the Commission. However, the Commission suggests to the Stakeholders to formally submit the specific issues and discrepancies in the existing Regulations/Orders of the Commission for similar modification.

2.2.9. Renewable Energy

Stakeholder's Comment:

The department should collaborate with Renewable Energy Department to set-up solar or other renewable power plants on its own rather than asking individual consumers to install renewable plants. This will also reduce dependence of the UT on other states for power purchase.

Petitioner's Response:

JERC has determined the RPO for CED as per Order dated 28th April 2016 which is to be complied by CED. CREST has been nominated as the nodal agency for installation of renewable plants. Till January 2017 a total of 183 Solar Roof-top projects with cumulative installed capacity of 8.38 MW have been commissioned. Further CED will also buy power from solid waste project as per tariff approved by JERC if the Municipal Corporation of Chandigarh sets-up the same.

Commission's View:

The Petitioner is directed to continue its efforts to promote renewable energy and also to hold seminars/workshops to promote and create more awareness of solar energy in association with the CREST.

2.2.10.Completion of Capital Works

Stakeholder's Comment:

Information regarding target date of completion of various capital projects viz new substations and transmission/distribution lines, the gestation period of ongoing contracts etc. should be identified and accountability should be fixed in case of delays for appropriate action.

Petitioner's Response:

The status of ongoing 66 /11 kV capital works has been submitted to the Commission.

Commission's View:

The Commission notes the submission of the Petitioner and directs the Petitioner to undertake necessary actions so as to ensure that the works approved in the Business Plan Order are completed at the earliest.

2.2.11.Strengthening of CGRF

Stakeholder's Comment:

Action for removal of Chairman, CGRF was initiated in August 2015 on the basis of the enquiry done by the Advisor Judicial, JERC. However he is still retaining his post. Moreover the office of CGRF was supposed to be shifted to a separate building as per Orders of JERC in 2015. However the shifting has still not happened and the new office is still vacant.

Petitioner's Response:

The matter of removal of Chairman, CGRF is under consideration of the competent disciplinary authority of Chandigarh Administration. The CGRF Building in Sector 19 has been renovated and tender for providing furniture/curtains/AC etc. has been floated. After providing necessary infrastructure, the office of CGRF will be shifted to the new building.

Commission's View:

Directive is being issued to the Petitioner in this regard as detailed in Para 10.1.9 of this Order.

2.2.12.Non Utilization of 66 kV Transformer at Sector 34 Grid Sub-Station

Stakeholder's Comment:

Works of laying 66 kV underground cable from Sector 32 Grid Sub-station to Sector 34 Grid Sub-station as approved by the JERC in the Business Plan for the FY 2015-16 to FY 2018-19 has still not been completed. CED should fix responsibility for delay in completion of work and should make the name public. Further CED should inform target date of commissioning of the said grid sub-station.

Petitioner's Response:

The work of laying 66 kV cable from Sector 32 Grid Sub-station to Sector 34 Grid Sub-station has already been allotted to M/s REC Ltd. on $23^{\rm rd}$ November 2016. The survey work has already been completed by the firm.

Commission's View:

The Commission observes that the said work was slated to get completed by FY 2016-17 but is still under execution. The Petitioner is directed to undertake necessary/appropriate actions so as to ensure that the works approved in the Business Plan Order are completed as per the schedule committed.

2.2.13.Free electricity to employees

Stakeholder's Comment:

The staff of CED should be compensated in cash/salary instead of free/concessional power. However UT Powermen Union submitted that free-electricity is a type of concession and can't be subjected to income-tax. If the same is paid in the form of cash it will be subjected to Income-Tax. If the concession is not restored, employees of the department would be demoralized.

Petitioner's Response:

CED has proposed the free electricity concession to its employees in line with the already adopted circular of PSEB dated 7^{th} January 2011. The cost to be incurred on account of free electricity is proposed to be merged with the employee cost. However, the directions as passed in the Tariff Order for the FY 2016-17 in this regard by the Commission will be followed.

Commission's View:

As per the provisions of Electricity Act 2003 and regulations framed hereunder, the utility has to charge the Tariff approved by the Commission. Further, as per section 65 of the Electricity Act, 2003 (Provision of subsidy by State Government):

"If the State Government requires the grant of any subsidy to any consumer or class of consumers in the tariff determined by the State Commission under section 62, the State Government shall, notwithstanding any direction which may be given under section 108, pay, in advance and in such manner as may be specified, the amount to compensate the person affected by the grant of subsidy in the manner the State Commission may direct, as a condition for the license or any other person concerned to implement the subsidy provided for by the State Government."

Accordingly, the amount applicable for provision of free electricity to the employees as per the circular needs to be provided by the Chandigarh Administration only and the same cannot be recovered from Tariff.

2.2.14. Revenue Gap of the Previous Years

Stakeholder's Comment:

Revenue Gap of Rs 208.17 crore pertaining to previous years has been accumulated due to inefficiency of the CED and hence the same should not be passed on to the consumers. The same should be met from alternative sources like government subsidy.

Petitioner's Response:

JERC had advised the CED to approach the government to provide budgetary support to meet the regulatory gap of Rs 208.17 crore. There is no provision in the rules under which the government can provide Rs 208.17 crore budgetary support. Hence, the CED filed a

review petition and requested the Commission to allow the revenue gap through increase in tariff. In its Tariff Order on the Review Petition dated 26th July 2016, JERC directed the CED to raise the issue at the time of True-up of the impugned Order. Accordingly, the CED has raised the issue in its present petition where in it has proposed amortization of regulatory asset of Rs 208.17 crore along with regulatory asset of Rs 265.04 crore in 3 equal tranches starting from FY 2017-18.

Commission's View:

The submission made by the Petitioner is noted. Please refer to the para 8.4 of the Order for this issue.

2.2.15.T&D Loss level in the UT

Stakeholder's Comment:

CED has not filed information regarding segregation of Transmission and Distribution Losses and trajectory of Losses despite direction by the JERC. Actual Losses are much more than the projected Losses.

Petitioner's Response:

The losses have been reduced from 22.2% to 15.24% between the FY 2011-12 and FY 2015-16. The losses are further aimed to reduce to 8% with implementation of IPDS, Smart Grid Projects and IT interventions.

Further, Enforcement Department regularly checks doubtful connections and imposes penalty as per the various provisions of the Electricity Act 2003.

Commission's View:

The Commission has already fixed the target of T&D Losses for the Petitioner and the impact of any additional losses is to be borne by the Petitioner only as per the provisions of the MYT Regulations 2014.

2.2.16. Hearing Process

Stakeholder's Comment:

The process of inviting suggestions/comments/objections from the public is faulty for the following reasons:

1. Practically one/two days' time has been given to the public to file objections/suggestions/comments to the Petition which is over 100 pages as the Public Notice appeared on 7th March, 2017 asking for the suggestions/objections/comments by 9th March, 2017.

- 2. The hardcopies of the Petition were also not made available in advance in Hindi and Punjabi; thus those who are not familiar with English, are actually deprived from filing objections/suggestions/comments.
- 3. The hard copy of the Petition is being sold for Rs 300/- just to discourage people from studying the same and then filing objections/suggestions/comments; it should be sold not for more than Rs 50/-, as many photocopier shops are doing photocopy for 50 paisa per page.
- 4. The copies of the Petition were available only at Sector 9 but it should have been available at all sub-divisions and/or E-Sampark centres.
- 5. Consumers should be informed regarding public hearing either by a notice attached to the power bill or by using the service of mobile operators.

Petitioner's Response:

- 1. The brief about the ARR and Tariff proposal was published through Public Notice in Newspapers namely "Chandigarh Amar Ujala", "Hindustan Times" and "Ajit" on 08th February 2017 to file objections/comments/suggestions on or before 09th March 2017. The second repeat notice was published on 07th March 2017.
- 2. The CED has filed the Tariff Petition in English as per relevant regulations/ precedence.
- 3. The rate of hardcopy of Rs. 300/- for 250 pages Petition is fixed as per the cost involved in stationary and spiral binding and therefore is reasonable
- 4. There are 42 e-sampark centers and 10 nos. of sub-divisions in Chandigarh. Hence for distribution of Petitions from e-sampark centers and sub-divisions atleast 52 number of copies would be required which would lead to wastage of stationery as only a few hard-copies (2-3) of the Petition are sold.
- 5. The CED has more than 2.19 Lakhs consumers and the billing period is bimonthly. The two month billing cycle is further divided into four cycles. Hence, it is not possible to attach notice inviting objection to Petition with each and every power bill.

Commission's View:

It is observed that all the procedures laid down for the conduct of a Public Hearing in the Conduct of Business Regulations 2009 have been followed. However, the Petitioner is advised to explore means of sale of copy of the Petition filed at subsidized rates so as to create have wider and meaningful public participation.

2.2.17. Format of Electricity Bill

Stakeholder's Comment:

The format of the Electricity Bill should be changed so that it doesn't get mixed-up with water and sewage bill.

Petitioner's Response:

The new bill format as approved by the JERC has been sent to NIELIT for printing. The final detail of the same is being worked out by NIELIT. A copy of the same shall also be uploaded on the website of CED for information to stakeholders.

Commission's View:

The Petitioner is directed to immediately release the new bill format and its applicability date under intimation to the Commission.

2.2.18.Voluntary Disclosure of tampered meter and payment of default amount

Stakeholder's Comment:

As per section 10.8 of the Supply Code, no case of theft is to be registered with the police in case a consumer voluntarily discloses a tampered meter. A scheme should be floated by the department for voluntary disclosure of tampered meter so as to replace all such meters in one go. Similarly a scheme should also be floated to deposit long pending outstanding amount of electricity bill without paying surcharge amount. A similar scheme was successfully introduced in Haryana.

Petitioner's Response:

The Supply Code is already available on the website of the department. Any consumer who wishes to avail the provisions of clause 10.8 of the Supply Code, can come and voluntarily declare tampering of meters/seals. Further, the JERC has already approved that no surcharge shall be levied in case of permanent disconnected consumers.

Commission's View:

The Petitioner is advised to widely publicize similar provisions of the Regulations/Code periodically and also to send the relevant extract of the same with the bill.

2.2.19.Commercial Tariff for Lifts in Co-Operative Housing Societies

Stakeholder's Comment:

Commercial Tariff charged is being charged for the lifts installed in co-operative housing societies. However Domestic tariff is charged for lifts installed for Chandigarh Housing

Board. Hence step motherly treatment is meted out to co-operative housing building societies. Since no commercial activity is carried out in the societies and the lifts are used for domestic purpose only, domestic category tariff should be charged for the lifts.

Petitioner's Response:

CED is bound to follow Tariff Order issued by the JERC. As per Clause 11.3 of the JERC Tariff Order dated 28th April 2016, domestic category would be applicable to light, fan, domestic pumping set and household appliances in housing colonies and multi storied flats. However there is no mention regarding tariff to be applicable for common services. CED has requested JERC to clarify the matter.

Commission's View:

The Commission has noted the concerns of the Stakeholder and the response of the Petitioner. The Commission is of the view that the loads of common amenities for such residential consumers may include pumps for pumping water supply, lifts and lighting of common area. However, the consumption of energy for common services shall be separately metered with sealed meters installed by the licensee. The consumption of such energy shall be billed at Domestic Tariff. The user shall inform the details of every non-domestic activity within the residential complex, such as commercial complex, industrial activity, and recreation club, along with the connected load, and shall seek a separate connection for the same under the commercial category. The issue has been also dealt in detail in the "Tariff Principles and Design" Chapter of this Order.

2.2.20.Energy Audit

Stakeholder's Comment:

CED has not furnished action plan for Energy Audit and loss reduction measure to the Commission. The response of the CED should be made time bound with maximum period of one year. In the absence of energy audit the entire issue of tariff is non-transparent.

Petitioner's Response:

The estimate of design, supply, erection, testing and commissioning of the Energy Audit system amounting to Rs 89.75 Lakhs has been sent to the higher authorities for approval. A pilot project for installation of 30,000 smart meters with allied infrastructure has already been awarded. Further DPR for Smart Grid for Chandigarh has already been approved by the Distribution Reforms Committee and the same has been forwarded to Ministry of Power on 02nd December 2016. After installation of Smart Grid/Smart Meters, CED will be able to undertake online Energy audit of each feeder.

Commission's View:

Directive is being issued to the Petitioner in this regard as detailed in Para 10.1.4 of this Order.

2.2.21.Replacement by LED Bulbs in Government Departments

Stakeholder's Comment:

CED should replace all existing bulbs with LED Lights in the offices/premises of the Government Departments. Also all street lights need to be replaced with LED bulbs which will reduce electricity losses and high energy bills for Govt. departments.

Petitioner's Response:

M/S EESL has started distribution of LED bulbs, tube lights and star rated fans in Chandigarh w.e.f 06th March 2017. Till 24th March 2017, a total of 50,000 LED Bulbs, 6,000 tube-lights and 1,700 Energy Efficient fans have been sold. The Chandigarh Administration is already providing LED fittings in new buildings and replacing with the same in old buildings.

Commission's View:

The efforts made by the Petitioner are appreciable and the same efforts should be directed towards replacing street lights also.

2.2.22.History Cards

Stakeholder's Comment:

CED should provide history card for all meters by which consumers can check their past consumption trends.

Petitioner's Response:

CED is planning to install smart meters for the whole of Chandigarh under the National Smart Grid Mission. After installation of the same consumers can track their consumption profile at any time. Hence, meter history cards may have little use and will increase operational cost.

However, in the meanwhile, the CED has taken up the matter with the NIELIT to print consumption profile for at least 5 billing cycles.

Commission's View:

The Commission directs the Petitioner to dispense the history cards after the installation of smart meters.

2.2.23.Standards of Performance (SoP)

Stakeholder's Comment:

The Commission had earlier directed CED to create awareness amongst the consumers on the Standards of Performance notified by the Commission and to publish the Standards of Performance/salient features of the Supply Code and the Distribution Code in all leading newspapers in the vernacular language i.e. understandable to the general consumer. However CED has not initiated steps in this direction. The department has also not provided services specified in the SoP in a time bound manner and its staff is not courteous in dealing with the consumers.

Petitioner's Response:

The Standards of Performance Regulations and the Supply Code have already been uploaded on the CED website and have been displayed on the notice board of field offices. CED has 15 complaint centers for lodging of complaints regarding electricity in various sectors of Chandigarh. A 24X7 centralized consumer grievance cell is already operational since the last 2 years in the office of the Superintending Engineer, Sector-9 with its phone number printed on each electricity bill. The phone-number of the concerned sub-division is also printed on the electricity bill of the consumer.

Commission's View:

The Petitioner is directed to share the results of reliability indices of the consumers on its website, which needs to be updated periodically.

2.2.24.Procedure for Open-Access

Stakeholder's Comment:

In Chandigarh, well defined Open Access Regulations followed by Open Access Charges are in place but till date, the procedure of the same has not been defined by the SLDC. Due to this, the procurement of power through Open Access in Chandigarh is not possible as consumers don't have guidelines/procedures for the same. However in other UTs regulated by JERC the said procedures are in place. CED should also prepare procedure for procurement of Power from Power Exchanges on Day-Ahead basis by Consumers so that they can buy power at competitive rates.

Petitioner's Response:

The procedure for Short-Term Open Access and Long-Term Access has already been prepared as per open access in transmission and Distribution Regulations 2009 and has been forwarded to the higher authority for its approval and would be notified shortly.

Commission's View:

Open Access has to be permitted as per provisions of the Electricity Act 2003 and the regulations are already in place. CED is directed to expedite the approval and allow Open Access to the stakeholders.

2.2.25. Shortage of Electricity Meters, Cables and Other Equipment

Stakeholder's Comment:

There is shortage of electricity meters, cables and other equipment in the stores of the CED creating an inconvenience to the general public. Capacity of distribution transformers provided in different domestic/commercial areas of the UT is not in consonance with load requirement of that area leading to frequent break-down during peak hours. There are also no stocks of spares as inventory and consumers are forced to buy these from the private contractors.

Petitioner's Response:

The department has sufficient stock of material like cables and meters etc.

Commission's View:

The Commission directs the Petitioner to address the issue of non-availability of the spares after verification of the facts as per the suggestion of stakeholders and to regularly top-up the stock of the fast moving and other inventory.

2.2.26. Power Purchase Planning and Cost

Stakeholder's Comment:

CED undertakes short term purchase of electricity at higher price. The power should be purchased on a long-term basis at competitively negotiated price. CED should also incorporate load forecasting to optimize power purchase.

Petitioner's Response:

CED procures power from Central Generating Plants on long-term basis, and for shortfall in summer season it procures power by competitive bidding from DEEP (Discovery of Efficient Electricity Price) portal by reverse auction and through power exchange. CED has already done load forecasting study till FY 2039-40 through M/S Feedback Infra and JERC has approved the same vide Order dated 16th September 2016 in Petition no. 216/2016.

Commission's View:

The Commission observes that there should be an optimal balance of long-term and short-term power procurement so as to minimize power purchase cost while enabling the licensee to supply round-the-clock power supply. The Ministry of Power has directed all utilities to procure short-term power from a common platform. The Petitioner is directed to abide by the said directive of the Ministry of Power, GoI.

2.2.27.FPPCA (Fuel and Power Purchase Cost adjustment) Charges

Stakeholder's Comment:

FPPCA charges are very high in Chandigarh. The same should be replaced by a fixed surcharge as consumers can't understand the FPPCA formulae.

Petitioner's Response:

CED is charging FPPCA as per the Commission's Order dated 27th June 2012 passed in the Petition No. 79 /2012 (Suo-moto) and is bound to follow the norms approved by the Commission and Regulations. M/S NIELIT is also working to make software for online calculation of FPPCA. CED shall certainly adopt the modification in FPPCA methodology/treatment, if approved by the Commission.

Commission's View:

The present FPPCA mechanism was approved after detailed deliberations with the stakeholders across various UTs. However, the Stakeholders are requested to formally submit the specific issues and discrepancies (if any) in the existing methodology for consideration of the Commission (if any).

2.2.28.Electricity Ombudsman

Stakeholder's Comment:

Facility of Electricity Ombudsman has not been provided in Chandigarh and hence there is no forum where consumers can contest the decision of CGRF.

Petitioner's Response:

The Ombudsman is already in existence.

Commission's View:

The Commission confirms the submission made by the Petitioner. The Ombudsman is positioned at Gurgaon. The Petitioner is directed to publicize the CGRF and Ombudsman as the forum for settlement of consumers' grievances.

2.2.29.Bad/Doubtful Debts

Stakeholder's Comment:

CED has accumulated bad debts of Rs 36.16 crore. The department should disconnect supply if any consumer fails to pay its bills of power supplied in time and the amount should be recovered from the security deposit. However, presently even the defaulters are getting power supply without paying their bills. Hence the amount should be recovered and accountability of staff responsible for bad debt should be fixed. Further,

the list of defaulter/(s) with outstanding amount has not been disclosed. CED should disclose how much recovery of bad debts has been done during the last one year. CED should also elaborate on the Action Plan for recovering Rs 8-10 crore dues from Government Departments.

Petitioner's Response:

The Department is following a very stringent Policy for disconnection of power supply to any consumer on non-payment of electricity bills. CED has been successful in reducing list of defaulters by 6% and the outstanding amount has been reduced by 17% from last year. Most of the connections having unpaid electricity bills have been disconnected and remaining are pending in the court for dispute settlement

Up-to-date list of outstanding receivables or arrears of existing consumers' upto 15th February 2017 has already been published on the CED website.

Commission's View:

The Petitioner is advised to continue its sincere efforts for reduction of bad debts/arrears.

2.2.30.Levy of Fixed Charges

Stakeholder's Comment:

Levy of Fixed Charges on connected load for domestic and commercial consumers is totally unjustified since such charges are recovered at the time of release of connections and no such charge is existing in the Tariff structure of the neighboring States of Punjab and Haryana.

Petitioner's Response:

Recovery of Fixed Charges is as per policy of Central Generating Stations (CGS) like NTPC, SJVNL and NHPC whose tariff is approved by CERC.

Commission's View:

The Petitioner has to incur expenditure towards the capacity charges of Power Purchase and O&M Expenses which are fixed in nature in contrast to the energy charges which are payable for purchase of energy per unit. These expenses have to be recovered from the consumers and this is done by having a two-part tariff. Thus the recovery of these expenses from the tariff is also levied on two part tariff basis other-wise the entire recovery shall be made from the energy charges.

2.2.31. Tariff Hike for Agriculture Consumers

Stakeholder's Comment:

Agriculture Sector consumers should not be spared from hike in the power tariff, if any, as domestic consumers are facing similar issues irrespective of their income level.

Petitioner's Response:

There are only 121 agriculture consumers in Chandigarh and they collectively consume only 0.12% of the total power sale in Chandigarh. In neighboring States, subsidy is offered to agricultural consumers. However no such subsidy is given in Chandigarh and hence no tariff increase is proposed for the agricultural consumers.

Commission's View:

Please refer to para 8.4 in the Chapter "Tariff Principles and Design" of this Order for the Commission's view on this issue. However the Commission has not approved any tariff increase in this Order. In future also tariff increase would be approved across consumer categories keeping in view limits of cross subsidy specified under National Tariff Policy.

2.2.32.Corporatization of Electricity Department

Stakeholder's Comment:

As per CED, DNIT for restructuring/corporatization has been prepared and is under approval. Some milestones should be fixed for each activity to achieve corporatization of the department. The experience of corporatization from other States is not very encouraging.

Petitioner's Response:

Tender for corporatization was uploaded on 16th June 2016, however no bidder turned-up in response. The case has been forwarded to the higher authorities of Chandigarh Administration for logical conclusion of the matter.

Commission's View:

Directive is being issued to the Petitioner in this regard as detailed in Para 10.1.8 of this Order.

2.2.33.Smart City

Stakeholder's Comment:

The CED was requested to share the information regarding the impact of smart city project specifically the financial burden associated with it which would be transferred to consumers of the city.

Petitioner's Response:

JERC vide its Order dated 13th February 2017 has given an in-principal approval to the project subject to exploring if a part of the funding is being offered as a grant by the Urban Ministry, Government of India.

Commission's View:

The Commission advises the Petitioner to follow-up with appropriate government bodies so as to extract maximum benefits for consumers from implementation of the Smart City Project.

2.2.34.Upgradation of CED Website

Stakeholder's Comment:

CED should upgrade its website to make it user friendly and more informative.

Petitioner's Response:

Upgradation of website is a continuous process. The IT Department of the Administration updates the website whenever needed. CED also plans to host its separate website in the near future.

Commission's View:

The Petitioner is directed to upgrade its website on priority basis within the next 6 months to make it more informative and consumer friendly in line with the websites of progressive utilities. The last updation date of the website should also appear on the website.

2.2.35.Unutilized Fund of Rs 300 crore

Stakeholder's Comment:

An amount of Rs 300 crore fund was unutilized by the Chandigarh Administration in the last fiscal and was returned to the central treasury. JERC should intervene in the matter and ask CED to utilize funds from the central treasury for underground cable/SMART city project which will make Kundi connections impossible.

Petitioner's Response:

CED has utilized 100% budget in all heads of accounts in FY 2016-17. There is no record of Rs 300 crore being ever allotted to CED and no fund has been surrendered.

Commission's View:

The Commission notes the submission made by the Petitioner.

2.2.36. Measures to prevent theft or damage to network component

Stakeholder's Comment:

CED is not taking steps to prevent theft of power and damage to electrical plants, lines equipment and meters.

Petitioner's Response:

Enforcement Department regularly checks the doubtful connections and imposes penalty as per various provisions of the Electricity Act 2003.

Commission's View:

The Petitioner is advised to strengthen the functioning of its enforcement department and also take action in a planned manner so as to avoid recurrence of theft.

Chapter 3. Impact of the change in approach for the approval of Gross Fixed Assets

3.1. Rationale for change in approach for the approval of Gross Fixed Assets (GFA)

In the last Order dated 28th April 2016, the Commission has ordered as follows:

"The Commission in its order dated 07th May 2012 had disallowed the opening GFA in absence of the audited accounts and Fixed Asset and Depreciation Registers and gave a directive to the Petitioner to furnish the same urgently and the same was repeated year after year.

However, the Petitioner has now furnished the audited accounts and the Fixed Asset Register (FAR) for the FY 2011-12. The Commission has also taken note of the fact that the Petitioner has prepared the FAR based on physical verification of Fixed Assets carried out by the Department. However there is discrepancy in the figure of fixed assets as reflected in the audited balance sheet and the FAR. The Commission has considered the figure of Gross Fixed Assets as reflected in the FAR as it is based on actual physical verification of assets available".

However, the Commission now has reviewed the impact of this approach across all utilities under its jurisdiction. The Commission observes that in all practical circumstances, the information as available in the Fixed Assets Register (FAR) is the same as that available in the audited accounts. The Commission also notes that the Petitioner has made sincere efforts for preparation of the FAR and verified all post 2005 assets so far. The Commission is of the view that once the verification of all the remaining assets is complete, the information as available in the audited accounts will tally with the information available in the available FARs.

In view of the efforts undertaken by the Petitioner in this context, the Commission finds it appropriate to henceforth consider the GFA as per the audited accounts. Accordingly, the Commission has decided to consider the full GFA since FY 2011-12 as available in the audited accounts and approves the impact of the additional GFA as detailed in subsequent paragraphs.

3.2. GFA now considered by the Commission

In line with the above para, the Commission now approves the GFA for the previous years as shown in the Table below:

Table 3.1: Revised GFA now considered and approved by the Commission (Rs crore)

| Particulars | FY 2011-12 | FY 2012-13 | FY 2013-14 | FY 2014-15 | | |
|---|------------------------|------------------|------------|------------|--|--|
| GFA (As per FAR) approved as per JERC Order dated 28th April 2016 | | | | | | |
| Opening Assets | 170.21 | 174.09 | 176.17 | 213.71 | | |
| Addition in Asset | 3.88 | 2.07 | 37.54 | 16.59 | | |
| Closing Assets | 174.09 | 176.17 | 213.71 | 230.30 | | |
| GFA (As per Audited E | Balance Sheet) now app | roved by the Com | nission | | | |
| Opening Assets | 359.72 | 363.60 | 356.61 | 381.37 | | |
| Addition in Asset | 3.88 | 2.07 | 24.77 | 10.20 | | |
| Deletion in Assets | 0.00 | 9.06 | 0.00 | 0.00 | | |
| Closing Assets | 363.60 | 356.61 | 381.37 | 391.57 | | |

3.3. Impact of approval of revised GFA on Depreciation

In the previous Order dated 28th April, 2016, the Commission had calculated depreciation as per the CERC depreciation rates on different classes of distribution assets being reflected in the FAR.

However, as the Commission has considered the GFA as per the audited accounts, the Commission finds it appropriate to consider the depreciation as available in the audited accounts as shown in the Table below:

Table 3.2: Revised Depreciation now considered and approved by the Commission (Rs crore)

| Particulars | FY 2011-12 | FY 2012-13 | FY 2013-14 | FY 2014-15 | |
|--|-------------------|------------|------------|------------|--|
| Depreciation (As per FAR) approved as per JERC Order dated 28th April 2016 | | | | | |
| Depreciation Cost | 9.48 | 9.64 | 10.69 | 12.14 | |
| Depreciation (As per Audited B | alance Sheet) nov | w approved | | | |
| Depreciation Cost | 6.25 | 26.54* | 17.79 | 19.77 | |
| Difference from previously approved | -3.23 | 16.90 | 7.10 | 7.63 | |

^{*} Includes adjustment for addition of Rs 18.68 crore

3.4. Impact of approval of revised GFA on Return on Net Fixed Assets

In the previous Order dated 28th April, 2016, the Commission had calculated return on Net Fixed Assets (NFA) considering the GFA and depreciation as per the FAR.

However, as the Commission has now considered the GFA and depreciation as per the audited accounts, the Commission finds it appropriate to reconsider the return on Net Fixed Assets as shown in the Table below:

Table 3.3: Revised Return on NFA now considered and approved by the Commission (Rs crore)

| Particular | FY 2011-12 | FY 2012-13 | FY 2013-14 | FY 2014-15 | | | |
|----------------------------------|--|------------|------------|------------|--|--|--|
| Return on NFA approved as per JI | Return on NFA approved as per JERC Order dated 28 April 2016 | | | | | | |
| Opening Gross block | 170.21 | 174.09 | 176.17 | 213.71 | | | |
| Accumulated depreciation | 40.50 | 49.99 | 59.63 | 70.32 | | | |
| Opening Net block | 129.71 | 124.11 | 116.54 | 143.39 | | | |
| Return @3% of NFA | 3.89 | 3.72 | 3.50 | 4.30 | | | |
| Return on NFA now approved by | the Commission | | | | | | |
| Opening Gross block | 359.72 | 363.60 | 356.61 | 381.37 | | | |
| Accumulated depreciation | 72.03 | 78.29 | 104.82 | 122.62 | | | |
| Opening Net block | 287.69 | 285.31 | 251.78 | 258.76 | | | |
| Return @3% of NFA | 8.63 | 8.56 | 7.55 | 7.76 | | | |
| Difference (additional Return) | 4.74 | 4.84 | 4.06 | 3.46 | | | |

3.5. Impact of approval of revised GFA on Interest and Finance Charges

In the previous Order dated 28th April, 2016, the Commission had considered opening loan in FY 2011-12 as 'Nil'. Thereafter, the Commission had considered addition in normative debt at 70% of GFA and calculated Interest and Finance Charges as per the addition in GFA being reflected in the FAR. Due to change in approval of GFA as per the audited accounts, the Commission has also considered addition in GFA as that being reflected in the audited accounts and has accordingly recalculated the Interest and Finance Charges as shown in the Table below:

Table 3.4: Interest and Finance Charges now considered and approved by the Commission (Rs crore)

| Particular | FY 2011-12 | FY 2012-13 | FY 2013-14 | FY 2014-15 | |
|---|------------|------------|------------|------------|--|
| Interest Cost approved as per JERC Order dated 28th April 2016 | | | | | |
| Opening Normative Loan | 0.00 | 2.72 | 3.90 | 29.78 | |
| Add: Normative Loan during the year (70% of addition in GFA as per FAR) | 2.72 | 1.45 | 26.28 | 11.61 | |
| Less: Normative Repayment 10% of Opening loan | 0.00 | 0.27 | 0.39 | 2.98 | |
| Closing Normative Loan | 2.72 | 3.90 | 29.78 | 38.42 | |
| Average Normative Loan | 1.36 | 3.31 | 16.84 | 34.10 | |
| Rate of Interest (@State Bank Advance Rate) | 14.40% | 14.61% | 14.58% | 14.75% | |
| Interest on Normative Loan | 0.20 | 0.48 | 2.46 | 5.03 | |

| Particular | FY 2011-12 | FY 2012-13 | FY 2013-14 | FY 2014-15 |
|---|------------|------------|------------|------------|
| Interest Cost now approved by the Commission | | | | |
| Opening Normative Loan | 0.00 | 2.72 | 3.89 | 20.84 |
| Add: Normative Loan during the year (70% of addition in GFA as per Audited Balance Sheet) | 2.72 | 1.45 | 17.34 | 7.14 |
| Less: Normative Repayment 10% of Opening | 0.00 | 0.27 | 0.39 | 2.08 |
| Closing Normative Loan | 2.72 | 3.89 | 20.84 | 25.89 |
| Average Normative Loan | 1.36 | 3.30 | 12.37 | 23.37 |
| Rate of Interest (@SBAR rate) | 14.40% | 14.61% | 14.58% | 14.75% |
| Interest on Normative Loan including bank charges | 0.20 | 0.48 | 1.80 | 3.45 |
| Difference from previously approved | 0.00 | 0.00 | (0.65) | (1.58) |

3.6. Cumulative impact of approval of revised GFA on revenue gap of previous years

Based on calculations in the foregoing paragraphs, the Commission has calculated incremental revenue gap owing to consideration of revised GFA, over and above the revenue gap calculated till the FY 2014-15 in the previous Order dated 28th April, 2016 as tabulated below:

Table 3.5 Incremental Revenue Gap based on Revised GFA approved by the Commission (Rs crore)

| Particular | FY 2011-12 | FY 2012-13 | FY 2013-14 | FY 2014-15 |
|---------------------------------|------------|------------|------------|------------|
| Opening Incremental Revenue Gap | 0.00 | 1.51 | 23.24 | 33.74 |
| Depreciation Cost | (3.23) | 16.90 | 7.10 | 7.63 |
| Return on Net Worth | 4.74 | 4.84 | 4.06 | 3.46 |
| Interest and Financing Charges | 0.00 | 0.00 | (0.65) | (1.58) |
| Addition in Revenue Gap | 1.51 | 21.73 | 10.50 | 9.51 |
| Closing Incremental Gap | 1.51 | 23.24 | 33.74# | 9.51 |

[#] Could not be considered because of delay in submission of audited accounts.

However in the previous order dated 28th April 2016, the Commission had ordered that

"The Commission is also of the view that historically, in the absence of the audited accounts, the Commission had approved expenses and income as sought by the Petitioner. However, there has been repeated non-compliance by the Petitioner i.e. on account of delay in finalization of the audited accounts based on commercial principles and the preparation of Fixed Asset Register which prevented the Commission from ascertaining the actual expenses and revenue. This has eventually resulted in substantial disallowances over a period of time and non-recovery of the actual costs in a time bound manner.

Further, 8.1.7 of Tariff Policy 2016 provides that

Quote

"..... it is desirable that the requisite tariff changes come into effect from the date of the commencement of the each financial year and any gap on account of delay in filing should be on account of licensee."

Unquote

As per the MYT Order dated 28th April, 2016 the Commission adopted the following approach towards years for which the True-up submission was delayed by the Petitioner due to non-availability of the audited accounts.

Quote

"The Commission is of the view that had the Petitioner filed the True-up Petitions for FY 2011-12, FY 2012-13 and FY 2013-14 in the stipulated time frame, the requisite tariff changes on account of additional gaps in these years would have come into effect from the date of commencement of the respective financial years. As there was substantial delay in filing of the True-ups for the above years by the Petitioner, the Commission is of the view that resultant gap should be on account of licensee only.

The Commission is strictly of the view that while inefficiencies of the Petitioner should not be passed on to the consumers, at the same time the utility should not be devoid of its due amount. The Commission orders that the Petitioner, being a Government Department, should approach the Government to provide a budgetary support to meet this approved revenue gap of Rs 208.17 Crores.

Accordingly, the Commission is not carrying forward this gap of Rs 208.17 Crores for future years."

Unquote

Considering the reasons detailed in the previous order, the Commission finds it appropriate to continue with its approach in this regard and disallows the cumulative revenue gap till FY 2013-14 amounting to Rs 33.74 crore in FY 2014-15.

Accordingly, the Commission has considered the incremental revenue gap for the FY 2014-15, to be 9.51 crores, which is added to the approved revenue gap for the FY 2014-15 of Rs 143.83 crore (as approved in the previous Tariff Order dated 28th April 2016) and the revised revenue gap at the end of the FY 2014-15 is approved at Rs (143.83+9.51) = 153.34 crore.

Chapter 4. True-up for the FY 2015-16

4.1. Applicable provisions of JERC for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009

The True-up of the FY 2015-16 is to be carried out as per Regulation 8 (2) of the Tariff Regulations, 2009:

- (2) (i) After audited accounts of a year are made available, the Commission shall undertake similar exercise as above with reference to the final actual figures as per the audited accounts. This exercise with reference to audited accounts shall be called 'Truing Up'.
- (ii) The Truing Up for any year will ordinarily not be considered after more than one year of 'Review'.
- (3) The revenue gap of the ensuing year shall be adjusted as a result of review and truing up exercises.
- (4) While approving such expenses/revenues to be adjusted in the future years as arising out of the Review and / or Truing up exercises, the Commission may allow the carrying costs as determined by the Commission of such expenses/revenues. Carrying costs shall be limited to the interest rate approved for working capital borrowings.
- (5) For any revision in approvals, the licensee would be required to satisfy the Commission that the revision is necessary due to conditions beyond its control.
- (6) In case additional supply is required to be made to any particular category, the licensee may, any time during the year make an application to the Commission for its approval. The application will demonstrate the need for such change of consumer mix and additional supply of power and also indicate the manner in which the licensee proposes to meet the cost for such change of consumer mix and additional supply of power.
- (7) The Commission may consider granting approval to such proposals provided the cost of additional supply is ordinarily met by the beneficiary category."

4.2. Approach for the True-up of the FY 2015-16

While the Petitioner has submitted the True-up for the FY 2015-16, it has been observed that the Petitioner has not submitted certain information (even in the response to data gaps sought by the Commission) that is required to undertake a proper True-up.

The Commission has adopted the following approach which is in conformity with the Tariff Regulations, 2009 for True-up of ARR for the FY 2015-16:

- 1. The Petitioner has not submitted any supporting document regarding number of consumers and connected load, hence the same has been taken as submitted by the Petitioner as actuals in its Petition.
- 2. The Commission has considered energy availability at the periphery of the Petitioner's territory and UI sale/UI purchase from deviation settlement accounts in this regard.
- 3. The Commission has verified the power purchase bills of the Petitioner on random-basis and has found the same to be in order. Further, the total power purchase cost of the Petitioner for the True-up period has been taken from the audited accounts of the Petitioner.
- 4. The Commission has adjusted the security deposit as available with the Petitioner at the end of the financial year from the working capital requirement of the financial year for subsequent calculation of the interest on working capital.
- 5. The Commission has considered provision for doubtful debts for the True-up years as bad-debt actually written-off and not just the amount provisioned as bad debt.

For the issues in regards to the True-up other than listed above, the Commission has adopted treatment on basis of Tariff Regulations, 2009.

The Commission had determined the ARR for the FY 2015-16 vide its Order dated $10^{\rm th}$ April 2015 and subsequently carried out the Review of the FY 2015-16 in its Order dated $28^{\rm h}$ April 2016.

In this Chapter, the Commission has analysed all the elements of actual revenue and expenses for the FY 2015-16 and has carried out the True up of expenses and revenue with reference to the actual figures (final) as per the audited accounts, after a prudence check and has permitted necessary adjustments in cases where variations are for reasonable and justifiable reasons.

4.3. Energy sales, Number of consumers and Connected load

Petitioner's submission:

The actual energy sales were 1491.32 MU for the FY 2015-16, as against 1510 MU approved earlier by the Commission vide Tariff Order dated 28th April 2016. The actual number of consumers at the end of the FY 2015-16 were 2,16,001 against 2,16,184 approved earlier by the Commission. Also, the actual connected load for the FY 2015-16 was 14,32,184 kW against the earlier approved value of 14,54,240 kW.

Commission's analysis:

The Commission observed that except for Large Supply, Medium Supply and Public Lighting, the energy sales in all other categories has reduced. The Commission, after going through the submissions of the Petitioner including the audited accounts, has considered the energy sales at 1491.32 MU as submitted by the Petitioner for the purpose of Trueup as shown in the following Table:

Table 4.1: Energy Sales approved by the Commission in the True-up of FY 2015-16 (in MU)

| S. No. | Consumer Categories | Approved in the Tariff Order dated 28th April 2016 | Petitioner's submission (True-up) | Approved by the Commission (True-up) |
|--------|-------------------------|--|-----------------------------------|--|
| 1. | Domestic | 667.00 | 658.50 | 658.50 |
| 2. | Commercial | 485.00 | 463.34 | 463.34 |
| 3. | Large Supply | 120.00 | 131.84 | 131.84 |
| 4. | Medium Supply | 103.75 | 110.94 | 110.94 |
| 5. | Small Power Supply | 20.52 | 19.01 | 19.01 |
| 6. | Agriculture | 1.61 | 1.49 | 1.49 |
| 7. | Public Lighting | 20.36 | 22.50 | 22.50 |
| 8. | Bulk Supply | 84.61 | 77.19 | 77.19 |
| 9. | Others Temporary Supply | 7.15 | 6.52 | 6.52 |
| | Grand total | 1510.00 | 1491.32 | 1491.32 |

As the Petitioner has not submitted any supporting documents to validate its claim, the Commission is constrained to approve the number of consumers and connected load as submitted by the Petitioner for the purpose of True-up, as shown in the Table below:

Table 4.2: Number of Consumers approved by the Commission in the True-up of FY 2015-16 (in Nos.)

| S. No. | Consumer Categories | Approved in the Tariff Order dated 28th April 2016 | Petitioner's submission (True-up) | Approved by the Commission (True-up) |
|--------|-------------------------|--|-----------------------------------|--|
| 1. | Domestic | 1,88,707 | 1,88,375 | 1,88,375 |
| 2. | Commercial | 22,586 | 22,661 | 22,661 |
| 3. | Large Supply | 108 | 103 | 103 |
| 4. | Medium Supply | 1,245 | 1,255 | 1,255 |
| 5. | Small Power Supply | 1,275 | 1,269 | 1,269 |
| 6. | Agriculture | 121 | 120 | 120 |
| 7. | Public Lighting | 930 | 978 | 978 |
| 8. | Bulk Supply | 592 | 667 | 667 |
| 9. | Others Temporary Supply | 620 | 573 | 573 |
| | Grand total | 2,16,184 | 2,16,001 | 2,16,001 |

Table 4.3: Connected Load approved by the Commission in the True-up of FY 2015-16 (in kW)

| S. No. | Consumer Categories | Approved in the Tariff Order dated 28th April 2016 | Petitioner's submission (True-up) | Approved by the Commission (True-up) |
|--------|-------------------------|--|-----------------------------------|--|
| 1. | Domestic | 8,34,672 | 8,18,172 | 8,18,172 |
| 2. | Commercial | 4,06,588 | 4,00,437 | 4,00,437 |
| 3. | Large Supply | 73,197 | 71,904 | 71,904 |
| 4. | Medium Supply | 68,543 | 70,162 | 70,162 |
| 5. | Small Power Supply | 19,461 | 19,364 | 19,364 |
| 6. | Agriculture | 729 | 737 | 737 |
| 7. | Public Lighting | 6,075 | 6,243 | 6,243 |
| 8. | Bulk Supply | 41,464 | 41,916 | 41,916 |
| 9. | Others Temporary Supply | 3,510 | 3,250 | 3,250 |
| | Grand total | 14,54,240 | 14,32,184 | 14,32,184 |

Therefore, the Commission approves the total sales of 1491.32 MU, total number of consumers at 2,16,001 and total connected load at 14,32,184 kW in the True-up of FY 2015-16.

4.4. Power Purchase Quantum and Cost

Petitioner's submission:

An amount of Rs 690.81 crore has been incurred for the procurement of power in the FY 2015-16 (including the transmission charges, UI charges and the purchase from short term sources etc.) against the total Power Purchase Cost of Rs 654.55 crore approved by the Commission for the FY 2015-16 in its Order dated 28th April, 2016.

Commission's analysis:

The power purchase details have been verified from the bills made available by the Petitioner and the quantum of purchase of power is validated from the Regional Energy Accounts (REA) maintained by the Northern Region Power Committee.

Accordingly, the quantum of power purchase for the FY 2015-16 has been considered as shown in the Table below:

Table 4.4: Power purchase quantum (in MU) approved by the Commission in the True-up of FY 2015-16

| | | Energy (MU) | | | | |
|-------|-------------|---|--|------------|--|--|
| S. No | Particulars | Petitioner's submission (True-up) | Approved by the Commission (True-up) | Difference | | |
| A | NTPC | 483.36 | 478.24 | 5.11 | | |
| 1 | Anta | 20.51 | 20.38 | 0.13 | | |
| 2 | Auraiya | 16.37 | 16.31 | 0.07 | | |
| 3 | Dadri GPP | 26.39 | 26.03 | 0.36 | | |

| | | Energy (MU) | | |
|--------|---------------------|--------------|-----------------|------------|
| S. No | Particulars | Petitioner's | Approved by the | |
| 5. 140 | 1 al ticulai s | submission | Commission | Difference |
| | | (True-up) | (True-up) | |
| 4 | Dadri II TPP | 23.48 | 23.48 | 0.00 |
| 5 | Kahalgaon II | 34.39 | 32.27 | 2.12 |
| 6 | Rihand I | 77.54 | 77.54 | 0.00 |
| 7 | Rihand II | 74.11 | 74.11 | 0.00 |
| 8 | Rihand III | 58.47 | 58.47 | 0.00 |
| 9 | Singrauli | 37.64 | 35.20 | 2.44 |
| 10 | Unchahar I | 20.68 | 20.68 | 0.00 |
| 11 | Unchahar II | 29.62 | 29.62 | 0.00 |
| 12 | Unchahar III | 11.95 | 11.95 | 0.00 |
| 13 | Jhajjar | 27.56 | 27.56 | 0.00 |
| 14 | Koldam | 24.63 | 24.63 | 0.00 |
| В | NHPC | 228.60 | 228.60 | 0.00 |
| 1 | Chamera I | 99.72 | 99.72 | 0.00 |
| 2 | Chamera II | 20.32 | 20.32 | 0.00 |
| 3 | Chamera III | 12.02 | 12.02 | 0.00 |
| 4 | Dhauliganga | 13.73 | 13.73 | 0.00 |
| 5 | Dulhasti | 24.14 | 24.14 | 0.00 |
| 6 | Parbathi III | 7.64 | 7.64 | 0.00 |
| 7 | Salal | 9.24 | 9.24 | 0.00 |
| 8 | Sewa II | 7.74 | 7.74 | 0.00 |
| 9 | Tanakpur | 4.16 | 4.16 | 0.00 |
| 10 | Uri-I | 19.76 | 19.76 | 0.00 |
| 11 | Uri-II | 10.13 | 10.13 | 0.00 |
| С | SJVNL | 73.67 | 73.67 | 0.00 |
| 1 | NATHPA JHAKRI | 66.72 | 66.72 | 0.00 |
| 2 | RAMPUR (Additional) | 6.95 | 6.95 | 0.00 |
| 3 | RAMPUR (UQ) | | - | 0.00 |
| D | ВВМВ | 698.26 | 698.26 | 0.00 |
| 1 | BBMB 3.5% | | | 0.00 |
| 2 | BBMB 1 LU | 581.94 | 581.94 | 0.00 |
| 3 | BBMB 10 LU | | | 0.00 |
| 4 | Pong | 24.76 | 24.76 | 0.00 |
| 5 | Dehar | 91.55 | 91.55 | 0.00 |
| Е | NPCIL | 120.25 | 122.18 | (1.93) |
| 1 | NAPS | 52.26 | 52.94 | (0.68) |
| 2 | RAPP (Unit 3 & 4)-B | 20.27 | 20.39 | (0.12) |
| 3 | RAPP (Unit 5 & 6)-C | 47.73 | 48.85 | (1.13) |
| F | THDC | 85.87 | 85.87 | 0.00 |
| 1 | Koteshwar | 9.15 | 9.15 | 0.00 |
| 2 | Tehri | 76.72 | 76.72 | 0.00 |
| G | Banking | 0.00 | 29.10 | (29.10) |
| Н | Short-term | 0.00 | 49.58 | (49.58) |
| I | UI | 0.00 | 150.21 | (150.21) |
| J | Solar | 1.38 | 1.38 | 0.00 |
| K | Total | 1,691.38 | 1917.08 | (225.70) |

The Commission observes that the Power Purchase cost of Rs. $690.81\ crore$ as claimed by

the Petitioner is the same as reflected in the audited accounts for the FY 2015-16. In the notes to the accounts, CAG has pointed out that the Petitioner has not included any liability on account of deviation charges and hence there is under-statement of expense by Rs 0.67 crore. The Petitioner has also acknowledged this omission and has agreed to incorporate the same in the next year's accounts. Since the liability pertains to the FY 2015-16 only, the Commission finds it appropriate to consider the same at this stage itself and accordingly approves an amount of Rs 691.48 (= 690.81+0.67) crore towards Power Purchase Cost for the FY 2015-16 as shown in the following Table:

| Particulars | Approved in Tariff Order dated 28 th April 2016 | Petitioner's submission (True-up) | Approved by the Commission (True-up) |
|-----------------------------|--|---|--|
| Power Purchase Quantum (MU) | 1838.83 | 1691.38 | 1917.08 |
| Power Purchase Cost (Rs Cr) | 654.55 | 690.81 | 691.48 |

Table 4.5: Power Purchase approved by the Commission in the True-up of FY 2015-16

Therefore, the Commission approves the overall power purchase quantum of 1917.08 MU at the cost of Rs 691.48 crore in the True-up of the FY 2015-16.

4.5. Renewable Purchase Obligations (RPOs)

As per Clause 1, Sub-clause (1) of the JERC for the State of Goa and UTs (Procurement of Renewable Energy) Regulations, 2010

"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."

Further, the Commission has notified the amendment to the JERC (Procurement of Renewable Energy) Regulations, 2010 on 19^{th} February 2014. As per the amendment issued, the Petitioner has to purchase 3.55% of the total energy purchase from renewable sources (0.85% for Solar and 2.70% for Non-Solar) for the FY 2015-16.

The Commission, in its Business Plan MYT Order dated 28th December 2015 issued against Petition no. 183/2015, has reiterated that all the pending RPO's up-to the FY 2015-16 must be fulfilled by the Petitioner by 31st March 2016 and no backlog would be allowed to be carried forward to the MYT Control Period from FY 2016-17 to FY 2018-19.

Accordingly, the RPO compliance has been computed on the basis of submissions made by the Petitioner during the true up of FY 2010-11, FY 2011-12, FY 2012-13, FY 2013-14 and FY 2014-15 Till the FY 2014-15, there is a net surplus of 0.26 MU (Solar: 0.45 MU Deficit and Non-Solar: 0.76 MU Surplus).

The Petitioner in its additional submission has stated that during the period from April 2015 to March 2016, it has bought physical power of 3.45 MU from Solar Power and RECs of 53.40 MU (Solar – 9.60 Units and Non-Solar 43.80 Units).

Based on the above, the Commission has computed the accumulated compliance of RPO at the end of the FY 2015-16 as shown below:

Table 4.6: Summary of RPO Compliance upto end of FY 2015-16

| Particulars | FY 11 | FY 12 | FY 13 | FY 14 | FY 15 | FY 16 |
|---|----------|----------|---------------|---------|----------|----------|
| Solar | 0.25% | 0.30% | 0.40% | 0.40% | 0.60% | 0.85% |
| Non Solar | 0.75% | 1.70% | 2.60% | 2.60% | 2.70% | 2.70% |
| Total | 1.00% | 2.00% | 3.00% | 3.00% | 3.30% | 3.55% |
| Sales Within UT (in MU) | 1,285.33 | 1301.482 | 1376.428 | 1423.04 | 1,512.54 | 1,491.32 |
| RPO Obligation (in MU) | 13.07 | 26.03 | 41.29 | 42.69 | 49.91 | 52.94 |
| - Solar | 3.43 | 3.90 | 5.51 | 5.69 | 9.08 | 12.68 |
| -Non Solar | 9.64 | 22.13 | <i>35.7</i> 9 | 37.00 | 40.84 | 40.27 |
| RPO Compliance (Power Purchase) (in MU) | - | - | - | - | - | 3.45 |
| - Solar | - | - | - | - | - | 3.45 |
| -Non Solar | - | - | - | - | - | |
| RPO Compliance (REC Certificate Purchase) (in MU) | - | 10.75 | 55.09 | 58.37 | 45.14 | 53.40 |
| - Solar | | - | 2.36 | 15.89 | 8.54 | 9.60 |
| -Non Solar | | 10.75 | 52.73 | 42.48 | 36.60 | 43.80 |
| Total RPO Compliance (in MU) | - | 10.75 | 55.09 | 58.37 | 45.14 | 56.85 |
| - Solar | - | - | 2.36 | 15.89 | 8.54 | 13.05 |
| -Non Solar | - | 10.75 | 52.73 | 42.48 | 36.60 | 43.80 |
| Cumulative Requirement till current year (in MU) | 13.07 | 39.10 | 80.39 | 123.08 | 173.00 | 225.94 |
| - Solar | 3.43 | 7.33 | 12.84 | 18.53 | 27.61 | 40.28 |
| -Non Solar | 9.64 | 31.77 | 67.55 | 104.55 | 145.39 | 185.66 |
| Cumulative Compliance till current year (in MU) | - | 10.75 | 65.84 | 124.21 | 169.35 | 226.20 |
| - Solar | - | - | 2.36 | 18.25 | 26.79 | 39.84 |
| -Non Solar | - | 10.75 | 63.48 | 105.97 | 142.57 | 186.37 |
| Net Shortfall/(Surplus) in RPO Compliance Cumulative till current year (in MU) | 13.07 | 28.35 | 14.55 | (1.13) | 3.64 | (0.26) |
| - Solar | 3.43 | 7.33 | 10.49 | 0.29 | 0.82 | 0.45 |
| -Non Solar | 9.64 | 21.01 | 4.07 | (1.42) | 2.82 | (0.71) |

It is evident from the Table above that the Petitioner has broadly complied with the directives of the Commission to fulfill all the pending RPO's up-to FY 2015-16 by 31st March 2016.

The Commission notes that there is a shortfall of 0.45 MU in compliance of Solar RPO. However there is also a minor over compliance of Non-Solar RPO by 0.71 MU. Overall there is minor surplus of RPO of 0.26 MU.

As per Regulation 10 of JERC (Procurement of Renewable Energy) (Second Amendment), Regulations, 2015 issued on 22nd December 2015, following are the Consequences of Default:

"If the obligated entity does not fulfill the renewable purchase obligation as provided in these regulations during any year and also does not purchase the certificates, the Commission may direct the obligated entity to deposit into a separate fund, to be created and maintained by State Agency, such amount as the Commission may determine on the basis of the shortfall in units of RPO and the forbearance price decided by the Central Commission. Where any obligated entity fails to comply with the obligation to purchase the required minimum quantum of purchase from renewable energy sources or procure the Renewable Energy Certificate (s), it shall also be liable for penalty as may be decided by the Commission under Section 142 of the Act.

Provided

- 10.1. That the fund so created shall be utilized as may be directed by the Commission for purchase of the certificates.
- 10.2. Further that the Commission may empower an officer of the State Agency to operate the fund and procure from the Power Exchange the required number of certificates to the extent of the shortfall in the fulfillment of the obligations, out of the amount in the fund.
- 10.3. That the obligated entities shall be in breach of its license condition if it fails to deposit the amount directed by the Commission within 15 days of the communication of such direction.
- 10.4. That in case of genuine difficulty in complying with a Renewable Purchase Obligation the obligated entity can approach the Commission for carry forward of compliance requirement to the next year.

However, credit for excess renewal energy purchase would not be adjusted in the next year.

Provided that where the Commission has consented to the carry forward of compliance requirement, the provision of penalty as mentioned in the first paragraph of this Regulation or the provision of section 142 of the Act shall not be invoked.

Provided further that the penalty enforced by the Commission on the obligated entity shall not be a pass through in the Aggregate Revenue Requirement (ARR) in case the obligated entity is the licensee / deemed licensee."

The Commission observes that there can always be minor variations in RPO compliance as the utility can't predict the RPO upto the last MU with complete certainty. Accordingly, considering the efforts of the Petitioner to ensure compliance of RPO through both actual power purchase as well as purchase of REC, the Commission approves the carry forward of shortfall of 0.45 MU to the Solar RPO in the FY 2016-17.

Further, keeping in view the provisions cited above, the Commission does not approve the carry forward of surplus owing to over-compliance of non-Solar RPO in FY 2016-17.

4.6. Intra-State Transmission and Distribution (T&D) losses

Petitioner's submission:

T&D losses for the FY 2015-16 have been arrived at 15.24% as compared to 13.75% approved by the Commission in its Order dated 28th April, 2016. The T&D losses have stagnated in spite of an increase in the overall sales because maximum increase in sales has happened in the domestic category resulting in a higher proportion of the overall sales from 40% in FY 2011-12 to 44% in FY 2015-16 as compared to industrial consumers where the sales have remained stagnant leading to a reduction in overall share in percentage terms.

Further, the energy input to the UT is metered outside its territory and hence CED has to bear the additional losses of Inter-State circuit due to not having any Inter-State point at its boundary.

Also, the T&D losses of 12.81% in the FY 2014-15 were computed based on the sales of 1512.54 MU contained in the audited accounts for the FY 2014-15. However, there was an inadvertent error with respect to the sales recorded in the audited accounts of the FY 2014-15 and CED has already written to CAG for rectification of the error. The correct sales figure for the FY 2014-15 is 1471 MU which would lead to a loss level of 15.17% for the FY 2014-15.

Therefore, the Petitioner submitted that the T&D loss target approved for the FY 2015-16 as well as for MYT Control Period is unrealistic and requested the Commission to restate the loss targets.

Commission's analysis:

The Commission has considered net energy available for sales to retail consumers by the Petitioner at 1759.50 MU as per Deviation Settlement Account (DSA) including 1.38 MU procured from Solar sources within the UT. The Commission has further considered actual sales of 1491.32 MU. Considering the difference in energy available at the periphery of the Petitioner and the sales approved, actual T&D loss of the FY 2015-16 stands at 15.24% as shown below:

Table 4.7: T&D Losses approved by the Commission in the True-up of the FY 2015-16 (MU)

| Particulars | Approved in Tariff Order dated 28 th April 2016 | Petitioner's submission (True-up) | Approved by the Commission (True-up) |
|--|--|---|--|
| Energy sales within the State/UT (MU) | 1,510.00 | 1,491.32 | 1,491.32 |
| Energy required at State Periphery for Sale to Retail Consumers (MU) | 1,750.72 | 1,759.50 | 1,759.50 |
| T&D Losses (MU) | 240.72 | 268.18 | 268.18 |
| T&D Losses (%) | 13.75% | 15.24% | 15.24% |

Therefore, the Commission approves the T&D loss of 15.24% for True-up of the FY 2015-16.

In the previous Tariff Order dated 28th April 2016, the Commission had ordered that:

"The Commission had approved a loss level of 13.75% in its Order dated 10th April 2015 while determining the ARR for FY 2015-16. The Commission has already taken into consideration the difficulties expressed by the Petitioner and reduced the loss target only by 0.25%, though as per the recommendation of Abraham Committee the reduction should be 1%. The Commission also notes that actual losses as approved by the Commission for True-up of FY 2014-15 stands at 12.81%, which are lower than 13.75% presently approved for FY 2015-16. However, as the Petitioner has neither submitted actual power purchase bills upto FY 2014-15, nor have submitted the energy audit reports, the losses ascertained by the Commission are based on the information available at the alternate available resources. The Commission is also of the view that being a predominantly LT network, the losses are comparatively at a competitive level. Accordingly, the Commission finds it appropriate to retain the losses at the level of 13.75% for the purpose of review of FY 2015-16."

Considering the above the Commission accepts the actual T&D loss level of 15.24% for the FY 2015-16 based on actual energy sales and energy available at periphery. However, in respect of T&D loss trajectory, the Commission has not considered the Petitioner's request for revising the T&D Loss trajectory and the Commission has maintained the same loss trajectory based on approved lower (True-up) losses in the FY 2014-15 in the previous Order. Thus, the Commission retains the normative loss level of 13.75% for the FY 2015-16.

4.6.1. Penalty towards under-achievement of T&D losses

Commission's analysis:

In view of the above para the Commission works out the penalty as under:

As per Regulation 9 of the JERC Tariff Regulations 2009,

"9. Excess or Under Recovery with Respect to Norms and Targets

- "1) The generating company or the licensee, as the case may be, shall pass on to the consumers, the 70 % of the gain arising from over achievement of the norms laid down by the Commission in these Regulations or targets set by the Commission from time to time and retaining balance 30% with themselves.
- 2) The generating company or the licensee, as the case may be, shall bear the entire loss on account of its failure to achieve the norms laid down by the Commission or targets set by the Commission from time to time."

During the review for the FY 2015-16, the Commission had approved a T&D loss level of 13.75%. In view of the audited accounts now submitted by the Petitioner for the True up

of FY 2015-16, the Commission has approved the intra-state transmission and distribution loss level of 15.24% with reference to the audited figures of the quantum of power purchase, energy sales (including separate effect of UI over drawl / under drawl as per the bills) and actual energy drawl of FY 2015-16. The Commission therefore in accordance with the Regulation 9 referred above finds it reasonable to consider penalty towards under-achievement of the norms laid down by the Commission.

Consequent to the increase in percentage losses over the target approved by the Commission, the power purchased in actual is more than that corresponding to the approved percentage of losses in the Review Order for the FY 2015-16 dated 28th April, 2016 for the same sale of power. The assessment of penalty for increase in the T&D losses is shown in the Table below:

| | | FY 2015-16 | | |
|-----------|---|---|--|--|
| Sr No. | Particulars | Approved in the TO dated 28 th April, 2016 | Approved by the Commission (True-up) | |
| a | b | С | d | |
| 1 | Energy sales within the UT | 1491.32 | 1491.32 | |
| 2 | T&D Loss within the UT | 13.75% | 15.24% | |
| 3 | Energy required at UT Periphery for Sale to Retail Consumers (1 +1*2) | 1729.07 | 1759.50 | |
| 4 | Excess Power Purchase (3d-3c) | 30.43 | | |
| 5 | Approved Per unit Power Purchase Cost (Paisa per kWH) | 388.69 | | |
| 6 | Penalty for Under-achievement (Rs Crore) (4*5) | 11.83 | | |

Table 4.8: Penalty for underachievement of T&D losses in FY 2015-16 (Rs. crore)

4.7. Energy Balance

Petitioner Submission

Based on the actual sales and T&D losses, the energy requirement at periphery of the Petitioner has been calculated at 1759.50 MU including 1.38 MU procured from solar power inside the UT. It is further submitted that it has procured 1818.91 MU have been procured from generators/traders.

In additional submission, the Petitioner tabulated energy balance for FY 2015-16 as tabulated below:

| Particulars | FY 2015-16 |
|--|------------|
| Energy Requirement | |
| Energy Sales (MU) | 1,491.32 |
| T&D Loss% | 15.24% |
| Loss (MU) | 268.18 |
| Total Energy Required at UT Periphery (MU) | 1,759.50 |

Table 4.9: Energy Balance for FY 2015-16 as submitted by the Petitioner (MU)

| Particulars | FY 2015-16 |
|---|------------|
| Energy Available | |
| Units Procured | 1,817.53 |
| Inter-State Transmission Loss | 3.27% |
| Transmission Loss (MU) | 59.41 |
| Net Energy Available at UT Periphery | 1,758.12 |
| Power Available within UT | |
| Solar Power procured in NET Metering Mode (In MU's) | 1.36 |
| Solar Power procured in Gross Metering Mode (In MU's) | 0.02 |
| Total Energy Available | 1,759.50 |
| Demand Supply (Gap) / Surplus | (0.00) |

Commission's analysis:

The Commission has examined Regional Energy Accounting (REA) for FY 2015-16 as available in public domain for getting energy purchased by the Petitioner from power plants/traders/exchange/banking arrangement/UI mechanism. Further the Commission has relied on Deviation Settlement account (DSA) available on website of Northern Regional Power Committee (NRPC) website to arrive at actual power available at periphery of UT for same. The Commission has arrived at UI power purchase of 150.21 MU and UI/Third Party Power sale of 109.76 MU (43.47 MU from UI+36.83 MU from IEX Sale+ 29.46 MU Banking Sale) as difference of energy scheduled by the Petitioner and actual drawl at periphery of the Petitioner as per DSA available on website of NRPC.

The Total power purchase quantum of 1917.08 MU was approved by the Commission after verifying power purchase from REA and DSA. External Loss of 47.82 MU was considered by the Commission as difference of gross power purchase and energy available at periphery.

Table 4.10: Energy Balance approved by the Commission for True-up of FY 2015-16 (MU)

| S. No | Particulars | Approved in Tariff Order dated 28th April 2016 | Petitioner's Submission | Approved (True-up) |
|----------|---|--|----------------------------|-----------------------|
| A | ENERGY REQUIREMENT | | | |
| 1 | Energy sales in the UT | 1,510.00 | 1,491.32 | 1491.32 |
| 2 | Distribution losses (%age) | 13.75% | 15.24% | 15.24% |
| 3 | Energy required for the Territory (MU) 1/(100%-2) | 1,750.72 | 1,759.50 | 1,759.50 |
| 4 | Add: Sales to common pool consumers/ UI (As per NRPC) | 52.36 | | 109.76 |
| 5 | Energy Requirement @ periphery (3 + 4) | 1,803.09 | 1,759.50 | 1869.26 |
| | ENERGY AVAILABILITY | | | |
| 6 | Gross Energy Purchase (As per REA) | 1,867.92 | 1818.91 | 1917.08 |
| 7 | External losses (MU) (6-5) | 64.84 | 59.41 | 47.82 |
| 8 | Net Energy Availability (6-7) | 1,803.09 | 1,759.50 | 1869.26 |

4.8. Operation & Maintenance (0&M) Expenses

The O&M Expenses cover the following expenses:

- Employee expenses and gratuity, leave encashment and staff welfare
- Administrative and General (A&G) expenses mainly comprising of the rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances and other expenses.
- Repairs and Maintenance Expenses (R&M) for day to day upkeep of the distribution network of the Company.

(i) Employee Expenses

Petitioner's submission:

The actual employee expenses for the FY 2015-16 of Rs 61.80 crore are less than Rs. 63.13 crore approved by the Commission during the review of the FY 2015-16 in the Tariff Order dated 28th April 2016.

Commission's analysis:

The Commission had approved the employee expenses of Rs. 63.13 Crores in the 'Review of the ARR for the FY 2015-16' vide Tariff Order dated 28th April, 2016 by escalating actual employee expense of FY 2014-15 by 5.11% (average growth of WPI for the past three years) as per Regulation 27 (3) of the Tariff Regulations, 2009. However, the actual growth in WPI for the FY 2015-16 has been negative (-2.49%). The Commission appreciates the fact that the Petitioner had to incur employee expenses at the same level though the WPI turned negative.

Therefore, the Commission approves actual employee expenses of Rs 61.80 crore for the True-up of the FY 2015-16.

(ii) Administrative and General Expenses (A&G)

Petitioner's submission:

The A&G expenses of Rs 4.39 crore incurred for the FY 2015-16 are slightly higher than the approved figures of Rs 3.59 crore because, post initiation of commercial accounting practice all expenses are being booked under the respective heads and hence basis for projections by considering increase over the past year actuals is not appropriate for approval of the O&M parameters. The Petitioner requested the Commission to approve the A&G expenses as per actuals.

Commission's analysis:

The Commission had approved the A&G expenses of Rs. 3.59 crore in the 'Review of the ARR for the FY 2015-16 vide Tariff Order dated 28th April 2016 by escalating the actual A&G expense of FY 2014-15 by 5.11% (Average growth of WPI for the past three years) as per Regulation 27 (3) of the Tariff Regulations, 2009. However, the actual WPI for the FY 2015-16 has been negative (-2.49%).

The Commission acknowledges the fact that the Petitioner had to incur the A&G Expenses at the same level though the WPI turned negative and hence finds it appropriate to consider the actual A&G expenses of Rs 3.42 Crore as incurred for the FY 2014-15 in the True-up of the FY 2015-16.

Therefore, the Commission approves the A&G expenses of Rs 3.42 crore for the True-up of the FY 2015-16.

(iii) Repair and Maintenance Expenses (R&M)

Petitioner's submission:

The actual R&M expenses for the FY 2015-16 of Rs 10.01 crore are less than Rs. 13.87 crore approved by the Commission during the review of the FY 2015-16 in the Tariff Order dated 28th April 2016.

Commission's analysis:

The Commission had approved the R&M expenses at Rs. 13.87 crore in the 'Review of the ARR for the FY 2015-16 vide Order dated 28th April, 2016 by escalating the actual R&M expenses of FY 2014-15 by 5.11% (Average growth of WPI for past three years) as per Regulation 27 (3) of Tariff Regulations, 2009. However, the actual WPI for the FY 2015-16 has been negative (-2.49%). Even after applying the actual WPI for the FY 2015-16, the R&M Expenses for the FY 2015-16 is Rs 13.26 Crores which is higher than the actual R&M Expenses of Rs 10.01 Crore for the FY 2015-16.

Therefore, the Commission approves the actual R&M expenses of Rs 10.01 crore for True-up of the FY 2015-16 as indicated by the Petitioner.

However, the Commission directs the Petitioner to incur the requisite expenditure on preventive and other maintenance activities.

Summary of O&M Expenses approved for the FY 2015-16

The 0&M expenses as submitted and approved for the FY 2015-16 are as shown below:

Table 4.11: 0&M Expenses approved by the Commission for True-up of FY 2015-16 (Rs crore)

| S.No | Particulars | Approved in Tariff Order dated 28 th April 2016 | Petitioner's submission (True-up) | Approved by the Commission (True-up) |
|------|--------------------|--|---|--|
| 1 | Employee Expenses | 63.13 | 61.80 | 61.80 |
| 2 | A&G Expenses | 3.59 | 4.39 | 3.42 |
| 3 | R&M Expenses | 13.87 | 10.01 | 10.01 |
| | Total O&M Expenses | 80.60 | 76.20 | 75.23 |

4.9. Gross Fixed Assets (GFA), Capitalisation and Depreciation

Petitioner's submission:

In the absence of the Fixed Assets Register (FAR) for assets prior to 2005, the GFA approved by the Commission in the previous Order dated 28th April 2016 is considered. Therefore, the opening assets amount approved by the Commission in the FY 2015-16 has been considered as approved for the FY 2015-16, actual addition of Rs. 12.29 crore has been considered for arriving at the closing assets of the FY 2015-16. Further, the Petitioner also submitted that it has initiated activities with respect to the preparation of the FAR for the period prior to year 2005 and requested the Commission to approve the same as and when they are prepared. The Petitioner has further submitted that it has booked depreciation of Rs 14.65 crore.

Commission's analysis:

As detailed in the previous chapter, the Commission has now decided to consider the assets and depreciation as per the audited accounts. Accordingly, the Commission has taken the opening GFA, asset addition and closing GFA as per the audited accounts for the FY 2015-16 as shown in the Table below:

Table 4.12: GFA approved by the Commission in the True-up of FY 2015-16 (Rs crore)

| Particulars | Approved in the Tariff Order dated 28 th April 2016 | Petitioner's submission (True-up) | Approved by the Commission As per Audited A/c (True-up) |
|--------------------------|--|---|--|
| Opening GFA | 230.30 | 230.30 | 391.57 |
| Addition during the year | 9.96 | 12.29 | 12.29 |
| Closing GFA | 240.26 | 242.58 | 403.86 |

In respect of depreciation the Commission has followed Regulation 26 of the Tariff Regulations 2009,

"26. Depreciation

- (1) For the purpose of tariff, depreciation shall be computed in the following manner:
- (i) The value base for the purpose of depreciation shall be the historical cost of the assets, that is actual expenses limited to approved capital cost where such capital cost has been approved by the Commission:

Provided that land is not a depreciable asset and its cost shall be excluded from the capital cost while computing depreciation.

- (ii) The historical cost of the asset shall include additional capitalization.
- (iii) The historical cost shall include foreign currency funding converted into equivalent rupees at the exchange rate prevalent on the date when foreign currency was actually availed but not later than the date of commercial operation.
- (iv) Depreciation for generation and transmission assets shall be calculated annually as per straight-line method over the useful life of the asset at the rate of depreciation specified by the Central Electricity Regulatory Commission from time to time.

Provided that the total depreciation during the life of the asset shall not exceed 90% of the original cost.

Depreciation for distribution and other assets not covered by CERC shall be as per Government of India norms of 1994 as may be revised by the Commission from time to time."

The Commission has not applied the applicable CERC rates on the average assets in place, since some of these assets have already attained 90% limit of depreciation during the life of the asset, and accordingly has approved depreciation as per the audited accounts for the True-up of FY 2015-16 as shown in the Table below:

Table 4.13: Asset-wise depreciation approved by the Commission in the True-up of FY 2015-16 (Rs crore)

| Particulars | Opening GFA | Additions | Closing GFA | Average Assets | Rate of depreciation | Depreciation |
|------------------------|-------------|-----------|-------------|----------------|----------------------|--------------|
| | (a) | b | c-a+b | d= (a+b)/2 | e=f/d | f |
| Plant & Machinery | 383.05 | 12.25 | 395.30 | 389.17 | 3.63% | 14.14 |
| Buildings | 6.84 | 0.00 | 6.84 | 6.84 | 5.52% | 0.38 |
| Vehicles | 0.71 | 0.00 | 0.71 | 0.71 | 9.50% | 0.07 |
| Furniture and Fixtures | 0.19 | 0.01 | 0.20 | 0.20 | 7.07% | 0.01 |
| Computers & others | 0.09 | 0.02 | 0.12 | 0.10 | 54.84% | 0.06 |
| Land | 0.69 | 0.00 | 0.69 | 0.69 | 0.00% | 0.00 |
| Total | 391.57 | 12.29 | 403.86 | 397.71 | 3.68% | 14.65 |

The depreciation amount as submitted by the Petitioner and approved by the Commission in the True-up of FY 2015-16 is shown in the Table below:

Table 4.14: Depreciation approved by the Commission in the True-up of FY 2015-16 (Rs crore)

| Particulars | Approved in the Tariff Order dated 28 th April 2016 | Petitioner's submission (True-up) | Approved by the Commission As per Audited A/c (True-up) |
|--------------|--|---|--|
| Depreciation | 12.86 | 14.65 | 14.65 |

Therefore, the Commission approves actual depreciation of Rs 14.65 crore for True-up of the FY 2015-16.

4.10. Interest and Finance Charges

Petitioner's submission:

The closing normative loan for the FY 2014-15 as approved in the MYT Order dated 28th April 2016 has been considered as opening normative loan for the FY 2015-16. The addition in the normative loan for the FY 2015-16 has been considered based on debt-equity ratio of 70:30. Further, the repayment of the loan has been considered at 10% of the opening normative loan. An interest rate of 14.75% applicable as on 1st April, 2015 (which is the SBI PLR rate replaced by SBAR) has been applied on the average normative debt in order to estimate the normative interest cost for the FY 2015-16.

Accordingly, the interest on normative loan for the FY 2015-16 has been computed as Rs 6.02 crore in respect of the True-up for the FY 2015-16.

Commission's analysis:

As per Regulation 25 of the Tariff Regulations, 2009:

- "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." (Read SBI Advance Rate)

Further as per Regulation 23 of the said Tariff Regulations 2009:

"23. Debt-Equity Ratio

1) For the purpose of determination of tariff, debt-equity ratio in case of existing, ongoing as well as new projects commencing after the date of notification of these Regulations shall be 70:30. Where equity employed is more than 30%, the amount of equity

for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as loan. Where actual equity employed is less than 30%, the actual debt and equity shall be considered for determination of tariff:

- 2) Provided that the Commission may, in appropriate cases, consider equity higher than 30% for the purpose of determination of tariff, where the generating company or the licensee is able to establish to the satisfaction of the Commission that deployment of equity more than 30% is in the interest of the general public:
- 3) The debt and equity amounts arrived at in accordance with sub-regulation (1) above shall be used for all purposes including for determining interest on loan, return on equity, Advance against Depreciation and Foreign Exchange Rate Variation.
- 4) Provided that in the case of an Integrated Utility, till the time it remains Integrated Utility, it shall be entitled to return on its capital base as per Schedule VI to the repealed Electricity (Supply) Act, 1948."

As detailed in the previous chapter, the Commission has already approved the closing normative loan for the FY 2014-15. The Commission has considered an addition of Rs. 12.29 crore in the GFA for the FY 2015-16 which are considered funded through normative debt to the tune of 70% and accordingly the Commission has considered the addition in normative loan at Rs 8.60 crore (70% of 12.29) for the FY 2015-16. The Commission has considered weighted average rate of SBI Advance Rate for the year at 14.29 % and the repayment of the debt has been considered at 10% the opening loan amount.

The calculation of the interest on the normative loan is given in the following Table:

Table 4.15: Normative interest on loan approved by the Commission in the True-up of FY 2015-16 (Rs crore)

| S. No. | Particulars | Approved in the Tariff Order Dated 28 th April 2016 | Petitioner's submission (True-up) | Approved by the Commission (True-up) |
|-----------|---------------------------------------|--|---|--|
| 1 | Opening normative loan | 38.42 | 38.42 | 25.89 |
| 2 | Add: Normative loan during the year | 6.97 | 8.60 | 8.60 |
| 3 | Less: Normative repayment (10 % of 1) | 3.84 | 3.84 | 2.59 |
| 4 | Closing normative loan (1+2-3) | 41.55 | 43.18 | 31.91 |
| 5 | Average normative loan (1+4) * 0.5 | 39.98 | 40.80 | 28.90 |
| 6 | Rate of interest | 14.29% | 14.75% | 14.29% |
| 7 | Interest on normative loan | 5.71 | 6.02 | 4.13 |

Therefore, the Commission approves interest and finance charges of Rs 4.13 Crores in the True-up for the FY 2015-16.

4.11. Interest on Security Deposit

Petitioner's submission:

Regulation 25 of Tariff Regulations, 2009 read along with Clause 47(4) of the Electricity Act, 2003 provides for Interest on Security Deposit, if any, made by the consumer with the licensee. An amount of Rs 8.31 crore has been claimed as actual interest paid to the consumers on security deposits for the FY 2015-16.

Commission's analysis:

The Commission observes that as per the audited accounts for the FY 2015-16, the Petitioner has paid interest on security deposit at Rs 8.31 crore on the security deposit amount of Rs 136.67 crore and therefore approves the same in the True-up of the ARR for the FY 2015-16.

The Commission has further noticed that the CAG in its audit report has pointed out that the liability for Advance Consumer Deposit (ACD) is being booked on the basis of assessment instead of actual realization. Hence security deposits are overstated to the extent of ACD assessed but not realized. However the Commission has considered Interest on consumer deposit as per audited accounts and directs Petitioner to remove the discrepancy in accounts from next FY onwards.

4.12. Interest on Working Capital

Petitioner's submission:

Interest on Working Capital has been claimed in accordance with Regulation 29 of the Tariff Regulations 2009. Further, the closing balance of the security deposit has been deducted from the total normative Working Capital requirement for computing the Working Capital requirement as per the methodology followed by the Commission in its previous Tariff Order.

Commission's analysis:

As per Regulation 29 of the Tariff Regulations, 2009:

- "(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."

The Commission has considered the calculation of the different components of the Working Capital on the basis of the above-stipulated norms. The Commission has deducted the security deposit from the Working Capital requirement considered for the True-up of the ARR for the FY 2015-16. Further, the Commission clarifies that the SBI PLR rate has now been substituted by the SBI Advance Rate. The Commission has considered the SBI Advance Rate as on 01^{st} April 2015. The Working Capital requirement after deduction of the amount of security deposit is coming to be negative. Hence, the Interest on Working Capital is approved as Nil.

The detailed calculation of the interest on Working Capital is as per following Table:

Table 4.16: Interest on Working Capital approved by the Commission in the True-up of FY 2015-16 (Rs crore)

| S. No. | Particulars | Approved in the Tariff Order Dated 28 th April 2016 | Petitioner's submission (True-up) | Approved by the Commission (True-up) |
|--------|---|--|---|--|
| 1 | Power Purchase Cost for one month | 54.78 | 57.57 | 57.62 |
| 2 | Employee Cost for one month | 5.26 | 5.15 | 5.15 |
| 3 | A&G Expenses for one month | 0.30 | 0.37 | 0.29 |
| 4 | R&M Expenses for one month | 1.13 | 0.83 | 0.83 |
| 5 | Total Working Capital for one month | 61.24 | 63.92 | 63.89 |
| 6 | Security Deposit (amount with CED) | 138.84 | 136.67 | 136.67 |
| 7 | Total borrowing for Working Capital considered for one month | - | - | - |
| 8 | SBI PLR Rate (Read SBAR) (%) | 14.29% | 14.75% | 14.75% |
| 9 | Interest on Working Capital | - | - | - |

Therefore, the Commission approves 'Nil' Interest on Working Capital in the Trueup for the FY 2015-16.

4.13. Return on Capital Base

Petitioner's submission:

Considering the Capital Base/ Net Fixed Assets as per Regulation 23 (2) and Regulation 24 of the Tariff Regulations, 2009 the Return on Capital is computed based on the opening assets and the accumulated depreciation as approved by the Commission in its Order dated 28th April 2016. A reasonable return equal to 3% of Net fixed assets is considered after deduction of accumulated depreciation for calculation of Return on Equity (RoE).

Commission's analysis:

The CED, being an integrated T&D utility, is entitled to return on capital base as per Regulation 23 of the Tariff Regulations, 2009. Further, the Commission has considered the revised GFA as per audited accounts as detailed in the previous chapter.

Accordingly, the Commission approves the return on capital base on the basis of the revised GFA and cumulative depreciation (Rs 142.39 Crores) as on 01st April 2015 as reflected in the audited accounts.

The return on capital base as per the provisions of the Regulations is shown in the below Table:

Table 4.17: Return on Capital Base approved by the Commission in the True-up of FY 2015-16 (Rs crore)

| S. No. | Particulars | Approved in the Tariff Order Dated 28th April 2016 | Petitioner's submission (True-up) | Approved by the Commission (True-up) |
|-----------|---|--|-----------------------------------|--|
| 1 | Gross block at beginning of the FY | 230.30 | 230.30 | 391.57 |
| 2 | Less: Opening accumulated depreciation | 82.46 | 82.46 | 142.39 |
| 3 | Net block at beginning of the FY (1-2) | 147.83 | 147.84 | 249.18 |
| 4 | Less: Opening accumulated consumer contribution | 0 | 0 | 0 |
| 5 | Net fixed assets at beginning of the FY (3-4) | 147.83 | 147.84 | 249.18 |
| 6 | Return @3% of NFA | 4.44 | 4.44 | 7.48 |

Therefore, the Commission approves Return on Net Fixed Assets (NFA) of Rs 7.48 crore in the True-up for the FY 2015-16.

4.14. Provision for Bad and Doubtful Debts

Petitioner's submission:

In accordance with Clause 28 of the 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 licensee. It is further submitted that there are outstanding dues of Rs. 36.16 crore from permanently disconnected consumers. Accordingly, CED has proposed the provision for bad and doubtful debts on 1% of the receivables for the FY 2015-16 as Rs. 7.79 crore for the FY 2015-16.

Commission's analysis:

As specified in Regulation 28 of the Tariff Regulations, 2009 (to be read with the format):

"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."

It is observed that as per the audited accounts, the licensee has not actually written off any bad and doubtful debts for the FY 2015-16. The Commission therefore has not considered any bad and doubtful debts for truing up of FY 2015-16. Action either to recover the dues or its write-off may be initiated. **Therefore, the Commission has not approved any amount towards bad & doubtful debts in the True-up for the FY 2015-16.**

4.15. Non-Tariff Income

Petitioner's submission:

Non-Tariff Income of Rs 21.92 crore has been claimed in the True-up of the FY 2015-16.

Commission's analysis:

The Commission has found that as per the audited accounts of the FY 2015-16 other income of Rs 7.73 crore has been claimed. Additionally, Rs 5.74 crore has been received as late payment surcharge and Rs 8.45 crore received as miscellaneous charges. Hence, the total Non-Tariff Income is Rs 21.92 crore as per the audited accounts for the year, which is approved by the Commission as follows:

Table 4.18: Non-Tariff Income approved by the Commission in the True-up of FY 2015-16 (Rs crore)

| Particulars | Approved in the Tariff Order Dated 28 th April 2016 | Petitioner's submission (True-up) | Approved by the Commission (As per audited A/c) (True-up) |
|-------------------|--|---|---|
| Non-Tariff Income | 23.32 | 21.92 | 21.92 |

Therefore, the Commission approves the Non-Tariff Income of Rs 21.92 crore in the True-up for the FY 2015-16.

The Commission has also noted that as per CAG audit report the interest from bonds receivable upto $31^{\rm st}$ March 2016 has not been accounted for by the Petitioner. The Commission directs the Petitioner to furnish such details in the next Petition.

4.16. Revenue from Sale of Surplus Power/ Unscheduled Interchange (UI)

Petitioner's submission:

UI sale of Rs 7.58 crore has been shown in the FY 2015-16.

Commission's analysis:

The Commission has analyzed the submission made by the Petitioner regarding surplus power/UI sales and finds that it has made surplus power/UI sale of Rs 7.58 Crores as submitted. The same figure is also reflected in the audited accounts of FY 2015-16.

Therefore the Commission approves the revenue from sale of surplus power of Rs 7.58 crore in the True-up for the FY 2015-16.

4.17. Revenue at approved Retail Tariff for the FY 2015-16

Petitioner's submission:

The revenue from Tariff for the FY 2015-16 was Rs. 656.59 crore and additionally Rs 3.47 crore was billed as FPPCA.

Commission's analysis:

The Commission has verified revenue from the sale of power inside the UT in the FY 2015-16 from the audited accounts and approves the revenue from sale of power at Rs 656.59 crore and Rs 3.47 crore from FPPCA in the True-up for the FY 2015-16. Total revenue billed in FY 2015-16 is hence arrived at Rs 660.06 crore.

4.18. Aggregate Revenue Requirement (ARR)

Petitioner's submission:

The Net Aggregate Revenue Requirement as approved by the Commission in the Review of the ARR for the FY 2015-16 was Rs. 742.50 crore. The Petitioner, based on the true-up submissions for the FY 2015-16 has requested the Commission to approve an ARR of Rs. 778.71 crore.

Commission's analysis:

The Commission based on the detailed analysis of the cost parameters of the ARR has considered and approved net revenue requirement of FY 2015-16 in True up at Rs. 759.95 crore as shown in the following Table:

Table 4.19: Net ARR approved by the Commission in the True-up of FY 2015-16 (Rs crore)

| S. No. | Particulars | Approved in the Tariff Order Dated 28 th April 2016 | Petitioner's submission (True-up) | Approved by the Commission (True-up) |
|-----------|---|--|---|--|
| 1 | Cost of power purchase for full year | 654.55 | 690.81 | 691.48 |
| 2 | Employee costs | 63.13 | 61.80 | 61.80 |
| 3 | Administration and General Expenses | 3.59 | 4.39 | 3.42 |
| 4 | Repair and Maintenance Expenses | 13.87 | 10.01 | 10.01 |
| 5 | Depreciation | 12.86 | 14.65 | 14.65 |
| 6 | Interest and Finance charges | 5.71 | 6.02 | 4.13 |
| 7 | Interest on Working Capital | - | - | - |
| 8 | Interest on Security Deposit | 11.59 | 8.31 | 8.31 |
| 9 | Return on NFA /Equity | 4.44 | 4.44 | 7.48 |
| 10 | Provision for Bad Debt | - | 7.79 | - |
| 11 | Penalty For Under-achievement of T&D Loss | | | (11.83) |
| 12 | Total Revenue Requirement Sum(1:11) | 769.75 | 808.22 | 789.45 |
| 13 | Less: Non-Tariff Income | 23.32 | 21.92 | 21.92 |
| 14 | Less: Revenue from Surplus Power Sale/UI | 3.93 | 7.58 | 7.58 |
| 15 | Net Revenue Requirement (12-13-14) | 742.50 | 778.71 | 759.95 |

4.19. Revenue Gap/ (Surplus) for True-up of FY 2015-16

Petitioner's submission:

The revenue gap approved by the Commission in the Review of the ARR for the FY 2015-16 was Rs. 78.10 crores. The revenue gap calculated by the Petitioner on the basis of True-up for the FY 2015-16 is Rs. 118.66 crore.

Commission's analysis:

The Commission has analyzed and approved the Revenue Gap/(Surplus) as follows:

Table 4.20: Revenue Gap/(Surplus) approved by the Commission in the True-up of FY 2015-16 (Rs crore)

| S. No. | Particulars | Approved in the Tariff Order Dated 28th April 2016 | Petitioner's submission (True-up) | Approved by the Commission (True-up) |
|-----------|--|--|-----------------------------------|--|
| 1 | Net Revenue Requirement | 742.50 | 778.71 | 759.95 |
| 2 | Revenue from Retail Sales at Existing Tariff (Including FPPCA) | 664.40 660.06 | | 660.06 |
| 3 | Net Gap / (Surplus) (1-2) | 78.10 | 118.66 | 99.89 |
| 4 | Gap/(Surplus) for the previous year | 143.83 | - | 153.34 |
| 5 | Carrying Cost @ 14.75% | 20.55 | - | 22.62 |
| 6 | Total Gap/ (Surplus) | 242.49 | 118.66 | 275.85 |

The Commission in the previous chapter has approved the cumulative revenue gap of Rs 153.34 crore. Considering the rate of interest approved for Working Capital i.e. 14.75%, the carrying cost works out be Rs 22.62 crore for the FY 2015-16.

Accordingly, the Commission considers the standalone Revenue Gap of Rs 99.89 crore in the True-up for the FY 2015-16 and cumulative revenue gap of Rs 275.85 crore for carry forward to the FY 2016-17.

Chapter 5. Review of FY 2016-17

5.1. Applicable Provisions of MYT Regulations, 2014

The Review of the FY 2016-17 is to be carried out as per the following provisions of Regulation 8 of MYT Regulations, 2014 reproduced below:

- "(1) The Commission shall undertake a review along with the next Tariff Order of the expenses and revenue approved by the Commission in the Tariff Order. While doing so, the Commission shall consider variations between approvals and revised estimates/actuals of sale of electricity, income and expenditure for the relevant year and permit necessary adjustments/ changes in case such variations are for adequate and justifiable reasons. Such an exercise shall be called 'Review'.
- (2) After audited accounts of a year are made available, the Commission shall undertake similar exercise as above with reference to the final actual figures or the provisional actual accounts as available 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'.

- (3) The revenue gap/surplus, if any, of the ensuing year shall be adjusted as a result of review and truing up exercises.
- (4) While approving such expenses/revenue to be adjusted in the future years as arising out of the Review and/or Truing up exercises, the Commission may allow the carrying costs as determined by the Commission of such expenses/revenue. Carrying costs shall be limited to 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 due to conditions beyond its control.
- (6) In case additional supply is required to be made to any particular category, the licensee may, any time during the year make an application to the Commission for its approval. The application will demonstrate the need for such additional supply of power and also indicate the manner in which the licensee proposes to meet the cost for such additional supply of power."

5.2. Approach for Review of FY 2016-17

The Review of ARR for the FY 2016-17 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. This has been done based on projections for 12 months of the actual data for 6 months (or 9 months wherever available) for Power Purchase Cost, and sales, and revised estimates of the FY 2016-17 for the O&M Expenses are based on the norms approved in the Business Plan Order dated 28th November 2015.

5.3. Energy sales, Number of consumers and Connected load

Petitioner's submission:

The revised estimates of sales are 1552.93 MU as compared to 1617.41 MU approved in the MYT Order dated 28th April 2016 for the FY 2016-17. The sales for the FY 2016-17 have been estimated based upon the trend followed by various categories during the past few years and considering the actual sales during first six months of FY 2016-17. While the increase in sales during the FY 2015-16 has been low, the actual six months sales during the FY 2016-17 have been higher than the FY 2015-16 during the same period. The actual energy sales in the first six months of the FY 2016-17 are 843.76 MU. Energy Sales (MU), Number of consumers and Connected Load (kW) as approved by the Commission in the Tariff Order dated 28th April 2016 and estimated (pro-rata) for the whole year are given in the Tables below:

Table 5.1: Energy Sales submitted by the Petitioner for the FY 2016-17 (in MU)

| S No | Categories | Approved as per T.O dated 28th April 2016 | T.O dated Actual 6 | |
|------|-------------------------|---|--------------------|---------|
| 1. | Domestic | 760.27 | 383.55 | 691.42 |
| 2. | Commercial | 490.82 | 260.73 | 481.87 |
| 3. | Large Supply | 117.00 | 65.24 | 138.43 |
| 4. | Medium Supply | 21.00 | 61.72 | 114.29 |
| 5. | Small Power Supply | 104.72 | 10.64 | 19.01 |
| 6. | Agriculture | 1.87 | 0.75 | 1.52 |
| 7. | Public Lighting | 25.67 | 9.99 | 22.68 |
| 8. | Bulk Supply | 89.06 | 48.15 | 77.19 |
| 9. | Others Temporary Supply | 7.00 | 3.01 | 6.52 |
| | Grand Total | 1,617.4 | 843.76 | 1552.93 |

Table 5.2: No. of consumers submitted by the Petitioner for the FY 2016-17 (in Nos.)

| S No | Categories | Approved as per T.O dated 28th April 2016 Actual 6 | | Estimated for full year |
|------|-------------------------|--|---------------|----------------------------|
| 1. | Domestic | 194,369 | 190,729 | 193,967 |
| 2. | Commercial | 23,038 | 23,038 23,069 | |
| 3. | Large Supply | 108 | 100 | 103 |
| 4. | Medium Supply | 1,295 | 1,264 | 1,305 |
| 5. | Small Power Supply | 1,275 | 1,269 | 1,269 |
| 6. | Agriculture | 121 | 121 | 120 |
| 7. | Public Lighting | 977 | 977 1041 | |
| 8. | Bulk Supply | 592 712 | | 700 |
| 9. | Others Temporary Supply | 620 560 | | 573 |
| | Grand Total | 222,394 | 218,865 | 222,292 |

Table 5.3: Connected Load submitted by the Petitioner for the FY 2016-17 (in kW)

| S No | Categories | Approved as per T.O dated 28th April 2016 | per T.O dated Actual 6 months | |
|------|-------------------------|---|---------------------------------|-----------|
| 1. | Domestic | 876,406 | 842,345 | 842,717 |
| 2. | Commercial | 430,983 | 409,133 | 420,458 |
| 3. | Large Supply | 74,661 | 72,643 | 72,623 |
| 4. | Medium Supply | 71,285 | 70,630 | 73,996 |
| 5. | Small Power Supply | 19,655 | 19,387 | 19,558 |
| 6. | Agriculture | 737 | 756 | 747 |
| 7. | Public Lighting | 6,197 | 6,506 | 6,480 |
| 8. | Bulk Supply | 41,464 | 42,283 | 42,335 |
| 9. | Others Temporary Supply | 4,187 | 2,924 | 3,250 |
| | Grand Total | 1,525,574 | 1,466,606 | 1,482,164 |

Commission's analysis:

The Commission has considered the number of consumers and connected load as submitted by the Petitioner in its additional submission. The Commission has noted the six months unaudited sales figures for the FY 2016-17. The Commission has examined the estimated energy sales for the FY 2016-17, projected for the full year considering the 6 months actuals and finds that the Petitioner has estimated that 54% of the power sale in the FY 2016-17 will occur in the first six months (H1) while 46% will occur in the last six months of the financial year (H2). However in the previous Petition, bearing the Petition no. 198/2016 for review of the FY 2015-16, the Petitioner had estimated only 51% power sales in the first six months of the FY 2015-16. The Commission opines that the Petitioner is not following any scientific methodology for estimation of power sales for the complete year on basis of actual data for the first six months. The Commission has calculated ratio of consumption in the first six months with that of the full year for the FY 2015-16 and has assumed that the same ratio of energy sales would be consumed in the second six months of FY 2016-17. The Commission has accordingly arrived at the full year consumption for the FY 2016-17.

The category wise number of Energy Sales, Number of consumers and connected load as approved is shown below:

Table 5.4: Energy Sales approved by the Commission for the FY 2016-17 (in MU)

| S. No. | Categories | Approved as per T.O dated 28 th April 2016 | Actual 6 months | Estimated for full year by the Petitioner | Approved in Review by the Commission |
|-----------|---------------|---|-----------------|---|--|
| 1 | Domestic | 760.27 | 383.55 | 691.42 | 748.70 |
| | 0-150 units | 326.92 | | 297 | 321.94 |
| | 151-400units | 250.89 | | 228 | 247.07 |
| | 401 and above | 182.46 | | 166 | 179.69 |
| 2 | Commercial | 490.82 | 260.73 | 481.87 | 508.05 |
| | 0-150 units | 220.87 | | 217 | 228.62 |

| S. No. | Categories | Approved as per T.O dated 28 th April 2016 | Actual 6 months | Estimated for full year by the Petitioner | Approved in Review by the Commission |
|-----------|-------------------------|---|-----------------|---|--|
| | 151-400units | 206.14 | | 202 | 213.38 |
| | 401 and above | 63.81 | | 63 | 66.05 |
| 3 | Large Supply | 117.00 | 65.24 | 138.43 | 124.66 |
| 4 | Medium Supply | 21.00 | 61.72 | 114.29 | 122.24 |
| 5 | Small Power Supply | 104.72 | 10.64 | 19.01 | 20.21 |
| 6 | Agriculture | 1.87 | 0.75 | 1.52 | 1.43 |
| 7 | Public Lighting | 25.67 | 9.99 | 22.68 | 21.09 |
| 8 | Bulk Supply | 89.06 | 48.15 | 77.19 | 85.34 |
| 9 | Others Temporary Supply | 7.00 | 3.01 | 6.52 | 5.61 |
| | Grand Total | 1617.41 | 843.76 | 1552.93 | 1637.33 |

Table 5.5: No. of consumers approved by the Commission for the FY 2016-17 (in Nos.)

| S No | Categories | Approved T.0 dated 28 th April 2016 | Petitioner's Submission (For review) | Approved by the Commission (Review) |
|------|-------------------------|--|--|---|
| 1. | Domestic | 194,369 | 193,967 | 193,967 |
| 2. | Commercial | 23,038 | 23,228 | 23,228 |
| 3. | Large Supply | 108 | 103 | 103 |
| 4. | Medium Supply | 1,295 | 1,305 | 1,305 |
| 5. | Small Power Supply | 1,275 | 1,269 | 1,269 |
| 6. | Agriculture | 121 | 120 | 120 |
| 7. | Public Lighting | 977 | 1027 | 1027 |
| 8. | Bulk Supply | 592 | 700 | 700 |
| 9. | Others Temporary Supply | 620 | 573 | 573 |
| | Grand Total | 222,394 | 222,292 | 222,292 |

Table 5.6: Connected Load approved by the Commission for the FY 2016-17 (in kW)

| | | Approved as | Petitioner's | Approved by the |
|------|-------------------------|-----------------------------|--------------|-----------------|
| S No | Categories | per T.O dated | Submission | Commission |
| | | 28 th April 2016 | (For review) | (Review) |
| 1. | Domestic | 876,406 | 842,717 | 842,717 |
| 2. | Commercial | 430,983 | 420,458 | 420,458 |
| 3. | Large Supply | 74,661 | 72,623 | 72,623 |
| 4. | Medium Supply | 71,285 | 73,996 | 73,996 |
| 5. | Small Power Supply | 19,655 | 19,558 | 19,558 |
| 6. | Agriculture | 737 | 747 | 747 |
| 7. | Public Lighting | 6,197 | 6,480 | 6,480 |
| 8. | Bulk Supply | 41,464 | 42,335 | 42,335 |
| 9. | Others Temporary Supply | 4,187 | 3,250 | 3,250 |
| | Grand Total | 1,525,574 | 1,482,164 | 1,482,164 |

Therefore, the Commission approves the total sales of 1637.33 MU for a total number of consumers at 2,22,292 with a total connected load at 14,82,164 kW in the Review of the ARR for the FY 2016-17.

5.4. Intra-State Transmission and Distribution (T&D) losses

Petitioner's submission:

While the sales have increased in the last three years, losses have remained stagnant without much improvement as majority of the increase in the sales has happened in the LT category. On the basis of the National Tariff Policy, 2006, the various technical and technological improvements proposed under IPDS and other schemes shall be useful in bringing about the desired reduction in loss levels. Since these schemes are currently under implementation, hence the T&D loss level for the FY 2016-17 should be revised to 14.00% in line with its submission in the Business Plan and MYT Petition. Besides the energy input to the UT is metered outside its territory and hence CED has to bear the additional losses of the interstate circuit due to not having any interstate point in its boundary. Also the T&D loss of 12.81% in the FY 2014-15 was computed based on the sales of 1512.54 MU contained in the audited accounts for the FY 2014-15. However, there was an inadvertent error with respect to the sales recorded in the audited accounts of the FY 2014-15 and CED has already written to the CAG for rectification of the error. The correct sales figure for the FY 2014-15 is 1471 MU, which would lead to a loss level of 15.17% for the FY 2014-15. In view of the restatement of actual T&D loss of FY 2014-15 due to correction in sales figure the T&D loss target approved for MYT Control Period is unrealistic and the loss targets should be re-set.

Commission's analysis:

In the previous Tariff Order dated 28th April 2016, the Commission had ordered that:

"The Commission had approved a loss level of 13.75% in its Order dated 10th April 2015 while determining the ARR for FY 2015-16. The Commission has already taken into consideration the difficulties expressed by the Petitioner and reduced the loss target only by 0.25%, though as per the recommendation of Abraham Committee the reduction should be 1%. The Commission also notes that actual losses as approved by the Commission for Trueup of FY 2014-15 stands at 12.81%, which are lower than 13.75% presently approved for FY 2015-16. However, as the Petitioner has neither submitted actual power purchase bills upto FY 2014-15, nor have submitted the energy audit reports, the losses ascertained by the Commission are based on the information available at the alternate available resources. The Commission is also of the view that being a predominantly LT network, the losses are comparatively at a competitive level. Accordingly, the Commission finds it appropriate to retain the losses at the level of 13.75% for the purpose of review of FY 2015-16."

Since the Commission has not restated the loss trajectory based on lower losses in the FY 2014-15 (now attributed to wrong submission of sales in FY 2014-15) in the previous order itself, the Commission finds no merit in restating the loss trajectory at this stage.

Hence the Commission retains the loss level of 13.25% as approved in the previous Order for the FY 2016-17.

5.5. Inter-State Transmission losses

Petitioner's submission:

The recent 52-week moving average of regional losses available at the level of 3.77% (30th March 2015-27th March 2016) has been considered for estimating the power availability at the periphery.

Commission's analysis:

The Commission in its MYT Order dated 28th April 2016 had considered the recent 52-week moving average of regional losses and approved 3.75% as the inter-state transmission loss for the FY 2016-17.

Since the recent 52 weeks moving average of regional losses is 4.05% (29^{th} February 2016 to 20^{th} February 2017), the Commission now considers the figures of regional pool losses of 4.05% as the inter-state loss and approves the same for Review of the ARR of the FY 2016-17 which would be revised based on actuals during the True-up exercise.

5.6. Energy Requirement

Petitioner's submission:

The overall energy requirement at the generator end for the FY 2016-17 is 1805.73 MU.

Commission's analysis:

The Commission has verified the power purchase from CPSUs and Bilateral/Exchange from the Regional Energy Accounts maintained by the Northern Region Power Committee. The Commission has also verified net purchase of 18.4 MU from open market/exchange in the first six months. Further, as the Petitioner has banked 54.27 MU with J&K Power Development Department in the first six months of the FY 2016-17 which would be offset by the equivalent quantum to be returned in the remaining six months, the Commission has not considered net purchase/sale on this account. The energy requirement for the FY 2016-17 is drawn on the approved inter-state and intra-state transmission & distribution losses and the approved energy sales as discussed in the foregoing paragraphs.

The gross energy requirement approved for the FY 2016-17 is shown in the Table below:

Table 5.7: Energy Requirement approved by the Commission for the FY 2016-17(in MU)

| S. No | Particulars | Approved in Tariff Order dated 28 th April 2016 | Petitioner's submission (Review) | Approved by the Commission (Review) |
|----------|--|--|----------------------------------|---|
| | ENERGY REQUIREMENT | | | |
| 1 | Energy sales in the UT | 1617.41 | 1,552.93 | 1637.33 |
| 2 | Distribution losses (%age)- as per approved trajectory | 13.25% | 14.00% | 13.25% |
| 3 | Gross Energy required for the Territory (MU) | 1,864.45 | 1805.73 | 1,887.41 |
| 4 | Solar Power adjusted/Generated within UT | 9.81 | 1.62 | 4.01 |
| 5 | Energy Requirement @ Generator End | 1854.64 | 1804.11 | 1883.40 |
| | GROSS AVAILABILITY SOURCES | | | |
| | | | | |
| 6 | Long-Term PPAs | 1765.99 | 1789.99 | 1916.31 |
| 7 | External losses (MU) @ 4.05% (6*4.05%) | 66.22 | 67.48 | 77.52 |
| 8 | PXIL (Buy), short term power to match the energy requirement (5+7-6) | 161.29 | 81.61 | 44.61 |
| 9 | Net Power Purchase including PXIL (6-7+8) | 1854.64 | 1804.11 | 1883.40 |

Hence the Commission approves purchase of 44.61 MU in Review of ARR for the FY 2016-18 to meet the energy shortfall.

5.7. Power Purchase Quantum and Cost

Petitioner's submission:

The revised estimates of the FY 2016-17 are based on six months actuals and projections for the remaining six months. For projections of the remaining six months of power purchase for the FY 2016-17, current firm and unallocated power allocation from the various Central Generating Stations (CGS) as per the recent revised allocation statement issued by Northern Regional Power Committee against the Ministry of Power letter No. NRPC/OPR/103/02/2016/9795-9818 dated 21st October 2016 has been considered for estimating the power procurement units. Following assumptions have been taken for projection of the Power Purchase Cost:

- a. The fixed cost for each plant is computed based upon the % allocation of the plant capacity to CED and corresponding annual fixed charges approved for the generating stations as per their recent Tariff Orders for the Control Period (FY 2014-19) approved by CERC. For generating plants where Tariff Orders are still pending, fixed charges from FY 2013-14 as per the CERC Order have been considered and an escalation of 5% has been considered.
- b. The variable charge for the thermal and nuclear power plants has been considered based on the actual variable charge during the first six months of the FY 2016-17.

- c. In case of BBMB the average rate of power as per the recent invoice has been considered for the purpose of projections.
- d. The generation units available from thermal and nuclear plants are computed considering the average PLF of the plants in the past three years. For hydel plants, the design energy or actual generation in the past three years has been considered as the basis for projections.
- e. The deficit in energy is proposed to be met through short term power.
- f. PGCIL, NRLDC and Reactive Energy charges are computed based upon the half yearly figures available and have been pro-rated for the balance period.

The Petitioner initially submitted Power Purchase Cost of Rs 688.20 Crores for the full FY 2016-17 and later revised it to Rs 655.55 crore as per the Table below:

Table 5.8: Source wise Power Procurement quantum (in MU) and cost (Rs. crore) submitted by the Petitioner

| C= No | Doutieulous | Energy | | Cost (Rs | Crores) | |
|--------|--------------------|---------------|-------|----------|---------|-------|
| Sr. No | Particulars | Purchase (MU) | Fixed | Variable | Other | Total |
| Α | NTPC | | | | | |
| 1 | Anta | 21.19 | 3.91 | 5.58 | 0.56 | 10.05 |
| 2 | Auraiya | 10.53 | 3.16 | 3.57 | (0.05) | 6.68 |
| 3 | Dadri GPP | 30.72 | 3.08 | 8.59 | (0.01) | 11.67 |
| 4 | Dadri II TPP | 22.31 | 3.08 | 6.81 | 2.59 | 12.47 |
| 5 | Kahalgaon II | 24.40 | 2.50 | 5.40 | 0.18 | 8.08 |
| 6 | Rihand I | 66.30 | 6.59 | 10.20 | 1.69 | 18.48 |
| 7 | Rihand II | 64.51 | 7.99 | 9.43 | 1.19 | 18.62 |
| 8 | Rihand III | 78.34 | 8.20 | 11.72 | 0.37 | 20.29 |
| 9 | Singrauli | 34.54 | 2.01 | 4.81 | 1.43 | 8.25 |
| 10 | Unchahar I | 22.54 | 1.43 | 6.30 | 0.98 | 8.72 |
| 11 | Unchahar II | 31.72 | 2.62 | 8.84 | 0.32 | 11.78 |
| 12 | Unchahar III | 15.44 | 1.56 | 4.29 | 1.17 | 7.02 |
| 13 | Jhajjar (Aravali) | 29.00 | 6.36 | 9.23 | 1.80 | 17.39 |
| 14 | Koldam | 38.15 | 7.60 | 8.28 | 0.01 | 15.89 |
| В | NHPC | | | | | |
| 1 | Chamera I | 86.71 | 6.94 | 9.04 | 2.137 | 18.11 |
| 2 | Chamera II | 21.72 | 2.37 | 2.22 | (0.501) | 4.09 |
| 3 | Chamera III | 13.33 | 3.13 | 2.74 | 0.005 | 5.88 |
| 4 | Dhauliganga | 13.25 | 2.24 | 1.92 | 2.235 | 6.39 |
| 5 | Dulhasti | 22.86 | 6.36 | 6.51 | (1.694) | 11.17 |
| 6 | Parbathi III | 9.73 | 2.66 | 2.70 | (1.033) | 4.32 |
| 7 | Salal | 8.91 | 0.56 | 0.48 | 0.615 | 1.65 |
| 8 | Sewa II | 5.34 | 1.83 | 1.11 | 0.08 | 3.02 |
| 9 | Tanakpur | 3.40 | 0.91 | 0.49 | 0.67 | 2.07 |
| 10 | Uri-I | 15.28 | 1.41 | 1.18 | 3.45 | 6.03 |
| 11 | Uri-II | 16.15 | 3.74 | 3.69 | 1.16 | 8.59 |
| С | SJVNL | | | | | |

| Sr. No | Particulars | Energy | Cost (Rs Crores) | | | | |
|--------|----------------------|---------------|------------------|----------|--------|--------|--|
| Sr. No | Particulars | Purchase (MU) | Fixed | Variable | Other | Total | |
| 1 | NATHPA JHAKRI | 71.19 | 9.62 | 9.93 | (0.26) | 19.29 | |
| 2 | RAMPUR (Additional) | 8.23 | 1.39 | 1.28 | (0.01) | 2.66 | |
| D | BBMB | 637.64 | | 199.72 | 5.61 | 205.32 | |
| Е | NPCIL | | | | | | |
| 1 | NAPS | 49.79 | - | 11.80 | 1.08 | 12.88 | |
| 2 | RAPP (Unit 3 & 4)-B | 17.82 | - | 4.89 | 0.07 | 4.95 | |
| 3 | RAPP (Unit 5 & 6)-C | 52.12 | - | 17.76 | .55 | 18.31 | |
| F | THDC | | | | | | |
| 1 | Koteshwar | 7.85 | 1.87 | 1.50 | (0.18) | 3.19 | |
| 2 | Tehri | 119.04 | 37.83 | 34.91 | (0.72) | 72.03 | |
| G | Other Charges | | | | | | |
| 1 | PGCIL CHARGES | | | | | 32.12 | |
| 2 | REC | | | | | 11.53 | |
| 3 | Bilateral/Exchange | 11.43 | | | | 6.49 | |
| 4 | UI Charges | 103.16 | | | | 20.79 | |
| 5 | Reactive charges | | | | | 0.04 | |
| 6 | NRLDC | | | | | 0.2 | |
| 7 | Solar Power Purchase | 2.00 | | | | 1.11 | |
| 8 | Less: Rebate | | | | | (2.07) | |
| Н | TOTAL | 1791.61 | 142.96 | 419.13 | 23.41 | 655.55 | |

During FY 2016-17 (Till Sept 2016), the Petitioner has purchased 20,500 non solar Renewable Energy Certificates (RECs) at the rate of Rs. 1527 per certificate to meet its non-solar obligation. To fulfil its solar obligation during the FY 2016-17, it has purchased 3,800 solar RECs at the rate of Rs. 3526 per certificate. Further it has purchase 2.01 MU of physical Solar power during H1 against target of 4.01 MU for the year from Solar plants in Chandigarh.

Commission's analysis:

As brought out in the section on energy balance, the power purchase quantum approved by the Commission in its last Tariff Order dated 28th April 2016 for the FY 2016-17 was 1937.09 MU at an approved Power Purchase Cost of Rs. 728.7 crore including the transmission charges.

The Commission, as part of its prudence check verified the station-wise Power purchase bills as submitted by the Petitioner for the FY 2016-17 for the first six months on random selection basis. The Commission has verified the actual quantum of Power purchase from the Regional Energy Accounts on actuals basis and compared it with the submission made by the Petitioner and found a small error of 2 MU. The Commission has not considered energy banked with the Petitioner and energy taken by UI mechanism and assumed that the same amount of banked power and UI purchased would be returned in the last six months of the FY 2016-17 with no cost implication. The Commission has considered power purchase from short-term sources at Rs 3.00/unit subject to True-up exercise.

The verified quantum of Power Purchase units and cost (including transmission charges) are mentioned in the Table below:

Table 5.9: Source wise Power Procurement quantum (in MU) and cost (Rs crore) approved by the Commission for H1 of FY 2016-17

| Sr. No | Particulars | Petitioner Submission | Actual analysed by the Commission |
|--------|---------------------|--------------------------|--------------------------------------|
| A | NTPC | 254.38 | 252.35 |
| 1 | Anta | 10.60 | 10.60 |
| 2 | Auraiya | 5.27 | 5.27 |
| 3 | Dadri GPP | 15.36 | 15.36 |
| 4 | Dadri II TPP | 11.15 | 11.15 |
| 5 | Kahalgaon II | 12.20 | 12.20 |
| 6 | Rihand I | 33.15 | 33.15 |
| 7 | Rihand II | 32.25 | 37.95 |
| 8 | Rihand III | 39.17 | 31.45 |
| 9 | Singrauli | 17.27 | 17.27 |
| 10 | Unchahar I | 11.27 | 11.27 |
| 11 | Unchahar II | 15.86 | 15.86 |
| 12 | Unchahar III | 7.72 | 7.72 |
| 13 | Jhajjar (Aravali) | 14.50 | 14.50 |
| 14 | Koldam | 28.61 | 28.61 |
| В | NHPC | 162.51 | 162.51 |
| 1 | Chamera I | 65.03 | 65.03 |
| 2 | Chamera II | 16.29 | 16.29 |
| 3 | Chamera III | 9.99 | 9.99 |
| 4 | Dhauliganga | 9.94 | 9.94 |
| 5 | Dulhasti | 17.15 | 17.15 |
| 6 | Parbathi III | 7.30 | 7.30 |
| 7 | Salal | 6.68 | 6.68 |
| 8 | Sewa II | 4.00 | 4.00 |
| 9 | Tanakpur | 2.55 | 2.55 |
| 10 | Uri-I | 11.46 | 11.46 |
| 11 | Uri-II | 12.11 | 12.11 |
| С | SJVNL | 59.56 | 59.56 |
| 1 | NATHPA JHAKRI | 53.39 | 53.39 |
| 2 | RAMPUR (Additional) | 6.17 | 6.17 |
| D | ВВМВ | 360.39 | 360.39 |
| 1 | BBMB 3.5% | | 286.41 |
| 2 | BBMB 1 LU | | - |
| 3 | BBMB 10 LU | 360.39 | - |
| 4 | Pong | | 8.97 |
| 5 | Dehar | | 65.02 |
| Е | NPCIL | 59.87 | 59.87 |
| 1 | NAPS | 24.90 | 24.90 |
| 2 | RAPP (Unit 3 & 4)-B | 8.91 | 8.91 |
| 3 | RAPP (Unit 5 & 6)-C | 26.06 | 26.06 |

| Sr. No | Particulars | Petitioner Submission | Actual analysed by the Commission |
|--------|-----------------------------------|--------------------------|-----------------------------------|
| F | THDC | 95.17 | 95.17 |
| 1 | Koteshwar | 5.89 | 5.89 |
| 2 | Tehri | 89.28 | 89.28 |
| G | Other | | |
| 1 | Bilateral/Exchange | 62.48 | 18.40 |
| 2 | UI | 103.16 | - |
| 3 | Solar Power Purchase | 0.82 | 2.01 |
| | | | |
| Н | TOTAL Power Purchase Quantum (H1) | 1158.33 | 1010.26 |
| I | TOTAL Power Purchase Cost (H1) | 355.01 | 332.54 |

Power Purchase Quantum and Cost for the remaining six months (H2) of FY 2016-17

The Petitioner has firm allocation from the Central Sector Generating Stations i.e. NTPC, NHPC, NPCIL, BBMB, THDC and SJVNL. The Commission while estimating the energy availability from the above stations has considered the following assumptions:

Allocation of Share: The Commission has considered the firm allocation and allocation from the unallocated quota from the above stations, as per the notification of the Northern Region Power Committee NRPC/ OPR/ 103/ 02/ 2017/1050-88 dated 25th January 2017.

Gross Energy Availability: The Commission has estimated the gross energy availability from the existing stations based on the installed capacity and the average Plant Load Factor (PLF) for the past five years including the FY 2016-17 (where-ever available). For hydro plants PLF has been determined on the basis of the average of the previous four years (excluding the FY 2016-17). The availability from each station has been considered based on Merit Order dispatch. However, the fixed charges are approved for full allocation. The Net Energy sent out has been considered after considering the applicable auxiliary consumption as per the CERC (Terms and Conditions of Tariff) Regulations, 2014. Short-Term Power Purchase has been determined based on the Energy Balance for the full year.

Energy Available to the Petitioner from the generating station: The effective share from the stations is applied on the energy sent out to arrive at the energy available for the Petitioner from respective stations.

The Commission has considered the following assumptions to arrive at the Power Purchase Cost for the remaining six months of the FY 2016-17:

Fixed Charges: The fixed charges are considered based on the formula specified for the stations in the CERC (Terms and Conditions of Tariff) Regulations, 2009. For the plants where CERC has already issued the Tariff Orders till FY 2018-19, Fixed Cost as determined for the FY 2016-17 has been considered. For the plants wherein Tariff Orders

are not issued by CERC for the period 2014-19, the Annual Fixed Charges determined for the FY 2013-14 for each station have been taken for the respective stations as applicable, with 5% escalation for each FY, which is subject to True-up in respect of revised tariff if issued by CERC.

Variable Charges: The Commission has considered the actual average variable charges for the period July to September 2016 as submitted by the Petitioner.

Other Charges: The Commission has considered the PoC rates as specified by the CERC vide its Order no No.L-1/44/2010-CERC Dated 27th January 2017. Other Charges (NRLDC, Reactive Energy Charges) have been considered the same as submitted by the Petitioner for H1.

The Commission has also noted that 4.01 MU of solar power from CREST and private solar plants is to be purchased and to be fed into the grid in the FY 2016-17. On the basis of the actual Power Purchase Cost of Rs 0.56 crore in the first 6 months as submitted by the Petitioner, the Commission has approved 1.12 crore towards purchase of physical solar power for the full year of FY 2016-17. The Commission has also calculated the power purchase quantum and cost from solar plants (both in gross and net metering mode) as well as cost of purchase of solar as well as non-solar RECs required for fulfilling solar and non-solar RPO. The detailed calculation is given in the subsequent section.

Accordingly, the Commission has considered the quantum and cost of power purchase for the H2 of FY 2016-17 as shown in the Table below:

Table 5.10: Power purchase quantum (in MU) and cost (Rs crore) approved by the Commission in the H2 of FY 2016-17

| Sr. | Particulars | Energy Purchase | | Cost (Rs | | Per Unit | |
|-----|--------------------|--------------------|-------|----------|-------|----------|-------------|
| No | Particulars | (MU) | Fixed | Variable | Other | Total | (Paisa/kWh) |
| | | | | | | | |
| Α | NTPC | | | | | | |
| 1 | Anta | 14.67 | 2.28 | 3.86 | - | 6.14 | 418 |
| 2 | Auraiya | 10.63 | 2.10 | 3.56 | - | 5.66 | 533 |
| 3 | Dadri GPP | 15.50 | 1.77 | 4.35 | - | 6.12 | 395 |
| 4 | Dadri II TPP | 9.11 | 2.01 | 2.87 | - | 4.88 | 535 |
| 5 | Kahalgaon II | 9.16 | 1.08 | 2.20 | - | 3.28 | 358 |
| 6 | Rihand I | 41.61 | 3.58 | 6.86 | - | 10.44 | 251 |
| 7 | Rihand II | 37.10 | 3.59 | 6.45 | - | 10.03 | 270 |
| 8 | Rihand III | 28.26 | 2.78 | 4.55 | - | 7.33 | 259 |
| 9 | Singrauli | 19.42 | 1.20 | 2.94 | - | 4.14 | 213 |
| 10 | Unchahar I | 8.25 | 0.95 | 2.24 | - | 3.19 | 387 |
| 11 | Unchahar II | 14.73 | 1.79 | 3.99 | - | 5.78 | 393 |
| 12 | Unchahar III | 5.81 | 1.01 | 1.62 | - | 2.63 | 452 |
| 13 | Jhajjar (Aravali) | 10.96 | 3.84 | 3.63 | - | 7.47 | 681 |
| 14 | Koldam | 13.15 | 4.56 | 2.85 | - | 7.41 | 564 |
| В | NHPC | | | | | | |
| 1 | Chamera I | 48.52 | 1.96 | 5.22 | - | 7.18 | 148 |
| 2 | Chamera II | 11.63 | 0.63 | 1.14 | - | 1.77 | 152 |
| 3 | Chamera III | 6.37 | 1.39 | 1.35 | - | 2.74 | 431 |

| Sr. | Double and our | Energy | | Cost (Rs | crore) | | Per Unit |
|-----|------------------------|------------------|-------|----------|--------|--------|-------------|
| No | Particulars | Purchase (MU) | Fixed | Variable | Other | Total | (Paisa/kWh) |
| 4 | Dhauliganga | 10.29 | 0.67 | 1.54 | - | 2.21 | 215 |
| 5 | Dulhasti | 13.53 | 2.08 | 3.92 | - | 5.99 | 443 |
| 6 | Parbathi III | 4.45 | 0.33 | 1.22 | - | 1.55 | 349 |
| 7 | Salal | 4.59 | 0.19 | 0.25 | - | 0.44 | 96 |
| 8 | Sewa II | 4.36 | 0.54 | 0.94 | - | 1.48 | 339 |
| 9 | Tanakpur | 2.82 | 0.37 | 0.42 | - | 0.78 | 278 |
| 10 | Uri-I | 9.18 | 0.56 | 0.73 | - | 1.29 | 140 |
| 11 | Uri-II | 3.76 | 0.77 | 0.91 | - | 1.68 | 448 |
| C | SJVNL | | | | | | |
| 1 | NATHPA JHAKRI | 36.54 | 2.53 | 5.27 | - | 7.80 | 213 |
| 2 | RAMPUR (Additional) | 3.86 | 0.35 | 0.62 | - | 0.97 | 251 |
| D | BBMB | 382.29 | | 90.85 | | 90.85 | 238 |
| Е | NPCIL | | | | | | |
| 1 | NAPS | 25.02 | | 5.93 | - | 5.93 | 236.90 |
| 2 | RAPP (Unit 3 & 4)-B | 9.60 | | 2.63 | - | 2.63 | 274.12 |
| 3 | RAPP (Unit 5 & 6)-C | 21.02 | | 7.16 | - | 7.16 | 340.83 |
| F | THDC | | | | | | |
| 1 | Koteshwar | 5.57 | 0.93 | 1.09 | - | 2.02 | 362.92 |
| 2 | Tehri | 84.71 | 15.62 | 25.39 | - | 41.01 | 484.16 |
| G | Other Charges | 14.67 | | | | | |
| 1 | PGCIL CHARGES | | | | | 15.48 | |
| 2 | REC | | | | | 11.60 | |
| 3 | Bilateral/Exchange | 26.21 | | | | 7.86 | 300.00 |
| 5 | Reactive charges | | | | | 0.02 | |
| 6 | NRLDC | | | | | 0.1 | |
| 7 | Solar Power | 2.00 | | | | 0.56 | |
| Н | TOTAL (H2) | 954.67 | 61.45 | 208.54 | - | 305.62 | |

Approved Power Purchase Quantum and Cost for the FY 2016-17

For determining the Power Purchase Cost, Merit Order dispatch principles have been applied. The power from must-run stations has 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.

Based on the above assumptions, the total Power purchase quantum and cost from various sources as approved for the Review of the FY 2016-17 is shown in following Table:

Table 5.11: Approved Power Purchase (MU) and Cost (Rs crore) for the FY 2016-17 (Full Year)

| S. No | Plant | Power Purchase (MU) | Fixed Cost | Variable Cost | Other Cost | Total Cost |
|-------|--------------|------------------------|------------|---------------|------------|------------|
| A | NTPC | | | | | |
| 1 | Anta | 25.26 | 4.14 | 6.65 | 0.28 | 11.07 |
| 2 | Auraiya | 15.89 | 3.55 | 5.34 | (0.05) | 8.84 |
| 3 | Dadri GPP | 30.85 | 3.19 | 8.64 | (0.01) | 11.83 |
| 4 | Dadri II TPP | 20.27 | 3.39 | 6.27 | 1.29 | 10.95 |

| S. No | Plant | Power Purchase (MU) | Fixed Cost | Variable Cost | Other Cost | Total Cost |
|-------|------------------------|------------------------|------------|---------------|------------|------------|
| 5 | Kahalgaon II | 21.36 | 2.27 | 4.90 | 0.09 | 7.26 |
| 6 | Rihand I | 74.77 | 6.61 | 11.96 | 0.84 | 19.41 |
| 7 | Rihand II | 75.05 | 7.80 | 11.16 | 0.60 | 19.56 |
| 8 | Rihand III | 59.71 | 6.07 | 10.40 | 0.19 | 16.67 |
| 9 | Singrauli | 36.68 | 2.10 | 5.34 | 0.72 | 8.16 |
| 10 | Unchahar I | 19.53 | 1.62 | 5.39 | 0.49 | 7.50 |
| 11 | Unchahar II | 30.59 | 3.00 | 8.41 | 0.16 | 11.57 |
| 12 | Unchahar III | 13.53 | 1.73 | 3.77 | 0.59 | 6.08 |
| 13 | Jhajjar (Aravali) | 25.46 | 6.84 | 8.24 | 0.90 | 15.98 |
| 14 | Koldam | 41.76 | 8.87 | 9.07 | 0.00 | 17.94 |
| В | NHPC | | | - | | |
| 1 | Chamera I | 113.56 | 5.85 | 12.22 | 1.07 | 19.14 |
| 2 | Chamera II | 27.91 | 1.99 | 2.89 | (0.50) | 4.38 |
| 3 | Chamera III | 16.36 | 3.12 | 3.47 | 0.00 | 6.60 |
| 4 | Dhauliganga | 20.23 | 1.81 | 3.03 | 1.12 | 5.95 |
| 5 | Dulhasti | 30.67 | 5.53 | 9.02 | (1.69) | 12.86 |
| 6 | Parbathi III | 11.75 | 1.61 | 3.22 | (1.03) | 3.80 |
| 7 | Salal | 11.27 | 0.55 | 0.62 | 0.31 | 1.48 |
| 8 | Sewa II | 8.36 | 1.58 | 1.81 | 0.04 | 3.43 |
| 9 | Tanakpur | 5.37 | 0.90 | 0.80 | 0.33 | 2.03 |
| 10 | Uri-I | 20.64 | 1.41 | 1.64 | 1.72 | 4.78 |
| 11 | Uri-II | 15.87 | 3.76 | 3.76 | 0.58 | 8.10 |
| С | SJVNL | | | | | |
| 1 | NATHPA JHAKRI | 89.93 | 7.90 | 12.96 | (0.26) | 20.60 |
| 2 | RAMPUR (Additional) | 10.03 | 1.13 | 1.62 | (0.01) | 2.73 |
| 3 | RAMPUR (U Q) | | | | | |
| D | ВВМВ | 742.68 | | 185.05 | 1.46 | 186.51 |
| Е | NPCIL | | | | | |
| 1 | NAPS | 49.92 | - | 11.83 | 0.54 | 12.37 |
| 2 | RAPP (Unit 3 & 4)-B | 18.51 | - | 5.08 | 0.03 | 5.11 |
| 3 | RAPP (Unit 5 & 6)-C | 47.07 | - | 16.04 | (0.01) | 16.03 |
| F | THDC | | | | | |
| 1 | Koteshwar | 11.46 | 1.91 | 2.24 | (0.18) | 3.97 |
| 2 | Tehri | 173.99 | 33.89 | 52.16 | (0.72) | 85.33 |
| G | Rebate | | | | | (2.08) |
| Н | Transmission Charge | | | | | 31.54 |
| I | NRLDC | | | | | 0.20 |
| J | Short-term | 44.61 | | | | 13.24 |
| K | REC | | | | | 16.07 |
| L | Solar | 4.01 | | | | 1.12 |
| M | Reactive Energy | | | | | 0.04 |
| N | Total | 1964.93 | 134.13 | 435.01 | 8.87 | 638.15 |

The Commission approves the Power Purchase Cost of Rs. 638.15 crore for procurement of 1964.93 MU of energy in the Review of the ARR for the FY 2016-17.

5.8. Renewable Purchase Obligations (RPOs)

Petitioner's submission:

The Petitioner in its Petition had submitted an expenditure of Rs 12.65 crore in the FY 2016-17 to meet its RPO by purchasing REC equivalent to 57.33 MU. Till September 2016, it has purchased 20.50 MU Non-Solar REC and 3.8 MUs Solar REC. Further, it has purchased 2.01 MU physical Solar power till September 2016.

Commission's analysis:

As per JERC (Procurement of Renewable Energy) (Second Amendment) Regulations 2015 clause 3.1

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.

.....

"Provided that the Renewal Purchase Obligation from solar as specified in Column 3 shall be fulfilled from the generation based on solar sources only;

Provided further that such obligation to purchase Renewal energy shall be inclusive of the purchases, if any, from renewal energy sources already being made by the concerned obligated entity;"

Further, as per JERC (Procurement of Renewable Energy) (Second Amendment) Regulations 2015 clause 3.2

"Every obligated entity shall meet its RPO target by way of its own generation or by way of purchase from other sources / licensees or by way of purchase of Renewal Energy Certificates or by way of combination of any of the above options. Any long term purchase arrangements shall be made only with the approval of the Commission. The Commission shall approve long term PPAs on case to case basis."

As per the new National Tariff Policy 2016 notified on 28th January 2016, clause 6.4 Renewable sources of energy generation including Co-generation from renewable energy sources:

"(1) Pursuant to provisions of section 86(1)(e) of the Act, the Appropriate Commission shall fix a minimum percentage of the total consumption of electricity in the area of a distribution licensee for purchase of energy from renewable energy sources, taking into account availability of such resources and its impact on retail tariffs.

Cost of purchase of renewable energy shall be taken into account while determining tariff

by SERCs. Long term growth trajectory of Renewable Purchase Obligations (RPOs) will be prescribed by the Ministry of Power in consultation with MNRE.

Provided that cogeneration from sources other than renewable sources shall not be excluded from the applicability of RPOs.

- (i) Within the percentage so made applicable, to start with, the SERCs shall also reserve a minimum percentage for purchase of solar energy from the date of notification of this policy which shall be such that it reaches 8% of total consumption of energy, excluding Hydro Power, by March 2022 or as notified by the Central Government from time to time.
- (ii) Distribution Licensee(s) shall compulsorily procure 100% power produced from all the Waste-to-Energy plants in the State, in the ratio of their procurement of power from all sources including their own, at the tariff determined by the Appropriate Commission under Section 62 of the Act.
- (iii) It is desirable that purchase of energy from renewable sources of energy takes place more or less in the same proportion in different States. To achieve this objective in the current scenario of large availability of such resources only in certain parts of the country, an appropriate mechanism such as Renewable Energy Certificate (REC) would need to be promoted. Through such a mechanism, the renewable energy based generation companies can sell the electricity to local distribution licensee at the rates for conventional power and can recover the balance cost by selling certificates to other distribution companies and obligated entities enabling the latter to meet their renewable power purchase obligations. The REC mechanism should also have a solar specific REC.
- (iv) Appropriate Commission may also provide for a suitable regulatory framework for encouraging such other emerging renewable energy technologies by prescribing separate technology based REC multiplier (i.e. granting higher or lower number of RECs to such emerging technologies for the same level of generation). Similarly, considering the change in prices of renewable energy technologies with passage of time, the Appropriate Commission may prescribe vintage based REC multiplier (i.e. granting higher or lower number of RECs for the same level of generation based on year of commissioning of plant).
- (2) States shall endeavor to procure power from renewable energy sources through competitive bidding to keep the tariff low, except from the waste to energy plants. Procurement of power by Distribution Licensee from renewable energy sources from projects above the notified capacity, shall be done through competitive bidding process, from the date to be notified by the Central Government.

However, till such notification, any such procurement of power from renewable energy sources projects, may be done under Section 62 of the Electricity Act, 2003. While determining the tariff from such sources, the Appropriate Commission shall take into account the solar radiation and wind intensity which may differ from area to area to ensure that the benefits are passed on to the consumers.

(3) The Central Commission should lay down guidelines for pricing intermittent power, especially from renewable energy sources, where such procurement is not through competitive bidding. The tariff stipulated by CERC shall act as a ceiling for that category.

.....

(7) Appropriate Commission may provide regulatory framework to facilitate generation and sale of electricity from renewable energy sources particularly from roof-top solar system by any entity including local authority, Panchayat Institution, user institution, cooperative society, Non-Governmental Organization, franchisee or by Renewable Energy Service Company. The Appropriate Government may also provide complementary policy support for this purpose.

Explanation: "Renewable Energy Service Company" means an energy service company which provides renewable energy to the consumers in the form of electricity."

In view of above, the Commission notified the JERC (Procurement of Renewable Energy), (Third Amendment) Regulations, 2016 on 22nd August, 2016 and approved the revised RPO targets as follows:

Table 5.12: Revised RPO Trajectory (in %) as per revised regulation

| Financial Year | Minimum Quantum of Renewable Purchase Obligation (RPO) of Renewable Energy Gin WWh) (% of total energy mix of consumption, evaluding Hydro Bower) | | | | |
|----------------|---|------|--|--|--|
| | (in KWh) (% of total energy mix of consumption, excluding Hydro Power) Total RPO (%) Solar RPO (%) | | | | |
| 2010-11 | 1.00 | 0.25 | | | |
| 2011-12 | 2.00 | 0.30 | | | |
| 2012-13 | 3.00 | 0.40 | | | |
| 2013-14 | 3.00 | 0.40 | | | |
| 2014-15 | 3.30 | 0.60 | | | |
| 2015-16 | 3.55 | 0.85 | | | |
| 2016-17 | 4.85 | 1.65 | | | |
| 2017-18 | 6.70 | 2.50 | | | |
| 2018-19 | 9.00 | 3.60 | | | |
| 2019-20 | 11.50 | 4.70 | | | |
| 2020-21 | 14.10 | 6.10 | | | |
| 2021-22 | 17.00 | 8.00 | | | |

As per the amendment issued, the Petitioner has to purchase 4.85% of total energy purchase from renewable sources for the FY 2016-17 including 1.65% for Solar and 3.20% for Non-Solar. The Petitioner has submitted that during FY 2016-17 it will be purchasing 57.33 MU equivalent of RECs (Solar – 13.85 MU and 43.48 MU from Non-Solar). However the Petitioner has not considered revision in RPO as per amendment in JERC (Procurement of Renewable Energy), (Third Amendment) Regulations, 2016 on

 22^{nd} August, 2016 for calculation of the RPOs.

The Commission has considered stand-alone RPO requirement for the FY 2016-17 as per the latest amendment. RPO (both solar and non-solar) for the FY 2016-17 is calculated in the Table below:

Table 5.13: Computation of RPO for the FY 2016-17 (MU)

| Sr. No | Particulars | FY 2016-17 |
|--------|---|--------------|
| 1 | Solar RPOs as % of the Energy Sales | 1.65% |
| 2 | Non-Solar RPOs as % of the Energy Sales | 3.20% |
| 3 | Sales within UT | 1,637.33 |
| 4 | RPO Obligation (in MU) | 79.41 |
| 5 | - Solar 1*3 | 27.02 |
| 6 | -Non Solar 2*3 | 52.39 |
| 7 | Short-Fall in RPO Compliance till FY 2015-16 (in MU) as per Table 4.6 | 0.45 |
| 8 | - Solar | 0.45 |
| 9 | -Non Solar | - |
| 10 | Total RPO (in MU) | 79.86 |
| 11 | - Solar 5+8 | 27.47 |
| 12 | -Non Solar 6+9 | 52.39 |
| 13 | RPO Compliance (Actual Power Purchase) (in MU) | 4.01 |
| 14 | - Solar | 4.01 |
| 15 | -Non Solar | - |
| 16 | RPO Compliance (REC Certificate Purchase) (in MU) | 75.85 |
| 17 | - Solar | 23.46 |
| 18 | -Non Solar | <i>52.39</i> |
| 19 | Total RPO Compliance (in MU) | 79.86 |
| 20 | - Solar 14+17 | 27.47 |
| 21 | -Non Solar 15+18 | <i>52.39</i> |

The Commission has considered the Petitioner's submission in respect to physical power purchase from solar plants i.e. 4.01 MU for the FY 2016-17 subject to True-up. Keeping in view the RPO of the Petitioner and the physical power requirement the Commission approved 75.85 MU of RECs to be purchased. The cost of RECs as well as physical renewable power has already been factored in the Power Procurement Cost. The Commission has further decided to approve the cost of purchase of RECs (both Solar and Non Solar) of Rs 16.07 Crores at the floor price approved by the CERC (http://www.cercind.gov.in/2014/Regulation/ord16.pdf).

5.9. Operation & Maintenance (0&M) Expenses

The O&M Expenses consists of the following expenses:

- Employee expenses & gratuity, leave encashment and staff welfare
- Administrative and General (A&G) expenses mainly comprise of the rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances and other expenses.
- Repairs and Maintenance Expenses (R&M) for day to day upkeep of the distribution network of the Company.

(i) Employee Expenses

Petitioner's submission:

It is requested to consider the expenses towards entitled quantum of concessional power to the employees of CED as part of the employee cost at a projected cost of Rs. 0.58 Crore based on estimated units allowed to employees. Detailed justification in this regard has been submitted to the Commission in the review Petition to MYT Order dated 28th April 2016 along with an example of similar approach being followed in the State of Punjab post the decision of Hon'ble APTEL. The Petitioner has submitted estimated employee expense of Rs 65.93 Crore for review of the ARR of the FY 2016-17.

Commission's analysis:

As per the Clause 21 (b) of the MYT Regulations, 2014, the norm for employee expenses shall be defined in terms of combination of number of personnel per 1000 consumers and number of personnel per sub-station along with annual expenses per personnel. The Commission in its Business Plan Order dated 28th December 2015 has determined the norm of 5.19 employees per '000 consumers and 0.58 Personnel/sub-station for the MYT Control Period. The base per employee cost was deduced at Rs 4,97,998 at the end of FY 2013-14.

The base per employee cost has been escalated by moving average WPI of previous 3 FYs as per the Table below:

| Financial Year | WPI | % age increase | Avg 3 Years increase |
|----------------|--------|----------------|----------------------|
| FY 2010-11 | 143.32 | - | - |
| FY 2011-12 | 156.13 | 8.94% | - |
| FY 2012-13 | 167.62 | 7.36% | - |
| FY 2013-14 | 177.64 | 5.98% | - |
| FY 2014-15 | 181.19 | 2.00% | 7.43% |
| FY 2015-16 | 176.67 | -2.49% | 5.11% |
| FY 2016-17 | - | - | 1.83% |
| FY 2017-18 | - | - | 1.83% |

Table 5.14: Calculation of WPI for projection of Per Employee Cost Norms

The Petitioner has not submitted detail of sub-stations for the FY 2016-17 despite being requested to furnish the same in data gaps. Hence, the Commission has considered number of sub-stations as approved in the MYT Order dated 28th April, 2016 for the FY 2016-17 for determining number of employees for the FY 2016-17.

Further, in the previous Order, the Commission has not allowed free electricity to employees as follows:

"Further, the Commission is of the view that as per the provisions of Electricity Act 2003 and regulations framed hereunder, the utility has to charge the tariff approved by the Commission. Further, as per section 65, (Provision of subsidy by State Government):

Quote

If the State Government requires the grant of any subsidy to any consumer or class of consumers in the tariff determined by the State Commission under section 62, the State Government shall, notwithstanding any direction which may be given under section 108, pay, in advance and in such manner as may be specified, the amount to compensate the person affected by the grant of subsidy in the manner the State Commission may direct, as a condition for the license or any other person concerned to implement the subsidy provided for by the State Government.

Unquote

Accordingly, the amount applicable for provision of free electricity to the employees as per Govt. Circular needs to be provided by the Government only and the same cannot be recovered from tariff."

Considering the reasons detailed in previous order, the Commission finds it appropriate to continue with its existing approach and accordingly, approves the employee expenses for review of the FY 2016-17 as shown in the Table below:

Table 5.15: Employee Expense as approved by the Commission for the Review of FY 2016-17 (Rs crore)

| Sr. No | Particulars | FY 2013-14 As approved in the Business Plan | FY 2014-15 Escalating Col c @ 7.43% | FY 2015-16 Col d @ 5.11% | FY 2016- 17 Col e @ 1.83% |
|-----------|-------------------------------------|---|---|--------------------------------|---------------------------------|
| a | b | С | d | e | f |
| 1 | Employee Expenses Per Employee (Rs) | 4,97,998 | 5,34,975 | 5,62,321 | 5,72,596 |
| 2 | No of Employee Per '000 Consumers | | | | 5.19 |
| 3 | No. of Employees Per Sub-station | | | | 0.58 |
| 4 | No. of Sub-stations (50% Weightage) | | | | 1,907 |
| 5 | No of Consumers '000 | | | | 222 |
| 6 | No of Employee (50% Weightage) | | | | 1,129 |
| 7 | Employee Expenses | | | | 64.65 |

The Commission approves the employee cost of Rs. 64.65 Crores in the Review of the ARR for the FY 2016-17. The treatment of the employee expenses during the True-up would be in accordance with the Provisions of Regulations 9.2, 10 and 11 of the JERC MYT Regulations, 2014.

(ii) Administrative and General Expenses (A&G)

Petitioner's submission:

A&G Expenses of Rs 6.16 crore as approved in previous Order have been considered for the Review of the ARR of the FY 2016-17.

Commission's analysis:

As per the Clause 21 (b) of the MYT Regulations 2014, the norms for A&G Expenses shall be defined in terms of a combination of the A&G expenses per personnel and the A&G expenses per 1000 consumers. The Commission reiterates that as per the Regulation provisions one-time expenses are provided and the same shall be allowed on 'as and when basis' after due prudence check by the Commission. Based on the average of A&G expenses per employee, a base of Rs. 46,024 per employee has been considered at the end of the FY 2013-14 approved in the Business Plan Order. Similarly, based on average, A&G expense per '000 consumers base of Rs. 2,42,883 at end of the FY 2013-14 in line with the approval in the Business Plan Order has been considered. The weightage of the above two factors in the overall A&G expenses computation as 50:50 has been considered. For the purpose of the Review of the FY 2016-17, the norms for A&G Expenses per employee and per '000 consumers at the end of the FY 2013-14 have been escalated by the average Wholesale Price Index (WPI) for calculation of Employee Expense.

The A&G expenses as per norms approved in the Business Plan Order is shown in the below Table:

Table 5.16: A&G Expense as approved by the Commission for the Review of FY 2016-17 (Rs crore)

| Sr. No | Particulars | FY 2013-14 As approved in the Business Plan | FY 2014-15 Escalating Col c @ 7.43% | FY 2015-16 Col d @ 5.11% | FY 2016- 17 Col e @ 1.83% |
|-----------|---|--|--|--------------------------------|------------------------------------|
| a | b | С | d | e | f |
| 1 | Average A&G Expenses Per Employee (Rs) | 46,024 | 49,441 | 51,969 | 52,918 |
| 2 | Average A&G Expenses Per '000 Consumers (Rs) | 2,42,883 | 2,60,917 | 2,74,255 | 2,79,266 |
| 3 | No of Employees | | | | 1,129 |
| 4 | No of Consumers '000 | | | | 222 |
| 5 | A&G Expenses Per Employee - 50% weightage (0.5*3*1) | | | | 2.99 |
| 6 | A&G Expenses Per '000 Consumers - 50% weightage (0.5*4*2) | | | | 3.10 |
| 7 | A&G Expenses (5+6) | | | | 6.09 |

The Commission approves the A&G expenses of Rs. 6.09 crore in the Review of the ARR for the FY 2016-17. The treatment of the A&G expenses during the True-up would be in accordance with the Provisions of Regulation 9.2, 10 and 11 of the JERC MYT Regulations, 2014.

(iii) Repair and Maintenance Expenses (R&M)

Petitioner's submission:

The Commission has considered the GFA as per the Fixed Asset Register and has not approved the entire GFA as recorded in the annual accounts during the past years. However, the Commission has considered K Factor as 2.6% for the MYT Control Period as approved in the Business Plan (based on the total assets of CED) which has resulted in low R&M expenses approved for the MYT Control Period. Further, R&M expenses approved for the FY 2013-14, FY 2014-15 and FY 2015-16 are Rs 10.79 crore, Rs 13.6 crore and Rs 13.87 crore, respectively against Rs 6.70 crore, Rs 8.64 crore and Rs 10.51 crore respectively approved by the Commission for the MYT Control Period and are considerably lower than the previous years. On the basis of the GFA approved, the value of K factor has been computed as per the Table below:

Particulars FY 2013-14 FY 2014-15 FY 2015-16 FY 2016-17 Opening GFA approved 170.21 174.09 176.17 213.71 R&M Approved 9.23 8.21 10.79 13.60 R&M as % of GFA 5.4% 4.7% 6.1% 6.4% Average of last 3 years 5.73%

Table 5.17: Estimation of K-Factor as submitted by the Petitioner

Based on K factor thus calculated, the R&M Expenses of Rs 14.93 crore have been projected for the FY 2016-17 considering inflation of 7.33% as considered by the Commission.

Commission's analysis:

As per the Regulation 21 (b) and 21.2 of the MYT Regulations, 2014, the norm for R&M Expenses shall be defined in terms of a percentage of opening gross fixed assets for estimation of R&M expenses. The Commission has analyzed the figures of the R&M expenses and the opening GFA based on the trued-up values. The "K-factor" of 2.60% was considered by the Commission during approval of the Business Plan Order dated 28th December 2015, which was approved on the basis of the GFA submitted by the Petitioner. As per the present Order the Commission has considered the GFA as submitted in the balance sheet for the FY 2014-15 (opening of FY 2015-16). Hence the Commission has retained value of K-Factor as approved in the Business Plan. The Commission has also considered capitalization in the FY 2015-16 as approved for True-up for the FY 2015-16. Inflation Index (CPI and WPI) has been considered with weightage of 60:40. The average

of the CPI Index of last 3 years arrives at 7.21% and the average of the WPI of the last 3 years comes to be 1.83%. The R&M expenses as per norms as approved in the Business Plan Order are shown below:

Table 5.18: R&M Expense as approved by the Commission for the Review of FY 2016-17 (Rs crore)

| Sr. No | Particulars | FY 2016-17 |
|--------|---|------------|
| 1 | Opening GFA | 403.86 |
| 2 | K Factor Approved by the Commission | 2.60% |
| 3 | Inflation index (60:40=CPI:WPI) (60%*7.21%+40%*1.83%) | 5.05% |
| 4 | R&M Expenses | 11.03 |

The Commission approves the R&M expenses of Rs. 11.03 crore in the Review of the ARR for the FY 2016-17. The treatment of the R&M expenses during the True-up would be in accordance with the Provisions of Regulation 9.2, 10 and 11 of the MYT Regulations, 2014.

Summary of O&M Expenses approved for the Review of the FY 2016-17

The 0&M expenses as submitted and approved for the FY 2016-17 are as shown below:

Table 5.19: 0&M Expenses approved by the Commission for True-up of FY 2016-17 (Rs crore)

| S.No | Particulars | Approved in Tariff Order dated 28 th April 2016 | Petitioner's submission (Review) | Approved by the Commission (Review) |
|------|--------------------|--|--|---|
| 1 | Employee Expenses | 65.35 | 65.93 | 64.65 |
| 2 | A&G Expenses | 6.16 | 6.16 | 6.09 |
| 3 | R&M Expenses | 6.70 | 14.93 | 11.03 |
| | Total O&M Expenses | 78.21 | 87.02 | 81.77 |

5.10. Gross Fixed Assets (GFA), Capitalisation and Depreciation

Petitioner's submission:

In the absence of the Fixed Assets Register (FAR) for assets prior to 2005, the GFA approved by the Commission in the previous Order dated 28th April 2016 is considered. Therefore, the opening assets approved by the Commission for the FY 2015-16 have been considered as such and for the FY 2015-16, actual addition of Rs. 12.29 crore has been considered for arriving at the opening assets of FY 2016-17. Further the Petitioner has considered capitalization for the FY 2016-17 as per the MYT Order. Further, it has initiated activities with respect to the preparation of the Fixed Asset Register for the period prior to year 2005 and requested the Commission to approve the same as and when it is prepared. The average depreciation rate of 5.45% as approved by the Commission has been considered for the FY 2016-17 for arriving at the revised depreciation of Rs. 14.53 crore for the FY 2016-17.

Commission's analysis:

As detailed in the previous chapter, the Commission has now decided to consider the assets and depreciation as per the audited accounts. Accordingly, the Commission has taken the closing GFA as per the audited accounts for the FY 2015-16 as opening GFA for the FY 2016-17. The Commission has analyzed the scheme-wise capex as submitted by the Petitioner and has found the same in line with the capex approved by the Commission in the Business Plan Order dated 28th December 2015. Hence the Commission has considered capitalization as approved by it in the Business Plan Order for the FY 2016-17. Since a large amount of assets have already been fully depreciated, the actual depreciation rate as calculated for the FY 2015-16 has been used for the FY 2016-17 also. Addition in assets for the FY 2016-17 has been fully considered in Plant & Machinery and the same would be trued up based on the audited accounts for the respective years.

Table 5.20: GFA and approved by the Commission in the Review of the FY 2016-17 (Rs crore)

| S No | Particulars (Rs Cr) | Approved in Tariff Order dated 28 th April 2016 | Petitioner's submission (Review) | Approved by the Commission (Review) |
|---------|----------------------------|--|--|---|
| 1 | Opening Gross Fixed Assets | 240.26 | 242.59 | 403.86 |
| 2 | Addition during the year | 48.13 | 48.13 | 48.13 |
| 3 | Closing Gross Fixed Assets | 288.39 | 290.72 | 451.99 |
| 4 | Average Gross Fixed Assets | 264.32 | 266.65 | 427.92 |
| 5 | Rate of Depreciation (%) | 5.45% | 5.45% | 3.68% |
| 6 | Depreciation for the year | 14.40 | 14.53 | 15.76 |

The Commission approves the depreciation of Rs 15.76 crore in the Review of the ARR for the FY 2016-17.

5.11. Interest and Finance Charges

Petitioner's submission:

The opening normative loan as approved by the Commission for the FY 2015-16 has been considered and the normative loan with respect to the actual assets capitalized and repayment of 10% of opening assets for the FY 2015-16 was considered to arrive at the opening normative loan for the FY 2016-17. The Petitioner has considered approved GFA addition for the FY 2016-17 as per the MYT Order with 70% of the same considered towards normative debt. Repayment of the normative loan during the FY 2016-17 has been considered equivalent to the depreciation in line with the MYT Regulations 2014. The rate of interest has been considered as SBI PLR (Read SBAR) as on 1st April, 2016 at 14.05%.

Commission's analysis:

As per Regulation 24 of MYT Regulations 2014, if the equity actually deployed is more than 30% of the capital cost, then equity in excess of 30% would be considered as normative loan. Actual loan or normative loan, if any, shall be referred to as gross normative loan. Since the entire funding of CED is through equity, the Commission has considered 70% of the capital cost as normative loan. The normative loan outstanding as on 1st April of the FY 2016-17 has been computed by deducting the cumulative repayment as approved by the Commission till the FY 2015-16. Further, the Commission has considered the actual capitalization of assets amounting to Rs 48.13 Crore as approved in the foregoing paragraphs. The Commission for the purpose of funding of the capitalization has considered the normative debt equity ratio of 70:30 since new capitalization is through 100% equity support by GoI. Repayment in the FY 2016-17 has been considered to be equal to depreciation allowed during the year. Further, the Commission has considered the interest rate (SBI PLR) as for the FY 2016-17 at 14.05%.

Accordingly, the calculation for the interest on the normative loan is given in the Table below:

Table 5.21: Normative interest on loan approved by the Commission for the Review of FY 2016-17 (Rs crore)

| S. No. | Particulars | Approved in the Tariff Order Dated 28 th April 2016 | Petitioner's submission (Review) | Approved by the Commission (Review) |
|-----------|--|--|--|-------------------------------------|
| 1 | Opening normative loan | 41.55 | 43.18 | 31.91 |
| 2 | Add: Normative loan during the year | 33.69 | 33.69 | 33.69 |
| 3 | Less: Normative repayment (Depreciation) | 14.40 | 14.53 | 15.76 |
| 4 | Closing normative loan (1+2-3) | 60.84 | 62.34 | 49.83 |
| 5 | Average normative loan (1+4) * 0.5 | 51.19 | 52.76 | 40.87 |
| 6 | Rate of interest (SBAR) | 14.05% | 14.05% | 14.05% |
| 7 | Interest on normative loan | 7.19 | 7.41 | 5.74 |

Therefore, the Commission approves interest and finance charges of Rs 5.74 crores in the Review of the ARR for the FY 2016-17.

5.12. Interest on Consumer Security Deposit

Petitioner's submission:

The Petitioner is obligated to pay interest on consumer security deposit and entitled to claim the same through tariff and has accordingly provisioned for the same. The opening consumer security deposit has been considered based on the actual closing for the FY 2015-16 and an addition of Rs. 5 crore has been projected during the FY 2016-17. The Petitioner requested for Rs 10.79 crore as interest on consumer security deposit in the

FY 2016-17 to be allowed.

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 has considered the closing Consumer Security Deposit for the FY 2015-16 as submitted by the Petitioner subject to True-up based on the audited accounts. Addition in Consumer Security Deposit of Rs. 5 Crores as submitted by the Petitioner during the FY 2016-17 is considered to be reasonable and the same would be revisited from the audited accounts for the FY 2016-17 at the time of True up of the FY 2016-17.

The Commission has considered the RBI bank Rate for calculation of Interest rate as on 01st April 2016 i.e. 7.75% and the detailed calculation is shown in the Table below:

Table 5.22: Interest on Consumer Security Deposit approved by the Commission for the Review of FY 2016-17 (Rs crore)

| S. No | Particulars | Approved in the Tariff Order Dated 28 th April 2016 | Petitioner's submission (Review) | Approved by the Commission (Review) |
|----------|--|--|----------------------------------|---|
| 1 | Opening Consumer Security Deposit | 138.84 | 136.67 | 136.67 |
| 2 | Net Addition During the year | 5.00 | 5.00 | 5.00 |
| 3 | Closing Consumer Security Deposit (1+2) | 143.84 | 141.67 | 141.67 |
| 4 | Average Deposit (1+3)*50% | 141.34 | 139.17 | 139.17 |
| 5 | Bank Rate | 7.75% | 7.75% | 7.75% |
| 6 | Interest on Consumer Security Deposit | 10.95 | 10.79 | 10.79 |

The Commission approves the Interest on Consumer Security Deposit at Rs. 10.79 crore in the Review of the ARR for the FY 2016-17.

5.13. Interest on Working Capital

Petitioner's submission:

Interest on Working Capital has been claimed in accordance with Regulation no. 25 of the JERC MYT Regulations, 2014. Further, the closing balance of the Consumer Security Deposit has been deducted from the total normative Working Capital requirement for computing the Working Capital requirement as per the methodology followed by the Commission in its previous Tariff Order and SBI Advance rate as on 1st April 2016 has been considered for computation of interest on the Working Capital.

Commission's analysis:

As per Regulation 25 of MYT Regulations, 2014 the Working Capital is:

- Receivables of two months of billing
- Less Power Purchase Cost of one month

- Less consumer security deposit in cash (excluding Bank Guarantee/Fixed Deposit)
- Inventory for two months based on annual requirement for the previous year

The Interest rate on Working Capital has been considered as 9.30% (SBI base Rate as on 05.10.2015) applicable as on 01st April 2016 i.e. start of the relevant year.

Inventory Based on Annual Requirement for previous year has been taken as per the audited accounts of the FY 2015-16 (Rs 1.86 crore). The actual Working Capital requirement after deduction of the amount of Consumer Security Deposit is coming to be negative. Thus, the Interest on Working Capital has been considered as nil.

The calculation for the interest on the Working Capital is given in the Table below:

Table 5.23: Interest on Working Capital approved by the Commission for Review of the FY 2016-17 (Rs crore)

| S. No | Particulars (Rs Cr) | Approved in the Tariff Order Dated 28th April 2016 | Petitioner's submission (Review) | Approved by the Commission (Review) |
|-------|--|--|----------------------------------|---|
| 1 | Receivables of 2 Months Billing | 137.94 | 134.48 | 124.43 |
| 2 | Power Purchase Cost 1 Month | 60.72 | 57.35 | 53.18 |
| 3 | Consumer Security Deposit Excl. BG/FDR | 143.84 | 141.67 | 141.67 |
| 4 | Inventory Based on Annual Requirement for Previous FY | 0.34 | 0.34 | 1.86 |
| 5 | Total Working Capital after adjusting Consumer Security Deposit | - | - | - |
| 6 | SBI Base Rate (%) | 9.30% | 9.30% | 9.30% |
| 7 | Interest on Working Capital | - | - | - |

Therefore, the Commission approves 'Nil' Interest on Working Capital in the Review of the ARR for the FY 2016-17.

5.14. Return on Equity

Petitioner's submission:

The opening equity for the FY 2016-17 has been computed considering the approved opening equity for the FY 2015-16 and 30% of the actual addition of GFA during FY 2015-16. The Petitioner requested the Commission to approve and consider any updation in FAR with respect to assets prior to 2005. Rate of Return on Equity is considered 16% post tax as per the Clause 27 of the MYT Regulations, 2014. Based on above the Petitioner has requested Rs 12.80 crore as Return on Equity for the FY 2016-17.

Commission's analysis:

As per Regulation 27 of MYT Regulations, 2014, Return on Equity shall be computed on 30% of the capital base or the actual equity whichever is lower based on approved capitalization 16% post tax return on equity shall be considered irrespective of whether

the distribution licensee has claimed return on equity in the ARR Petition. The Petitioner being a government department is not required to pay any income tax. The Commission has considered the closing capital base of the FY 2015-16 as per the audited balance sheet submitted by the Petitioner as the opening equity for the FY 2016-17. Further, the Commission has also considered equity addition in the FY 2016-17 equal to 30% of asset capitalization approved in the Business Plan Order. The same would also be subject to True-up on the basis of the audited accounts of the FY 2016-17.

The calculation for the Return on Equity is given in the Table below:

Table 5.24: Return on Equity approved by the Commission for Review of the FY 2016-17 (Rs crore)

| Sr. No. | Particulars | Approved in the Tariff Order Dated 28th April 2016 | Petitioner's submission (Review) | Approved by the Commission (Review) |
|------------|---|--|----------------------------------|---|
| 1 | Opening equity (30% of GFA) | 72.08 | 72.78 | 121.16 |
| 2 | Addition in Equity (30% of addition in GFA) | 14.44 | 14.44 | 14.44 |
| 3 | Closing Equity | 86.52 | 87.22 | 135.60 |
| 4 | Average Equity Amount (1+3)*0.5 | 79.30 | 80.00 | 128.38 |
| 5 | Return @ 16% on Equity | 12.69 | 12.80 | 20.54 |

Therefore, the Commission approves Return on Equity of Rs 20.54 crore in the Review of the ARR for the FY 2016-17.

5.15. Provision for Bad and Doubtful Debts

Petitioner's submission:

Provision of Rs 8.11 crore as bad debt (1% of the estimated receivables) has been claimed for the FY 2016-17.

Commission's analysis:

As per Regulation 32 of MYT Regulations, 2014

"Bad and Doubtful Debts shall be limited to 1% of receivables in the true up, subject to the condition that amount of bad and doubtful debts have actually been written off in the licensee books of accounts."

MYT Regulations, 2014 allows bad and doubtful debts up to 1% of receivables in the revenue requirement on the basis of audited accounts only. As amount indicated for the FY 2016-17 by the Petitioner is not actual and is based on projections, no amount is considered by the Commission towards bad and doubtful debts for the FY 2016-17.

5.16. Non-Tariff Income

Petitioner's submission:

Non-Tariff Income of Rs 17.63 crore has been claimed in the Review of the ARR of FY 2016-17 on the basis of actual Non-Tariff Income in the first 6 months and projections for the remaining 6 months.

Commission's analysis:

The Commission has considered an escalation of actual non-tariff income for the FY 2015-16 annually by 5% to arrive at the Non-Tariff Income for the FY 2016-17. **The Commission approves the Non-Tariff Income of Rs. 23.02 crore in the Review of FY 2016-17**, **subject to True-up on the basis of audited accounts for the FY 2016-17**.

5.17. Revenue from Sale of Surplus Power

Petitioner's submission:

The Petitioner has not submitted any revenue from sale of surplus power/UI for the FY 2016-17.

Commission's analysis:

The Commission has verified the REA available at the website of NRPC and has found that the Petitioner has made a sale of 10.50 MU of power at the power exchange till September 2016. Assuming a net average power sale @Rs 3/kWh, the Petitioner will earn a total revenue of Rs 3.15 crore in the FY 2016-17.

The Commission has considered NIL sale of surplus power for H2 of the FY 2016-17 and thereby NIL revenue for H2 of the FY 2016-17.

Therefore, the Commission has approved total income from sale of surplus power in FY 2016-17 at Rs 3.15 crore corresponding to H1 sale for the FY 2016-17 and Nil for H2 subject to Truing-up exercise.

5.18. Revenue at approved Retail Tariff of FY 2016-17

Petitioner's submission:

The revenue from retail tariff is projected at Rs. 801.17 crore (against Rs. 827.72 crores as approved by the Commission vide its Tariff Order dated 28th April 2016) for the FY 2016-17. Additionally the Petitioner has projected a billing of Rs 69.80 crore as FPPCA as billed in the first six months of the FY 2016-17.

Commission's analysis:

The Petitioner has submitted the revised figures of revenue from the sale of power at an approved tariff of FY 2016-17. Therefore the Commission has considered the same based on revised sales, connected load and the number of consumers and approved Rs. 826.46 crore as Revenue from the Sale of Power for the FY 2016-17. Additionally the Commission has also considered billing of Rs 87.27 Crores as FPPCA as submitted by the Petitioner for March 2016 to December 2016.

Table 5.25 Revenue from Sale of Power approved by the Commission for Review of the FY 2016-17 (Rs crore)

| | | Existing | Tariff | F | Y 2016-17 | |
|-----------|--------------------------------|--|------------------------------|---|--|--|
| Sr. No | Category/ Slab of Consumers | Demand Charges (Rs./KVA/ Per Month) | Energy Charge (Rs/kWh) | Approved in the Tariff Order Dated 28 th April 2016 | Petitioner's submission (Review) | Approved by the Commission (Review) |
| Α | Domestic | | | 305.54 | 278.42 | 300.64 |
| 1 | 0-150 units | 10.00 | 2.55 | 86.26 | 78.70 | 84.88 |
| 2 | 151-400units | 10.00 | 4.80 | 124.25 | 113.40 | 122.27 |
| 3 | 401 and above | 10.00 | 5.00 | 95.03 | 86.40 | 93.49 |
| В | Commercial | | | 296.26 | 294.37 | 304.05 |
| 1 | 0-150 kWh | 20.00 | 5.00 | 112.40 | 109.4 | 116.23 |
| 2 | 151-400 kWh | 100.00 | 5.20 | 116.50 | 109.1 | 120.04 |
| 3 | Above 400 kWh | 100.00 | 5.45 | 67.36 | 75.9 | 67.78 |
| С | Large Supply | 100.00 | 5.65 | 75.06 | 84.83 | 79.15 |
| D | Medium Supply | 100.00 | 5.35 | 19.79 | 67.83 | 74.28 |
| Е | Small Power Supply | 20.00 | 5.30 | <i>55.97</i> | 10.50 | 11.18 |
| F | Agriculture | - | 2.90 | 0.54 | 0.40 | 0.41 |
| G | Public Lighting | 100.00 | 5.35 | 14.48 | 12.90 | 12.06 |
| Н | Bulk Power | 100.00 | 5.55 | 54.40 | 46.60 | 52.45 |
| I | Other Temporary Supply | | 8.10 | 5.67 | 5.32 | 4.54 |
| J | Sub-Total | | | | | 838.76 |
| K | FPPCA | | | | 69.80 | 87.27 |
| L | Total | | | 827.72 | 870.97 | 926.03 |

For the purpose of the review of the FY 2016-17, the Commission has considered the revenue generated from the sale of retail power including FPPCA for the FY 2016-17 at Rs 926.03 crore. The same would be trued up based on the audited accounts of the FY 2016-17.

5.19. ARR, Revenue Deficit/(Surplus) for the Review of the FY 2016-17

Petitioner's submission:

A net revenue requirement of Rs. 811.23 crore for the FY 2016-17 has been submitted with an estimated revenue surplus of Rs. 59.74 crore for the purpose of review of the FY 2016-17.

Commission's analysis:

The Commission based on the detailed analysis of the cost parameters of the ARR has considered and approved the net revenue requirement of FY 2015-16 in the True up as shown in the Table below:

Table 5.26 Net ARR approved by the Commission for Review of the FY 2016-17 (Rs crore)

| S. No. | Particulars | Approved in the Tariff Order Dated 28 th April 2016 | Petitioner's submission (Review) | Approved by the Commission (Review) |
|-----------|--|--|----------------------------------|-------------------------------------|
| 1 | Cost of power purchase for full year | 728.70 | 688.20 | 638.15 |
| 2 | Employee costs | 65.35 | 65.93 | 64.65 |
| 3 | Administration and General Expenses | 6.16 | 6.16 | 6.09 |
| 4 | Repair and Maintenance Expenses | 6.70 | 14.93 | 11.03 |
| 5 | Depreciation | 14.40 | 14.53 | 15.76 |
| 6 | Interest and Finance charges | 7.19 | 7.41 | 5.74 |
| 7 | Interest on Working Capital | - | - | - |
| 8 | Interest on Consumer Security Deposit | 10.95 | 10.79 | 10.79 |
| 9 | Return on Equity | 12.69 | 12.80 | 20.54 |
| 10 | Provision for Bad Debt | - | 8.11 | - |
| 11 | Total Revenue Requirement Sum(1:10) | 852.15 | 828.86 | 772.75 |
| 12 | Less: Non-Tariff Income | 24.48 | 17.63 | 23.02 |
| 13 | Less: Revenue from Surplus Power Sale/UI | | | 3.15 |
| 14 | Net Revenue Requirement (11-12-13) | 827.66 | 811.23 | 746.59 |

Table 5.27: Revenue Gap/(Surplus) approved by the Commission for Review of the FY 2016-17 (Rs crore)

| S. No. | Particulars | Approved in the Tariff Order Dated 28th April 2016 | Petitioner's submission (Review) | Approved by the Commission (Review) |
|-----------|---|--|----------------------------------|---|
| 1 | Net Revenue Requirement | 827.66 | 811.23 | 746.59 |
| 2 | Revenue from Retail Sales at Existing Tariff | 827.72 | 870.97 | 926.03 |
| 3 | Net Gap / (Surplus) (1-2) | 124.91 | (59.74) | (179.45) |
| 4 | Cumulative Gap/(Surplus) carried forward from previous year | | | 275.85 |
| 5 | Carrying Cost @ 9.30% | | | 25.65 |
| 6 | Total Gap/ (Surplus) (3+4+5) | 124.91 | (59.74) | 122.05 |

The Commission approves the estimated standalone revenue surplus of Rs. 179.45 crore for the Review of the FY 2016-17 and the cumulative revenue gap of previous years together with the carrying cost on the revenue gap of the FY 2015-16 as Rs 122.05 crore. This estimated revenue deficit/ (surplus) is carried over to the next year and has accordingly been considered in the ensuing year i.e. FY 2017-18 with carrying cost.

Chapter 6. Approval of the various ARR components for FY 2017-18

6.1. Approach for Approval of Aggregate Revenue Requirement for the FY 2017-18

This chapter analyses the individual elements constituting the Aggregate Revenue Requirement for the FY 2017-18, approved in the MYT Order dated 28th April, 2016 and re-computes the same considering the actual values of various parameters for the FY 2015-16 as per the audited accounts and H1 figure of the FY 2016-17. The revised ARR for the FY 2017-18 is compared with revenue at existing tariff (as determined in the MYT Order dated 28th April FY 2016-17) for the FY 2017-18 to arrive at revised revenue gap/(surplus) for the year.

6.2. Energy sales, Number of consumers and Connected load

Petitioner's submission:

The sales for the FY 2017-18 have been projected on the basis of historic sales data in the respective categories including the actual sales for the FY 2015-16 and six months actuals for the FY 2016-17. Further, CAGR of previous 3 years/5 years has been considered and applied on the actual number of consumers and connected load (kW) of FY 2015-16 to arrive at the figures for the FY 2017-18:

Table 6.1: Energy Sales submitted by the Petitioner for the FY 2017-18 (in MU)

| S No | Categories | Approved as per T.O dated 28 th April 2016 | Projected for the full year |
|------|-------------------------|---|-----------------------------|
| 1. | Domestic | 818.46 | 726.00 |
| 2. | Commercial | 507.00 | 501.15 |
| 3. | Large Supply | 117.00 | 145.35 |
| 4. | Medium Supply | 21.00 | 117.74 |
| 5. | Small Power Supply | 104.82 | 19.01 |
| 6. | Agriculture | 2.02 | 1.55 |
| 7. | Public Lighting | 27.74 | 22.85 |
| 8. | Bulk Supply | 92.26 | 77.19 |
| 9. | Others Temporary Supply | 7.00 | 6.52 |
| | Grand Total | 1697.30 | 1617.36 |

The number of consumers and Connected Load (kW) for the FY 2017-18 as approved by the Commission in the Tariff Order dated 28th April 2016 and projected by the Petitioner in its additional submission are given in the Table below:

Table 6.2: No. of consumers submitted by the Petitioner for the FY 2017-18

| S No | Categories | Approved as per T.O dated 28 th April 2016 | Projected for the full year |
|------|-------------------------|---|-----------------------------|
| 1. | Domestic | 200,200 | 1,99,724 |
| 2. | Commercial | 23,498 | 23,808 |
| 3. | Large Supply | 108 | 103 |
| 4. | Medium Supply | 1,346 | 1,357 |
| 5. | Small Power Supply | 1,275 | 1,269 |
| 6. | Agriculture | 121 | 120 |
| 7. | Public Lighting | 1026 | 1,078 |
| 8. | Bulk Supply | 592 | 735 |
| 9. | Others Temporary Supply | 620 | 573 |
| | Grand Total | 2,27,786 | 2,28,768 |

Table 6.3: Connected Load submitted by the Petitioner for the FY 2017-18 (in kW)

| S No | Categories | Approved as per T.O dated 28 th April 2016 | Projected for the full year |
|------|-------------------------|---|-----------------------------|
| 1. | Domestic | 9,20,966 | 8,67,998 |
| 2. | Commercial | 4,56,842 | 4,41,481 |
| 3. | Large Supply | 76,155 | 73,349 |
| 4. | Medium Supply | 74,136 | 78,039 |
| 5. | Small Power Supply | 19,852 | 19,753 |
| 6. | Agriculture | 744 | 757 |
| 7. | Public Lighting | 6,321 | 6,726 |
| 8. | Bulk Supply | 41,464 | 42,759 |
| 9. | Others Temporary Supply | 4,187 | 3,250 |
| | Grand Total | 1,599,926 | 15,34,113 |

Commission's analysis:

The Commission has observed that there is a difference in the actual number of consumers and the connected load for the FY 2015-16 with the approved figures of consumers in review for the FY 2015-16. Approval for the FY 2017-18 in MYT Order dated 28th April, 2016 was based on the figures approved in the Review of FY 2015-16, hence the Commission finds it appropriate to consider number of consumers and connected load as per Petitioner's submission for the FY 2017-18. However, the Commission has projected the estimated energy sales of FY 2016-17 using CAGR of previous 3-5 audited years as deemed appropriate by the Commission, to arrive at the projection of the energy sales for the FY 2017-18 (except, wherever there is a negative

growth for any category the CAGR has been considered as zero). For the FY 2017-18, the CAGR used for the energy sales for various categories is given in the Table as follows:

Table 6.4: CAGR for various categories for Projections of sales in FY 2017-18

| S No | Categories | Estimated Sales for FY 2016-17 (MU) | CAGR used by the Commission | Sales for FY 2017-18 (MU) |
|------|-------------------------|---|-----------------------------------|---------------------------------|
| 1 | Domestic | 748.70 | 5.8% | 792.03 |
| 2 | Commercial | 508.05 | 5.2% | 534.67 |
| 3 | Industry | | | |
| a | Large Supply | 124.66 | 0.6% | 125.40 |
| b | Medium Supply | 122.24 | 4.5% | 127.75 |
| С | Small Power Supply | 20.21 | 0.0% | 20.21 |
| 4 | Agriculture | 1.43 | 4.1% | 1.49 |
| 5 | Public Lighting | 21.09 | 6.6% | 22.47 |
| 6 | Bulk Supply | 85.34 | 1.1% | 86.30 |
| 7 | Others Temporary Supply | 5.61 | 0.0% | 5.61 |
| | Grand Total | 1,637.33 | 4.8% | 1715.93 |

The detailed category wise Energy Sales, Number of consumers and connected load as approved are shown below:

Table 6.5: Energy Sales approved by the Commission for the FY 2017-18 (in MU)

| | | Approved | Projected | Approved by |
|------|-------------------------|------------------------|--------------|-------------|
| S No | Categories | as per T.O | for the full | the |
| 3 NO | Categories | dated 28 th | year by the | Commission |
| | | April 2016 | Petitioner | (ARR) |
| 1 | Domestic | 818.46 | 726.00 | 792.03 |
| a | 0-150 units | 351.94 | 312.00 | 340.57 |
| b | 151-400units | 270.09 | 240.00 | 261.37 |
| С | 401 and above | 196.43 | 174.00 | 190.09 |
| 2 | Commercial | 507.00 | 501.15 | 534.67 |
| a | 0-150 units | 228.15 | 226.00 | 240.60 |
| b | 151-400units | 212.94 | 210.00 | 224.56 |
| С | 401 and above | 65.91 | 65.00 | 69.51 |
| 3 | Industry | | | 273.37 |
| a | Large Supply | 117.00 | 145.35 | 125.40 |
| b | Medium Supply | 21.00 | 117.74 | 127.75 |
| С | Small Power Supply | 104.82 | 19.01 | 20.21 |
| 4 | Agriculture | 2.02 | 1.55 | 1.49 |
| 5 | Public Lighting | 27.74 | 22.85 | 22.47 |
| 6 | Bulk Supply | 92.26 | 77.19 | 86.30 |
| 7 | Others Temporary Supply | 7.00 | 6.52 | 5.61 |
| | Grand Total | 1697.30 | 1617.36 | 1715.93 |

Table 6.6: No. of consumers approved by the Commission for the FY 2017-18

| S No | Categories | Approved as per T.O dated 28 th April 2016 | Projected for the full year by the Petitioner | Approved by the Commission (ARR) |
|------|-------------------------|---|---|---|
| 1. | Domestic | 200,200 | 1,99,724 | 1,99,724 |
| 2. | Commercial | 23,498 | 23,808 | 23,808 |
| 3. | Industry | | | |
| a | Large Supply | 108 | 103 | 103 |
| b | Medium Supply | 1,346 | 1,357 | 1,357 |
| С | Small Power Supply | 1,275 | 1,269 | 1,269 |
| 4. | Agriculture | 121 | 120 | 120 |
| 5. | Public Lighting | 1026 | 1,078 | 1,078 |
| 6. | Bulk Supply | 592 | 735 | 735 |
| 7. | Others Temporary Supply | 620 | 573 | 573 |
| | Grand Total | 2,27,786 | 2,28,768 | 2,28,768 |

Table 6.7: Connected Load approved by the Commission for the FY 2017-18 (in kW)

| S No | Categories | Approved as per T.0 dated 28 th April 2016 | Projected for the full year by the Petitioner | Approved by the Commission (ARR) |
|------|-------------------------|--|--|----------------------------------|
| 1 | Domestic | 9,20,966 | 8,67,998 | 8,67,998 |
| а | 0-150 units | 2,53,551 | 2,46,942 | 2,46,942 |
| b | 151-400units | 3,34,783 | 3,30,687 | 3,30,687 |
| С | 401 and above | 3,31,893 | 2,90,370 | 2,90,370 |
| 2 | Commercial | 4,56,842 | 4,41,481 | 4,41,481 |
| a | 0-150 units | 86,800 | 42,508 | 42,508 |
| b | 151-400units | 82,232 | 33,557 | 33,557 |
| С | 401 and above | 2,87,811 | 3,65,417 | 3,65,417 |
| 3 | Industry | | | |
| a | Large Supply | 76,155 | 73,349 | 73,349 |
| b | Medium Supply | 74,136 | 78,039 | 78,039 |
| С | Small Power Supply | 19,852 | 19,753 | 19,753 |
| 4 | Agriculture | 744 | 757 | 757 |
| 5 | Public Lighting | 6,321 | 6,726 | 6,726 |
| 6 | Bulk Supply | 41,464 | 42,759 | 42,759 |
| 7 | Others Temporary Supply | 4,187 | 3,250 | 3,250 |
| | Grand Total | 1,599,926 | 15,34,113 | 15,34,113 |

Therefore, the Commission approves the total sales of 1715.93 MU for a total number of consumers at 2,28,768 with a total connected load at 15,34,113 kW for the FY 2017-18.

6.3. Intra-State Transmission and Distribution (T&D) losses

Petitioner's submission:

The sales have increased in the licensed territory in the last three years, however losses have remained stagnant without much improvement due to majority of the increase in the sales in the LT category. The Petitioner has stated that on the basis of the Tariff Policy, 2006, that various technical and technological improvement proposed under IPDS and other schemes shall be useful in bringing about the desired reduction in loss levels. Since these schemes are currently under implementation, hence the T&D loss level for the FY 2017-18 should be revised to 13.75% in line with its submission in the Business Plan and MYT Petition. The Petitioner again also pointed out that energy input to the UT is metered outside its territory and hence CED has to bear the additional losses of interstate circuit due to not having any interstate point in its boundary. The Petitioner has also stated that the T&D loss of 12.81% in the FY 2014-15 was computed based on the sales of 1512.54 MUs contained in the audited accounts for the FY 2014-15. However there was an inadvertent error with respect to the sales recorded in the audited accounts of the FY 2014-15 and CED has already written to the CAG for rectification of the error. The correct sales figure for the FY 2014-15 is 1471 MUs which would lead to a loss level of 15.17% for the FY 2014-15. In view of the reworking of the actual T&D loss of the FY 2014-15 due to correction in the sales figure, the T&D loss target approved for the MYT Control Period is unrealistic and the loss targets should be re-set.

Commission's analysis:

In the previous Tariff Order dated 28th April 2016, the Commission had ordered that:

"The Commission had approved a loss level of 13.75% in its Order dated 10th April 2015 while determining the ARR for FY 2015-16. The Commission has already taken into consideration the difficulties expressed by the Petitioner and reduced the loss target only by 0.25%, though as per the recommendation of Abraham Committee the reduction should be 1%. The Commission also notes that actual losses as approved by the Commission for True-up of FY 2014-15 stands at 12.81%, which are lower than 13.75% presently approved for FY 2015-16. However, as the Petitioner has neither submitted actual power purchase bills upto FY 2014-15, nor have submitted the energy audit reports, the losses ascertained by the Commission are based on the information available at the alternate available resources. The Commission is also of the view that being a predominantly LT network, the losses are comparatively at a competitive level. Accordingly, the Commission finds it appropriate to retain the losses at the level of 13.75% for the purpose of review of FY 2015-16."

Since the Commission has not restated the T&D loss trajectory based on lower losses in the FY 2014-15 (now attributed to wrong submission of sales in FY 2014-15) in the previous order itself, the Commission finds no merit in restating the loss trajectory at this stage. Hence the Commission retains the loss level of 12.75% as approved in MYT Order dated 28th April, 2016 for the FY 2017-18.

6.4. Inter-State Transmission losses

Petitioner's submission:

The recent 52-week moving average of regional losses available at the level of 3.77% (30th March 2015-27th March 2016) has been considered for estimating the power availability at the periphery.

Commission's analysis:

The Commission in its MYT Order dated 28th April 2016 had considered the recent 52-week moving average of regional losses and approved 3.75% as the inter-state transmission loss for the FY 2016-17.

Since the recent 52 weeks moving average of regional losses is 4.05% (29^{th} February 2016 to 20^{th} February 2017), the Commission considers the figures of regional pool losses of 4.05% as the inter-state loss and approves the same for the ARR of FY 2017-18 which would be further revised (if required) based on actuals during the True-up exercise.

6.5. Energy Requirement

Petitioner's submission:

The overall energy requirement at the generator end for the FY 2017-18 is 1940.56 MU.

Commission's analysis:

Considering the approved Inter-State losses Intra-State Transmission & Distribution losses and the approved energy sales as discussed in the foregoing paragraphs, the Commission has computed the gross energy requirement of 1966.68 MU for the FY 2017-18 as per the Table below:

Table 6.8: Energy Requirement approved by the Commission for the FY 2017-18(in MU)

| S. No | Particulars | Approved as per T.O dated 28 th April 2016 | Projected for full year by the Petitioner | Approved by the Commission (ARR) |
|-------|---|---|---|----------------------------------|
| 1 | Energy sales in the UT | 1,697.30 | 1,617.36 | 1715.93 |
| 2 | Distribution losses (%age) | 12.75% | 13.75% | 12.75% |
| 3 | Distribution losses (MU) (1 * 2)/(100%-2) | 248.03 | 257.84 | 250.75 |
| 4 | Add: Sales to common pool consumers/ UI | - | - | - |
| 5 | Gross Energy Requirement @ periphery (1 +3 +4) | 1,945.33 | 1,875.20 | 1966.68 |
| 6 | Solar Power generated within the UT | 18.22 | 18.22 | 18.22 |
| 7 | Net Energy Requirement at Periphery (5-6) | 1927.11 | 1856.98 | 1948.46 |
| 8 | Long-Term PPAs (Row H Table 6.11) | 1,765.99 | 1,733.81 | 1,848.94 |
| 9 | Transmission Losses (%) (NRLDC Pooled Losses) | 3.75% | 3.77% | 4.05% |
| 10 | Transmission losses (MU)(8*9) | 66.22 | 65.36 | 74.80 |
| 11 | Short term power to match energy requirement (7-8+10) | 236.91 | 188.53 | 174.31 |
| 12 | Net Energy Availability @ periphery (8-10+11) | 1927.11 | 1856.98 | 1948.46 |

The Commission approves short-term power purchase of 174.31 MU to meet its Energy shortfall for the FY 2017-18.

6.6. Power Purchase Quantum and Cost

Petitioner's submission:

Following assumptions have been taken into consideration for computation of energy availability:

- a. The current firm and unallocated power allocations from the various Central Generating Stations have been considered as per the recent revised allocation statement issued by Northern Regional Power Committee as per the Ministry of Power letter No. NRPC/OPR/103/02/2016/9795-9818 dated 21st October 2016. Current allocation from different plants to U.T. of Chandigarh has been considered for the availability to CED for the FY 2017-18.
- b. The generation units available from each plant are computed considering the average PLF of the plants in the past three years/hydro plants' design energy.
- c. The deficit in energy is proposed to be met through short term power on day to day basis.

Further, proposed availability of power from various sources has been computed as per the following methodology:

- a. NTPC: The normative auxiliary consumption as per CERC Tariff Regulations, 2014 has been considered. Based upon the generated energy from each plant and its corresponding entitlement to the UT of Chandigarh, the energy availability has been calculated.
- b. NHPC: The energy generated from the generating stations of NHPC has been estimated by considering design energy of the corresponding stations. Based upon the energy generated by each power plant and its corresponding entitlement to the UT of Chandigarh, the energy units availability has been calculated.
- c. NPCIL: The energy generated from the generating stations of NPCIL has been estimated by considering the average PLF of the past three years. Based upon the generated energy from each power plant and its corresponding entitlement to the UT of Chandigarh, the energy units availability has been calculated.
- d. SJVNL: The estimation of energy generated from the Naptha Jhakri generating station has been done based upon the average generation of the past three years, while for the Rampur hydro station it is estimated by considering design energy of the power plant. Based upon the generated energy from each power plant, the energy units availability to the UT of Chandigarh has been calculated.

- e. BBMB: The UT of Chandigarh had been allocated a fixed quota of 1Lakh Units initially and subsequently another allocation of 10 Lakh Units per day from the BBMB plant. In addition to above, 3.5% of the plant capacity has been allocated to the UT of Chandigarh. The availability of power from BBMB considered is based on the average generation of the past three years. Estimation of unit generation from Pong and Dehar power plant which are part of BBMB has also been done on the similar lines.
- f. THDC: The unit generation from the Koteshawar and Tehri plants has been estimated based upon the average generation during the past three years while the energy available to the UT of Chandigarh for the Control Period has been calculated based upon the entitlement.

Following assumptions have been considered for projection of Power Purchase Cost from the various generating stations:

- a. The Fixed Cost for each plant is computed based upon the proportionate % allocation of the plant capacity to CED and corresponding annual fixed charges approved for the generating stations as per Tariff Orders for the MYT Control Period (FY 2014-19) approved by CERC as per Tariff Regulations, 2014. For generating plants where Tariff Orders are still pending with CERC, fixed charges from FY 2013-14 have been considered with one time escalation of 5%.
- b. The Energy Charges for the FY 2017-18 for thermal plants have been taken after applying an escalation @ 5% on the variable charges applicable for the FY 2016-17.
- c. In case of the hydro plants, the variable charges have been computed based on the revised annual charges and design energy output of the respective plants.
- d. Energy Charge for BBMB has been considered as per the last twelve month rate for 1 Lakh Units and 10 Lakh Units in addition to the annual fixed charges and operation & maintenance charges towards the additional allocation of 3.5% of plant capacity.
- e. PGCIL Charges, NRLDC Charges, Reactive Energy charges are computed with an escalation of 10% y-o-y over actuals billed per energy unit billed in the FY 2016-17 in line with the latest Tariff Orders issued by the CERC.
- f. The Shortfall on day to day basis (if any) in power inflow after accounting for energy available from all generating stations and renewable sources has been considered to be met from short term power sources. The average rate of short term power has been considered at Rs. 4.00 per unit.
- g. Shortfall towards RPOs has been considered to be met by purchase of RECs from the Power Exchange

Based on the above assumptions, the Petitioner has proposed the following plant-wise power purchase quantum and cost for the FY 2017-18:

Table 6.9: Source wise Power Procurement quantum (in MU) and cost (Rs. crore) submitted by the Petitioner

| Plant | Units (in MUs) | Projected Cost (in Rs. Cr.) | Per Unit Cost (Rs./unit) |
|----------------------------------|-------------------|--------------------------------|-----------------------------|
| NTPC Stations | | , | , , |
| Anta | 17.91 | 9.14 | 5.11 |
| Auraiya | 20.55 | 10.73 | 5.22 |
| Dadri GPP | 28.01 | 11.55 | 4.12 |
| Dadri II TPP | 17.37 | 8.97 | 5.16 |
| Kahalgaon II | 18.15 | 6.85 | 3.77 |
| Rihand I | 83.68 | 20.69 | 2.47 |
| Rihand II | 71.82 | 18.58 | 2.59 |
| Rihand III | 57.65 | 18.87 | 3.27 |
| Singrauli | 39.22 | 8.07 | 2.06 |
| Unchahar I | 15.85 | 6.19 | 3.90 |
| Unchahar II | 28.43 | 11.13 | 3.92 |
| Unchahar III | 10.93 | 4.87 | 4.46 |
| Koldam | 34.78 | 21.72 | 6.25 |
| NHPC Stations | | | |
| Chamera I | 64.14 | 13.38 | 2.09 |
| Chamera II | 23.56 | 4.39 | 1.86 |
| Chamera III | 15.01 | 6.00 | 4.00 |
| Dhauliganga | 16.70 | 4.75 | 2.84 |
| Dulhasti | 23.36 | 12.24 | 5.24 |
| Parbathi III | 9.49 | 5.88 | 6.20 |
| Salal | 8.24 | 0.90 | 1.10 |
| Sewa II | 8.43 | 3.37 | 4.00 |
| Tanakpur | 5.73 | 1.69 | 2.95 |
| Uri-I | 15.85 | 2.41 | 1.52 |
| Uri II | 7.03 | 3.15 | 4.49 |
| APCL | 21.59 | 13.95 | 6.46 |
| NPCIL | | | |
| NAPP | 51.14 | 12.72 | 2.49 |
| RAPP (#3 and #4) | 20.01 | 5.76 | 2.88 |
| RAPP(#5 and #6) | 43.78 | 15.67 | 3.58 |
| SJVNL | | | |
| Nathpa Jhakri | 73.59 | 19.13 | 2.60 |
| Rampur | 9.32 | 2.71 | 2.90 |
| ВВМВ | 705.29 | 225.58 | 3.20 |
| THDC | | | |
| Koteshwar | 10.69 | 3.99 | 3.73 |
| Tehri | 156.48 | 88.28 | 5.64 |
| Other Sources | | | |
| Power Procurement (Net Metering) | 11.21 | 3.92 | 3.50 |

| Plant | Units (in MUs) | Projected Cost (in Rs. Cr.) | Per Unit Cost (Rs./unit) |
|---|-------------------|--------------------------------|-----------------------------|
| Power Procurement (Gross Metering) | 7.01 | 3.51 | 5.00 |
| Short Term Procurement (Bilateral / Exchange /UI) | 188.53 | 75.41 | - |
| Cost of REC certificates | | 8.91 | - |
| Grand Total | 1940.57 | 695.06 | |

Further, other charges proposed comprise of inter-state transmission charges, scheduling charges considering an increase of 10% year on year over the estimated cost for the FY 2016-17.

Based on the above assumptions the total Power Purchase cost projected for the FY 2017-18 in comparison to the approved Power Purchase Cost in the MYT Order is as provided in the Table below:

Table 6.10: Projected Power Purchase Cost submitted by the Petitioner for the FY 2017-18 (in Rs Crores)

| Particulars | Approved in Tariff Order dated 28 th April, 2016 | Revised Proposal |
|---------------------------|--|------------------|
| Total Power Purchase Cost | 760.16 | 731.87 |

Commission's analysis:

The Commission while estimating the energy availability to CED from the power plants considered the following assumptions:

- Allocation of Share of Power: The Commission has considered the firm allocation and allocation from the unallocated quota from the above stations, as per the notification of the Northern Region Power Committee NRPC/ OPR/ 103/ 02/2017/1050-88 dated 25th January 2017.
- **Gross Energy Availability**: The Commission has estimated the gross energy availability from the existing stations based on the installed capacity and the average PLF for the past 5 FYs as applicable i.e. the FY 2012-13 till January 2017. For hydro plants, PLF has been determined on the basis of the average of the previous four years (excluding last year i.e. FY 2016-17). The power intake from each power station has been considered based on merit order dispatch. However, the fixed charges on pro-rata allocation basis are approved for full power allocation. The net energy sent out from the generating station has been considered after accounting for the applicable auxiliary consumption on pro-rata basis as per the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014
- **Energy Available to the Petitioner:** The effective share from the stations is applied on the energy sent out from the generating station to arrive at the energy available for the Petitioner from the respective power stations.

The Commission has considered the following to arrive at the Power Purchase Cost for the FY 2017-18:

- **Fixed Charges:** The fixed charges based on the formula specified for the stations in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 have been considered. The Annual Fixed Charges determined for the FY 2013-14 for each station have been taken as per the latest Tariff Orders for the respective stations as applicable, with 5% annual escalation for each FY. However for plants where CERC has issued the Tariff Order as per CERC Tariff Regulations, 2014 till the FY 2018-19, fixed cost as determined for the FY 2017-18 has been considered.
- **Variable Charges:** The Commission has considered the average variable cost for the period as approved for the FY 2016-17 in this Order.
- Other Charges: The Commission has considered the PoC rates as specified by the Central Electricity Regulatory Commission vide its Order no No.L-1/44/2010-CERC Dated 27th January 2017 applicable from January 2017 to March 2017 to arrive at PGCIL charges for the FY 2017-18. Other Charges (NRLDC, Reactive Energy Charges) have been considered the same for the FY 2016-17.

Since the UT is facing a power deficit, it will have to go for procurement of the full power allocation available in the FY 2017-18. Short-Term Power Purchase to account from deficiency from long-term power sources has been assumed to be @ Rs 3.0/kWh.

The Commission has calculated power purchase quantum and cost from solar plants (both in gross and net metering mode) in addition to the cost of purchase of solar as well as non-solar RECs required for fulfilling the RPOs. The detailed calculation is given in the subsequent section.

The licensee will compute fuel and power procurement cost variations on a quarterly basis and adjustment shall be made in the consumer bills starting a month after the end of each quarter based on the Fuel & Power Purchase Cost Adjustment (FPPCA) formula notified separately by the Commission.

The Power Purchase units and cost (including transmission charges) as approved by the Commission for the FY 2017-18 as shown in the below Table:

Table 6.11: Source wise Power Procurement quantum (in MU) and cost (Rs crore) approved by the Commission for the FY 2017-18

| | | Cost (Rs Crores) | | | | | Per Unit |
|--------|--------------|----------------------------|-------|----------|-------|-------|-----------------|
| Sr. No | Particulars | Energy Purchase (MU) | Fixed | Variable | Other | Total | (Paisa/ kWh) |
| | | | | | | | |
| Α | NTPC | | | | | | |
| 1 | Anta | 29.25 | 4.67 | 7.69 | - | 12.37 | 423 |
| 2 | Auraiya | 21.19 | 4.40 | 7.10 | - | 11.51 | 543 |
| 3 | Dadri GPP | 30.91 | 3.72 | 8.67 | - | 12.39 | 401 |
| 4 | Dadri II TPP | 18.18 | 4.22 | 5.72 | - | 9.94 | 547 |

| | | | Co | st (Rs Crores) | | | Per Unit |
|--------|-------------------------------|----------------------------|--------|----------------|-------|--------|-----------------|
| Sr. No | Particulars | Energy Purchase (MU) | Fixed | Variable | Other | Total | (Paisa/ kWh) |
| 5 | Kahalgaon II | 18.27 | 2.18 | 4.39 | - | 6.56 | 359 |
| 6 | Rihand I | 83.00 | 7.24 | 13.67 | - | 20.91 | 252 |
| 7 | Rihand II | 74.00 | 7.17 | 12.86 | - | 20.03 | 271 |
| 8 | Rihand III | 56.37 | 5.84 | 9.07 | - | 14.91 | 264 |
| 9 | Singrauli | 38.73 | 2.53 | 5.85 | - | 8.38 | 216 |
| 10 | Unchahar I | 16.46 | 2.00 | 4.47 | - | 6.47 | 393 |
| 11 | Unchahar II | 29.38 | 3.77 | 7.96 | - | 11.73 | 399 |
| 12 | Unchahar III | 11.59 | 2.29 | 3.23 | ı | 5.52 | 476 |
| 13 | Jhajjar (Aravali) | 21.86 | 8.07 | 7.24 | - | 15.30 | 700 |
| 14 | Koldam | 26.22 | 9.57 | 5.69 | - | 15.26 | 582 |
| В | NHPC | | | | | | |
| 1 | Chamera I | 96.78 | 4.12 | 10.40 | - | 14.52 | 150 |
| 2 | Chamera II | 23.19 | 1.28 | 2.27 | - | 3.55 | 153 |
| 3 | Chamera III | 12.70 | 2.92 | 2.70 | - | 5.62 | 442 |
| 4 | Dhauliganga | 20.52 | 1.35 | 3.07 | - | 4.42 | 216 |
| 5 | Dulhasti | 26.98 | 4.10 | 7.81 | - | 11.92 | 442 |
| 6 | Parbathi III | 8.88 | 0.70 | 2.43 | - | 3.13 | 352 |
| 7 | Salal | 9.15 | 0.40 | 0.51 | - | 0.90 | 99 |
| 8 | Sewa II | 8.69 | 1.12 | 1.88 | - | 3.00 | 346 |
| 9 | Tanakpur | 5.63 | 0.78 | 0.83 | - | 1.61 | 286 |
| 10 | Uri-I | 18.30 | 1.14 | 1.45 | - | 2.60 | 142 |
| 11 | Uri-II | 7.50 | 1.53 | 1.82 | - | 3.35 | 447 |
| С | SIVNL | | | | | 0.00 | |
| 1 | NATHPA JHAKRI | 72.88 | 5.32 | 10.50 | - | 15.82 | 217 |
| | RAMPUR | | | | | | |
| 2 | (Additional) | 7.70 | 0.73 | 1.24 | - | 1.97 | 256 |
| D | BBMB | 763.58 | | 181.47 | | 181.47 | 238 |
| Е | NPCIL | | | | | | |
| 1 | NAPS | 49.91 | - | 11.82 | - | 11.82 | 237 |
| 2 | RAPP (Unit 3 & 4)-B | 19.15 | - | 5.25 | - | 5.25 | 274 |
| 3 | RAPP (Unit 5 & 6)-C | 41.92 | - | 14.29 | - | 14.29 | 341 |
| F | THDC | | | | | | |
| 1 | Koteshwar | 11.12 | 1.03 | 2.17 | - | 3.20 | 288 |
| 2 | Tehri | 168.95 | 17.22 | 50.65 | - | 67.87 | 402 |
| | Subtotal | 1,848.94 | 111.38 | 416.20 | | 527.59 | |
| G | Other Charges | , | | | | | |
| 1 | PGCIL CHARGES | | | | | 30.97 | |
| 1 | | | | | | 30.97 | |
| 2 | REC(Solar and Non- Solar) | | | | | 9.67 | |
| 3 | Bilateral/Exchange | 174.31 | | | | 52.29 | |
| 4 | Reactive charges | | | | | 0.04 | |
| 5 | NRLDC | | | 1 | | 0.20 | |
| 6 | | | | | | | |
| 7 | Others Charges Solar Power | 18.22 | | | | 7.43 | |
| | (Physical Power) | | 44 | | | | |
| Н | TOTAL | 2,041.48 | 111.38 | 416.20 | - | 628.19 | 1 |

The Commission hereby approves the total power purchase requirement of 2041.48 MU at a total Power Purchase Cost (including transmission charges) of Rs 628.19 crore for the FY 2017-18. The 'R approved' Factor for computation of FPPCA

charge is approved at 288 Paisa/kWh as the ratio of power purchase cost (without considering PGCIL and REC Charges) and the approved power purchase quantum.

6.7. Renewable Purchase Obligations (RPOs)

Petitioner's submission:

Solar power is being purchased from plants operating in the gross metering mode as well as the net metering mode. The Petitioner submitted that in the absence of any non-solar RE plants within the UT of Chandigarh, the non-solar RPOs compliance shall be done by purchase of non-solar RECs. In case of any shortfall in meeting solar RPOs, the balance solar RPOs also shall be met by way of purchase of RECs.

Table 6.12: REC and Solar Power Purchase as submitted by the Petitioner for the FY 2017-18

| | Project | tion |
|---|----------------|-------------------|
| Particulars | Units (in MUs) | Cost (Rs. Cr.) |
| Solar RPO (In %) | 1.50% | |
| Projected Sales | 1617.36 | |
| Total Power to be Procured to meet Solar Obligation (In MU) | 24.26 | 9.54 |
| Breakup of Sources for Solar RPO Compliance | | |
| Power planned to be procured from NET Metering Mode (In MW) | 8 | |
| Power planned to be procured from NET Metering Mode (In MU's) | 11.21 | 3.92 |
| Power planned to procure from Gross Metering Mode (In MW) | 5 | |
| Power planned to procure from Gross Metering Mode (In MU's) | 7.01 | 3.51 |
| RPO to be met with REC (In MU's) | 6.04 | 2.11 |
| Non Solar RPO (In %) | 2.80% | |
| Total Power to be Procured to meet Non Solar Obligation (In MU) | 45.29 | 6.79 |
| Total RPO (Solar and Non-Solar) | 69.55 | 16.34 |

Commission's analysis:

As per JERC (Procurement of Renewable Energy) (Second Amendment) Regulations 2015 clause 3.1

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.

"Provided that the Renewal Purchase Obligation from solar as specified in Column 3 shall be fulfilled from the generation based on solar sources only;

Provided further that such obligation to purchase Renewal energy shall be inclusive of the purchases, if any, from renewal energy sources already being made by the concerned obligated entity;"

^{......}

Further, as per JERC (Procurement of Renewable Energy) (Second Amendment) Regulations 2015 clause 3.2

"Every obligated entity shall meet its RPO target by way of its own generation or by way of purchase from other sources / licensees or by way of purchase of Renewal Energy Certificates or by way of combination of any of the above options. Any long term purchase arrangements shall be made only with the approval of the Commission. The Commission shall approve long term PPAs on case to case basis."

As per the new National Tariff Policy 2016 notified on 28th January 2016, clause 6.4 Renewable sources of energy generation including Co-generation from renewable energy sources:

"(1) Pursuant to provisions of section 86(1)(e) of the Act, the Appropriate Commission shall fix a minimum percentage of the total consumption of electricity in the area of a distribution licensee for purchase of energy from renewable energy sources, taking into account availability of such resources and its impact on retail tariffs.

Cost of purchase of renewable energy shall be taken into account while determining tariff by SERCs. Long term growth trajectory of Renewable Purchase Obligations (RPOs) will be prescribed by the Ministry of Power in consultation with MNRE.

Provided that cogeneration from sources other than renewable sources shall not be excluded from the applicability of RPOs.

- (i) Within the percentage so made applicable, to start with, the SERCs shall also reserve a minimum percentage for purchase of solar energy from the date of notification of this policy which shall be such that it reaches 8% of total consumption of energy, excluding Hydro Power, by March 2022 or as notified by the Central Government from time to time.
- (ii) Distribution Licensee(s) shall compulsorily procure 100% power produced from all the Waste-to-Energy plants in the State, in the ratio of their procurement of power from all sources including their own, at the tariff determined by the Appropriate Commission under Section 62 of the Act.
- (iii) It is desirable that purchase of energy from renewable sources of energy takes place more or less in the same proportion in different States. To achieve this objective in the current scenario of large availability of such resources only in certain parts of the country, an appropriate mechanism such as Renewable Energy Certificate (REC) would need to be promoted. Through such a mechanism, the renewable energy based generation companies can sell the electricity to local distribution licensee at the rates for conventional power and can recover the balance cost by selling certificates to other distribution companies and obligated entities enabling the latter to meet their renewable power purchase obligations. The REC mechanism should also have a solar specific REC.
- (iv) Appropriate Commission may also provide for a suitable regulatory framework for

encouraging such other emerging renewable energy technologies by prescribing separate technology based REC multiplier (i.e. granting higher or lower number of RECs to such emerging technologies for the same level of generation). Similarly, considering the change in prices of renewable energy technologies with passage of time, the Appropriate Commission may prescribe vintage based REC multiplier (i.e. granting higher or lower number of RECs for the same level of generation based on year of commissioning of plant).

(2) States shall endeavor to procure power from renewable energy sources through competitive bidding to keep the tariff low, except from the waste to energy plants. Procurement of power by Distribution Licensee from renewable energy sources from projects above the notified capacity, shall be done through competitive bidding process, from the date to be notified by the Central Government.

However, till such notification, any such procurement of power from renewable energy sources projects, may be done under Section 62 of the Electricity Act, 2003. While determining the tariff from such sources, the Appropriate Commission shall take into account the solar radiation and wind intensity which may differ from area to area to ensure that the benefits are passed on to the consumers.

(3) The Central Commission should lay down guidelines for pricing intermittent power, especially from renewable energy sources, where such procurement is not through competitive bidding. The tariff stipulated by CERC shall act as a ceiling for that category.

......

(7) Appropriate Commission may provide regulatory framework to facilitate generation and sale of electricity from renewable energy sources particularly from roof-top solar system by any entity including local authority, Panchayat Institution, user institution, cooperative society, Non-Governmental Organization, franchisee or by Renewable Energy Service Company. The Appropriate Government may also provide complementary policy support for this purpose.

Explanation: "Renewable Energy Service Company" means an energy service company which provides renewable energy to the consumers in the form of electricity."

In view of above, the Commission notified the JERC (Procurement of Renewable Energy), (Third Amendment) Regulations, 2016 on 22nd August, 2016 and approved the revised RPO targets as follows:

Financial Year

Minimum Quantum of Renewable Purchase Obligations (RPOs) (in KWh) (% of total energy mix of consumption, excluding Hydro Power)

Total RPOs (%)

Solar RPOs (%)

2010-11

1.00

0.25

2011-12

2.00

0.30

2012-13

3.00

0.40

Table 6.13: Revised RPO Trajectory (in %) as per revised regulation

| Financial Year | Minimum Quantum of Renewable Purchase Obligations (RPOs) (in KWh) (% of total energy mix of consumption, excluding Hydro Power) | | | |
|----------------|---|----------------|--|--|
| | Total RPOs (%) | Solar RPOs (%) | | |
| 2013-14 | 3.00 | 0.40 | | |
| 2014-15 | 3.30 | 0.60 | | |
| 2015-16 | 3.55 | 0.85 | | |
| 2016-17 | 4.85 | 1.65 | | |
| 2017-18 | 6.70 | 2.50 | | |
| 2018-19 | 9.00 | 3.60 | | |
| 2019-20 | 11.50 | 4.70 | | |
| 2020-21 | 14.10 | 6.10 | | |
| 2021-22 | 17.00 | 8.00 | | |

As per the third amendment issued, the Petitioner has to purchase 6.70% of the total energy purchase from renewable sources for the FY 2017-18 which includes 2.50% for Solar and 4.20% for Non-Solar

The Commission has considered the Petitioner's submission in respect to physical power purchase from solar plants i.e. 18.22 MUs for the FY 2017-18. Keeping in view the RPOs of the Petitioner the Commission approves the balance of RPOs to be met by purchase of RECs (as given in the following Table). CERC, in its order dated 30th March 2017 in Petition no. 02/SM/2017, has prescribed the floor price of Rs 1000 per MWh for both solar as well as non-solar certificates applicable from 01st April 2017 onwards.

The cost of RECs as well as the physical renewable power has already been factored in the Power Procurement Cost.

The Commission has considered the stand-alone RPO requirements for the FY 2017-18 as per the third amendment. RPO (both solar and non-solar) for the FY 2017-18 is calculated in the Table below:

Table 6.14: Computation of RPO for the FY 2017-18

| S. No | Particulars | Value |
|-------|---|---------|
| 1 | Solar RPOs % of the Electricity Sales | 2.50% |
| 2 | Energy Sales MU | 1715.93 |
| 3 | Solar RPOs Quantum (MU): (2*1) | 42.90 |
| 4 | Solar Power planned to be procured from NET Metering Mode (In MW) | 8.00 |
| 5 | Solar Power planned to be procured from NET Metering Mode (In MU) | 11.21 |
| 6 | Cost of Solar Power from Net Metering Mode (Rs. crore) @ avg rate Rs. 3.5/kWh = 5*(Rs 3.5/kWh)/10 | 3.92 |
| 7 | Solar Power planned to procure from Gross Metering Mode (In MW) | 5.00 |
| 8 | Solar Power planned to procure from Gross Metering Mode (In MU) | 7.01 |
| 9 | Cost of Solar Power from Gross Metering Mode (Rs. crore) = 8*(Rs 5/kWh)/10 (Rs. Crore) | 3.51 |
| 10 | Solar RPO to be met through RECs (3-5-8) | 24.68 |
| 11 | Solar Certificates to be bought (nos.) | 24,678 |

| S. No | Particulars | Value |
|-------|---|--------|
| 12 | Price of Solar Certificates (Rs/certificate) | 1000 |
| 13 | Cost of Solar REC (Rs crore) =11 *12/(10^7) | 2.47 |
| 14 | Non-Solar RPOs % of the Electricity Sales | 4.20% |
| 15 | Non-Solar RPO Quantum (MUs)=2*14 | 72.07 |
| 16 | Non- Solar Certificates to be bought (nos.) | 72,069 |
| 17 | Price of Non- Solar Certificates (Rs/certificate) | 1000 |
| 18 | Cost of Non-Solar RECs (Rs crore) 16 *17/(10^7) | 7.21 |

The Commission hence approves Rs 2.47 crore for the purchase of 24,678 solar certificates and Rs. 7.21 crore for the purchase of 72,067 non-solar certificate for meeting RPOs for FY 2017-18. Additionally the Commission approves Rs 7.42 crore (Rs 3.92 crore from net-metering and Rs 3.51 crore from gross metering mode) for purchase of physical Solar Power to meet its Solar RPO for FY 2017-18.

6.8. Operation & Maintenance (0&M) Expenses

The O&M Expenses consists of the following expenses:

- Employee expenses & gratuity, leave encashment and staff welfare
- Administrative and General (A&G) expenses mainly comprising of the rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances and other expenses.
- Repairs and Maintenance Expenses (R&M) for day to day upkeep of the distribution network of the Company.

(i) Employee Expenses

Petitioner's submission:

For determination of employee expense for the MYT Control Period, the Commission has approved the norms based on number of personnel per 1000 consumers and number of personnel per substation based on the actual employee data for the period FY 2012-13 to FY 2014-15 which has resulted in stringent norms as CED is highly understaffed while the consumer base is increasing. Further, retirement of employees each year and inadequate manpower to fill the vacant positions have led to further deterioration in this ratio. The Petitioner pointed out that a direction in this regard was given by the Commission for undertaking manpower study. The Commission had approved recruitment of manpower by CED vide its Order dated 29th December 2014 based on the report submitted by the Petitioner. The Petitioner pointed out that the Commission has directed CED to carry out recruitment as per approved the manpower study in the MYT Order dated 28th April 2016. The addition of manpower shall result in higher employee cost as compared to the approved employee cost once the recruitments are undertaken by CED during the FY 2017-18. The Petitioner therefore requests the Commission to

consider the impact of employee's addition during the Control Period at the time of Trueup, revise the norms keeping in view the higher employee strength as a result of recruitment, not to consider any loss on account of the increased employee cost due to addition of employees and approve the employee cost based on the actuals at the time of the True-up.

The Petitioner also requested for approval of the cost of concessional power of Rs 0.58 crore as a part of the employee cost for the FY 2017-18 and has accordingly submitted employee expenses of Rs 70.25 crore for the FY 2017-18.

Commission's analysis:

As per the Clause 21 (b) of the MYT Regulations, 2014, the norm for employee expenses shall be defined in terms of a combination of number of personnel per 1000 consumers and the number of personnel per sub-station along with the annual expenses per personnel. The Commission in its Business Plan Order dated 28th December 2015 has determined the norm of 5.19 employees per '000 consumers and 0.58 Personnel/sub-station for the MYT Control Period. The norm for the base cost per employee was fixed at Rs 4,97,998 at the end of FY 2013-14. The base per employee cost has been escalated by moving average WPI of previous 3 FYs as per the Table below:

| Financial Year | WPI | % age increase | Avg 3 Years increase |
|----------------|--------|----------------|----------------------|
| FY 2010-11 | 143.32 | - | - |
| FY 2011-12 | 156.13 | 8.94% | - |
| FY 2012-13 | 167.62 | 7.36% | - |
| FY 2013-14 | 177.64 | 5.98% | - |
| FY 2014-15 | 181.19 | 2.00% | 7.43% |
| FY 2015-16 | 176.67 | -2.49% | 5.11% |
| FY 2016-17 | - | - | 1.83% |
| FY 2017-18 | - | - | 1.83% |

Table 6.15: Calculation of WPI for projection of Per Employee Cost Norms

The Commission has considered the number of sub-stations as approved in the MYT Order dated 28th April, 2016 for the FY 2017-18 for determining the number of employees for the FY 2017-18. Further, the Commission has not allowed free electricity to employees in the previous Order which specifies as follows:

Quote

"Further, the Commission is of the view that as per the provisions of Electricity Act 2003 and regulations framed hereunder, the utility has to charge the tariff approved by the Commission. Further, as per section 65, (Provision of subsidy by State Government):

If the State Government requires the grant of any subsidy to any consumer or class of consumers in the tariff determined by the State Commission under section 62, the State

Government shall, notwithstanding any direction which may be given under section 108, pay, in advance and in such manner as may be specified, the amount to compensate the person affected by the grant of subsidy in the manner the State Commission may direct, as a condition for the license or any other person concerned to implement the subsidy provided for by the State Government.

Accordingly, the amount applicable for provision of free electricity to the employees as per Govt. Circular needs to be provided by the Government only and the same cannot be recovered from tariff."

Unquote

Considering the reasons furnished in the previous order, the Commission finds it appropriate to continue with its existing approach and accordingly, approves the employee expenses for the FY 2017-18 as shown in the Table below:

Table 6.16: Employee Expense as approved by the Commission for the FY 2017-18 (Rs crore)

| Sr. No | Particulars | FY 2013-14 As approved in the Business Plan | FY 2014-15 Escalating Col c @ 7.43% | FY 2015- 16 Col d @ 5.11% | FY 2016- 17 Col e @ 1.83% | FY 2017- 18 Col f @ 1.83% |
|-----------|--------------------------------------|---|--|---------------------------------------|------------------------------------|------------------------------------|
| a | b | С | d | e | f | g |
| 1 | Employee Expenses Per Employee (Rs) | 4,97,998 | 5,34,975 | 5,62,321 | 5,72,596 | 5,83,059 |
| 2 | No of Employee Per '000 Consumers | | | | 5.19 | 5.19 |
| 3 | No. of Employees Per Sub-station | | | | 0.58 | 0.58 |
| 4 | No. of Sub-stations (50% weightage) | | | | 1,907 | 1,907.00 |
| 5 | No of Consumers '000 | | | | 222 | 229 |
| 6 | No of Employee (50% weightage) | | | | 1,129 | 1,146.00 |
| 7 | Employee Expenses | | | | 64.65 | 66.82 |

The Commission approves the employee cost of Rs. 66.82 crore for the FY 2017-18. The treatment of the employee expenses during the True-up would be in accordance with the Provisions of Regulation 9.2, 10 and 11 of the JERC MYT Regulations, 2014.

(ii) Administrative and General Expenses (A&G)

Petitioner's submission:

A&G Expenses of Rs 6.61 crore as approved in the previous Order has been considered for the Review of the ARR of the FY 2017-18.

Commission's analysis:

As per Clause 21 (b) of the MYT Regulations 2014, the norm for A&G Expenses shall be defined in terms of a combination of the A&G expenses per personnel and the A&G expenses per 1000 consumers. The Commission reiterates that as per the Regulation's provisions for one-time expenses are provided and same shall be allowed on 'as and when basis' after due prudence check by the Commission. Based on average of A&G expenses per employee, a base of A&G expense per employee of Rs. 46,024 has been considered at end of the FY 2013-14 to be reasonable for the MYT Control Period. Similarly, based on average, a base for A&G expense per '000 consumers has been considered as Rs. 2,42,883 at end of the FY 2013-14 to be reasonable for the MYT Control Period. The Commission has considered the weightage of these two factors in overall A&G computation as 50:50. For purpose of Review of the FY 2016-17, the norms for A&G Expense per employee and per '000 consumers at end of the FY 2013-14 has been suitably escalated by the average Wholesale Price Index (WPI) as calculated for calculation of Employee Expense. The figure thus arrived has further been escalated by the Wholesale Price Index (WPI) for immediately preceding three years which comes as 1.83%, as per Regulation 21.3 of the MYT Regulations, 2014 to arrive at the A&G Expense for the FY 2017-18.

The A&G expenses as per norms approved in the Business Plan Order is shown in the Table below:

Table 6.17: A&G Expense as approved by the Commission for the Review of FY 2016-17 (Rs crore)

| Sr. No | Particulars | FY 2013-14 As approved in the Business Plan | FY 2014- 15 Escalating Col c @ 7.43% | FY 2015- 16 Col d @ 5.11% | FY 2016- 17 Col e @ 1.83% | FY 2017- 18 Col f @ 1.83% |
|-----------|---|--|--|------------------------------------|------------------------------------|------------------------------------|
| a | b | С | d | e | f | g |
| 1 | Average A&G Expenses Per Employee (Rs) | 46,024 | 49,441 | 51,969 | 52,918 | 53,885 |
| 2 | Average A&G Expenses Per '000 Consumers | 2,42,883 | 2,60,917 | 2,74,255 | 2,79,266 | 2,84,369 |
| 3 | No of Employees | | | | 1,129.00 | 1,146 |
| 4 | No of Consumers '000 | | | | 222 | 229 |
| 5 | A&G Expenses Per Employee - 50% | | | | 2.99 | 3.09 |
| 6 | A&G Expenses Per '000 Consumers - 50% weightage | | | | 3.10 | 3.25 |
| 7 | A&G Expenses (5+6) | | | | 6.09 | 6.34 |

The Commission approves the A&G expense of Rs. 6.34 crore for the FY 2017-18. The treatment of the A&G expenses during the True-up would be in accordance with the Provisions of Regulations 9.2, 10 and 11 of the JERC MYT Regulations, 2014.

(iii) Repair and Maintenance Expenses (R&M)

Petitioner's submission:

The Commission has considered the GFA as per the Fixed Asset Register and has not approved the entire GFA as recorded in the annual accounts during the past years. However, the Commission has considered K Factor as 2.6% for the MYT Control Period as approved in the Business Plan (based on the total assets of CED) which has resulted in low R&M expenses approved for the MYT Control Period. Further, R&M expenses approved for the FY 2013-14, FY 2014-15 and FY 2015-16 are Rs 10.79 crore, Rs 13.60 crore and Rs 13.87 crore, respectively against Rs 6.70 crore, Rs 8.64 crore and Rs 10.51 crore respectively approved by the Commission for the MYT Control Period and are considerably lower than the previous years. On the basis of the GFA approved, the value of K factor has been computed as per the below Table:

Particulars FY 2013-14 FY 2014-15 FY 2015-16 FY 2016-17 Opening GFA approved 170.21 174.09 176.17 213.71 **R&M** Approved 9.23 8.21 10.79 13.60 R&M as % of GFA 4.7% 5.4% 6.1% 6.4% Average of last 3 years 5.73%

Table 6.18: Estimation of K-Factor as submitted by the Petitioner

Based on K factor thus calculated, the Petitioner has arrived at R&M Expense of Rs 19.21 crore for the FY 2017-18 considering inflation of 7.33% as considered by the Commission.

Commission's analysis:

As per the Regulation 21 (b) and 21.2 of the MYT Regulations, 2014, the norm for R&M Expenses shall be defined in terms of percentage of opening gross fixed assets for estimation of R&M expenses. The Commission has analyzed the figures of the R&M expenses and the opening GFA based on the trued-up values. The "K-factor" of 2.60% was considered by the Commission during approval of the Business Plan Order dated 28th December 2015, which was approved on the basis of the GFA submitted by the Petitioner. As per present Order the Commission has considered GFA as submitted in the balance sheet for the FY 2014-15 (opening of FY 2015-16). Hence the Commission has retained value of K-Factor as approved in the Business Plan. The Commission has also considered capitalization in the FY 2015-16 as approved for True-up for the FY 2015-16. Inflation Index (CPI and WPI) has been considered with weightage of 60:40. The average of the CPI Index of last 3 years arrives at 7.21% and the average of the WPI of the last 3 years comes to be 1.83%.

The R&M expenses as per norms as approved in the Business Plan Order is shown below:

Table 6.19: R&M Expense as approved by the Commission for the FY 2017-18 (Rs crore)

| Sr. No | Particulars | FY 2017-18 |
|--------|--|------------|
| 1 | Opening GFA | 451.99 |
| 2 | K Factor Approved by the Commission (Base of FY 2015-16) | 2.60% |
| 3 | Inflation index (60:40=CPI:WPI) (60%*7.21%+40%*1.83%) | 5.05% |
| 4 | R&M Expenses (1 *2 * (1+3^2) | 12.97 |

The Commission thus approves an R&M expense of Rs. 12.97 crore for the FY 2017-18. The treatment of the R&M expenses during the true-up would be in accordance with the provisions of Regulations 9.2, 10 and 11 of JERC MYT Regulations, 2014.

Summary of O&M Expenses approved for the FY 2017-18

The O&M expenses as submitted and approved for the FY 2017-18 are as shown below:

Table 6.20: 0&M Expenses approved by the Commission for True-up of FY 2017-18 (Rs crore)

| S.No | Particulars | Approved in Tariff Order dated 28 th April 2016 | Petitioner's submission (ARR) | Approved by the Commission (ARR) |
|------|--------------------|--|-------------------------------------|--|
| 1 | Employee Expenses | 69.67 | 70.25 | 66.82 |
| 2 | A&G Expenses | 6.61 | 6.61 | 6.34 |
| 3 | R&M Expenses | 8.64 | 19.21 | 12.97 |
| | Total O&M Expenses | 84.92 | 96.07 | 86.13 |

6.9. Gross Fixed Assets (GFA), Capitalisation and Depreciation

Petitioner's submission:

In the absence of the Fixed Assets Register (FAR) for assets prior to 2005, the GFA approved by the Commission in the previous Order dated 28th April 2016 is considered. Therefore, the opening assets approved by the Commission for the FY 2015-16 has been considered as such and for the FY 2015-16, actual addition of Rs. 12.29 crore has been considered for arriving at the opening assets of FY 2016-17. The Petitioner has retained the capital expenditure and capitalization approved as per the MYT Order for the FY 2016-17 and FY 2017-18.

Commission's analysis:

As detailed in the previous chapter, the Commission has now decided to consider the assets and depreciation as per the audited accounts. Accordingly, the Commission has taken the closing GFA as approved for the FY 2016-17 as opening GFA for the FY 2017-18. The Commission has analyzed the scheme-wise capex as submitted by the Petitioner and has found the same in line with the capex approved by the Commission in its Business Plan Order dated 28th December 2015. Hence the Commission has considered capitalization as approved by it in the Business Plan Order for the FY 2017-18. Since a

large amount of assets have already been fully depreciated, the actual depreciation rate as calculated for the FY 2015-16 has been used for the FY 2017-18 also. Addition in assets for the FY 2017-18 has been fully considered in Plant & Machinery and the same would be trued up based on the audited accounts for the respective years.

Table 6.21: GFA and Depreciation approved by the Commission for the FY 2017-18 (Rs crore)

| S No | Particulars (Rs Cr) | Approved in Tariff Order dated 28 th April 2016 | Petitioner's submission (ARR) | Approved by the Commission (ARR) |
|---------|----------------------------|--|-------------------------------------|--|
| 1 | Opening Gross Fixed Assets | 288.39 | 290.72 | 451.99 |
| 2 | Addition during the year | 38.52 | 38.52 | 38.52 |
| 3 | Closing Gross Fixed Assets | 326.91 | 329.24 | 490.51 |
| 4 | Average Gross Fixed Assets | 307.65 | 309.98 | 471.25 |
| 5 | Rate of Depreciation (%) | 5.42% | 5.42% | 3.68% |
| 6 | Depreciation for the year | 16.69 | 16.80 | 17.36 |

Therefore, the Commission approves the depreciation of Rs 17.36 crore for the FY 2017-18.

6.10. Interest and Finance Charges

Petitioner's submission:

The opening normative loan as approved by the Commission for the FY 2015-16 has been considered and the normative loan with respect to the actual assets capitalized and repayment of 10% of the opening assets for the FY 2015-16 was considered to arrive at the opening normative loan for the FY 2016-17. The Petitioner has considered approved GFA addition for the FY 2016-17 and FY 2017-18 as per the MYT Order with 70% of the same considered towards normative debt. Repayment of the normative loan during the FY 2016-17 and FY 2017-18 has been considered equivalent to the depreciation in line with the MYT Regulations 2014. The rate of interest has been considered as SBI PLR (Read SBAR) as on 1st April, 2016 at 14.05%.

Commission's analysis:

As per Regulation 24 of MYT Regulations 2014, if the equity actually deployed is more than 30% of capital cost, then equity in excess of 30% would be considered as normative loan. Actual loan or normative loan, if any, shall be referred as gross normative loan. Since the entire funding of CED is through equity, the Commission has considered 70% of capital cost as normative loan. The normative loan outstanding as on 1st April of the FY 2017-18 has been computed by deducting the cumulative repayment as approved by the Commission till the FY 2016-17. Further, the Commission has considered the actual capitalization of assets amounting to Rs 38.52 crore as approved in the foregoing paragraphs. The Commission for the purpose of funding of the capitalization has considered the normative debt equity ratio of 70:30 since new capitalization is through

100% equity support by GoI. Repayment in the FY 2017-18 has been considered to be equal to depreciation allowed during the year. Further, the Commission has considered the interest rate (SBI PLR) as for the FY 2017-18 at 14.00%.

Accordingly, the calculation for the interest on the normative loan is given in the following Table:

Table 6.22: Normative interest on loan approved by the Commission for the FY 2017-18 (Rs crore)

| S. No. | Particulars | Approved in the Tariff Order Dated 28 th April 2016 | Petitioner's submission (ARR) | Approved by the Commission (ARR) |
|-----------|-------------------------------------|--|-------------------------------|--|
| 1 | Opening normative loan | 60.84 | 62.34 | 49.83 |
| 2 | Add: Normative loan during the year | 26.96 | 26.96 | 26.96 |
| 3 | Less: Normative repayment | 16.69 | 16.80 | 17.36 |
| 4 | Closing normative loan (1+2-3) | 71.12 | 72.50 | 59.44 |
| 5 | Average normative loan (1+4) * 0.5 | 65.98 | 67.42 | 54.63 |
| 6 | Rate of interest (SBAR) | 14.05% | 14.05% | 14.00% |
| 7 | Interest on normative loan | 9.27 | 9.47 | 7.65 |

Therefore, the Commission approves interest and finance charges of Rs 7.65 crores for the FY 2017-18.

6.11. Interest on Consumer Security Deposit

Petitioner's submission:

The Petitioner is obligated to pay interest on consumer security deposit and is entitled to claim the same through tariff and has accordingly provisioned for the same. The opening consumer security deposit has been considered based on the actual closing for the FY 2015-16 and an addition of Rs. 5 crore has been projected during the FY 2016-17 and FY 2017-18. The Petitioner requested for Rs 11.17 crore as interest on consumer security deposit in the FY 2017-18 to be allowed.

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 has considered the closing Consumer Security Deposit for the FY 2015-16 as submitted by the Petitioner. Addition in Consumer Security Deposit of Rs. 5 Crores as submitted by the Petitioner during the FY 2016-17 and FY 2017-18 is considered to be reasonable and the same would be revisited from the audited accounts for the FY 2017-18 at the time of True up of the FY 2017-18.

The Commission has considered the RBI bank Rate for calculation of Interest rate as on 01st April 2017 i.e. 6.75% and the detailed calculation is shown in the Table below:

Table 6.23: Interest on Consumer Security Deposit approved by the Commission for the FY 2017-18 (Rs crore)

| S. No | Particulars | Approved in the Tariff Order Dated 28 th April 2016 | Petitioner's submission (ARR) | Approved by the Commission (ARR) |
|----------|--|--|-------------------------------|--|
| 1 | Opening Consumer Security Deposit | 143.84 | 141.67 | 141.67 |
| 2 | Net Addition During the year | 5.00 | 5.00 | 5.00 |
| 3 | Closing Consumer Security Deposit (1+2) | 148.84 | 146.67 | 146.67 |
| 4 | Average Deposit (1+3)*50% | 146.34 | 144.17 | 144.17 |
| 5 | RBI Bank Rate | 7.75% | 7.75% | 6.75% |
| 6 | Interest on Consumer Security Deposit | 11.34 | 11.17 | 9.73 |

The Commission approves the Interest on Consumer Security Deposit at Rs. 9.73 crore for the FY 2016-17.

6.12. Interest on Working Capital

Petitioner's submission:

Interest on Working Capital has been claimed in accordance with Regulation no. 25 of the JERC MYT Regulations, 2014. Further, the closing balance of the Consumer Security Deposit has been deducted from the total normative Working Capital requirement for computing the Working Capital requirement as per the methodology followed by the Commission in its previous Tariff Order, SBI Advance rate as on 1st April 2016 has been considered for computation of interest on the Working Capital.

Commission's analysis:

As per Regulation 25 of MYT Regulations, 2014 the Working Capital is:

- Receivables of two months of billing
- Less Power Purchase Cost of one month
- Less consumer security deposit in cash (excluding Bank Guarantee/Fixed Deposit)
- Inventory for two months based on annual requirement for the previous year

The Interest rate on Working Capital has been considered as 9.25% (SBI base Rate as on 01.01.2017) applicable as on 01st April 2017 i.e. start of the relevant year.

Inventory Based on Annual Requirement for previous year has been taken as per the audited accounts of the FY 2015-16 (Rs 1.86 crore). The actual Working Capital requirement after deduction of the amount of Consumer Security Deposit is coming to be negative. Thus, the Interest on Working Capital has been considered as Nil. The

calculation for the interest on the Working Capital is given in the following Table:

Table 6.24: Interest on Working Capital approved by the Commission for the FY 2017-18 (Rs crore)

| S. No | Particulars (Rs Cr) | Approved in the Tariff Order Dated 28 th April 2016 | Petitioner's submission (ARR) | Approved by the Commission (ARR) |
|-------|--|--|-------------------------------|--|
| 1 | Receivables of 2 Months Billing | 145.24 | 145.22 | 124.58 |
| 2 | Power Purchase Cost 1 Month | 63.35 | 60.99 | 52.35 |
| 3 | Consumer Security Deposit Excl. BG/FDR | 148.84 | 146.67 | 146.67 |
| 4 | Inventory Based on Annual Requirement for Previous FY | 0.34 | 0.34 | 1.86 |
| 5 | Total Working Capital after deduction of Consumer Security Deposit | - | - | - |
| 6 | SBI Base Rate (%) | 9.30% | 9.30% | 9.25% |
| 7 | Interest on Working Capital | - | | - |

Therefore, the Commission approves 'Nil' Interest on Working Capital for the FY 2017-18.

6.13. Return on Equity

Petitioner's submission:

The opening equity for the FY 2017-18 has been considered based on the closing equity amount of Rs 87.22 Crores for the FY 2016-17. Rate of Return on Equity is considered 16% post tax as per Proviso 27 of the MYT Regulations, 2014. The Petitioner has requested for Rs 14.88 crore as return on equity for the FY 2017-18.

Commission's analysis:

As per Regulation 27 of MYT Regulations, 2014, a 16% post-tax Return on Equity shall be computed on 30% of the capital base or the actual equity whichever is lower based on approved capitalization. Return on equity shall be considered irrespective of whether the distribution licensee has claimed return on equity in the ARR Petition. The Petitioner being a government department is not required to pay any income tax. The Commission has considered the closing equity base of the FY 2016-17 as the opening equity for the FY 2017-18. Further, the Commission has also considered equity addition in the FY 2017-18 equal to 30% of asset capitalization approved in the Business Plan Order. The same would also be subject to True-up on the basis of the audited accounts of the FY 2017-18.

The calculation for the Return on Equity is given in the Table below:

Table 6.25: Return on Equity approved by the Commission for the FY 2017-18 (Rs crore)

| Sr. No. | Particulars | Approved in the Tariff Order Dated 28 th April 2016 | Petitioner's submission (ARR) | Approved by the Commission (ARR) |
|------------|---------------------------------|--|-------------------------------|--|
| 1 | Opening equity | 86.52 | 87.22 | 135.60 |
| 2 | Addition in Equity | 11.56 | 11.56 | 11.56 |
| 3 | Closing Equity | 98.07 | 98.77 | 147.15 |
| 4 | Average Equity Amount (1+3)*0.5 | 92.29 | 92.99 | 141.37 |
| 5 | Return @ 16% on Equity | 14.77 | 14.88 | 22.62 |

Therefore, the Commission approves Return on Equity of Rs 22.62 crore for the FY 2017-18.

6.14. Provision for Bad and Doubtful Debts

Petitioner's submission:

Provision of Rs 8.71 crore as bad debt (1% of the estimated receivables) has been made by the Petitioner for the FY 2017-18.

Commission's analysis:

As per Regulation 32 of MYT Regulations, 2014

"Bad and Doubtful Debts shall be limited to 1% of receivables in the true up, subject to the condition that amount of bad and doubtful debts have actually been written off in the licensee books of accounts."

MYT Regulations, 2014 allows bad and doubtful debts up to 1% of receivables in the revenue requirement on the basis of audited accounts only. As amount indicated by the Petitioner for the FY 2017-18 is not actual and are based on projections only, no amount is considered for bad and doubtful debts for the FY 2017-18.

6.15. Non-Tariff Income

Petitioner's submission:

Non-Tariff Income of Rs 17.63 crore has been claimed for the FY 2017-18.

Commission's analysis:

The Commission has considered an escalation of actual non-tariff income for the FY 2015-16 annually by 5% to arrive at the Non-Tariff Income for the FY 2017-18. **The Commission approves the Non-Tariff Income of Rs. 24.17 crore for the FY 2017-18, subject to True-up on the basis of audited accounts for the FY 2017-18**.

6.16. Revenue at approved Retail Tariff of FY 2017-18

Petitioner's submission:

The revenue from retail tariff is projected as Rs 833.49 crore for the FY 2017-18.

Commission's analysis:

The Commission based on the approved Retail Tariff for the FY 2016-17, the approved energy sales, the number of consumers and the connected load approved for the FY 2017-18 as discussed in the foregoing paragraphs of the chapter has calculated the revenue for the FY 2017-18 as shown in the Table below:

Table 6.26 Revenue from Sale of Power approved by the Commission for the FY 2017-18(Rs crore)

| | | Existing T | ariff | FY 2 | 2017-18 |
|-----------|--------------------------------|--|------------------------------|----------------------------|----------------------------|
| Sr. No | Category/ Slab of Consumers | Demand Charges (Rs./KW/ Per Month) | Energy Charge (Rs/kWh) | Petitioner's Submission | Approved by the Commission |
| A | Domestic | | | 292.14 | 317.76 |
| 1 | 0-150 units | 10.00 | 2.55 | 82.57 | 89.81 |
| 2 | 151-400units | 10.00 | 4.80 | 118.97 | 129.43 |
| 3 | 401 and above | 10.00 | 5.00 | 90.60 | 98.53 |
| В | Commercial | | | 306.61 | 323.85 |
| 1 | 0-150 kWh | 20.00 | 5.00 | 113.78 | 121.32 |
| 2 | 151-400 kWh | 100.00 | 5.20 | 113.48 | 120.80 |
| 3 | Above 400 kWh | 100.00 | 5.45 | 79.36 | 81.73 |
| С | Industrial | | | 169.29 | 168.55 |
| 1 | Large Supply | 100.00 | 5.65 | 88.73 | 79.66 |
| 2 | Medium Supply | 100.00 | 5.35 | 70.01 | 77.71 |
| 3 | Small Power Supply | 20.00 | 5.30 | 10.55 | 11.19 |
| D | Agriculture | - | 2.90 | 0.45 | 0.43 |
| E | Public Lighting | 100.00 | 5.35 | 13.03 | 12.83 |
| F | Bulk Power | 100.00 | 5.55 | 46.69 | 53.03 |
| G | Other Temporary Supply | | 8.10 | 5.28 | 4.54 |
| Н | FPPCA | | | - | - |
| I | Total | | | 833.49 | 881.00 |

Therefore, the Commission considers Revenue from Approved Retail Tariff of Rs 881.00 crore for the FY 2017-18.

6.17. ARR, Revenue Deficit/(Surplus) for the FY 2017-18

Petitioner's submission:

Net revenue requirement is computed at Rs. 871.35 crore for the FY 2017-18. Further, the Petitioner has estimated a standalone revenue surplus of Rs. 37.85 crore for the FY 2017-18 on the basis of Tariff proposal submitted for approval.

Commission's analysis:

The Commission has considered and approved the Aggregate Revenue Requirement (ARR) for the FY 2017-18 based on the items of expenditure discussed in the preceding paragraphs and the same has been summarized in the Table below vis-à-vis the Petitioner's submission as follows:

Table 6.27 Net ARR approved by the Commission for the FY 2017-18 (Rs crore)

| S. No. | Particulars | Approved in the Tariff Order Dated 28 th April 2016 | Petitioner's submission (ARR) | Approved by the Commission (ARR) |
|-----------|---------------------------------------|--|-------------------------------|--|
| 1 | Cost of power purchase for full year | 760.16 | 731.87 | 628.19 |
| 2 | Employee costs | 69.67 | 70.25 | 66.82 |
| 3 | Administration and General Expenses | 6.61 | 6.61 | 6.34 |
| 4 | Repair and Maintenance Expenses | 8.64 | 19.21 | 12.97 |
| 5 | Depreciation | 16.69 | 16.80 | 17.36 |
| 6 | Interest and Finance charges | 9.27 | 9.47 | 7.65 |
| 7 | Interest on Working Capital | - | - | - |
| 8 | Interest on Consumer Security Deposit | 11.34 | 11.17 | 9.73 |
| 9 | Return on Equity | 14.77 | 14.88 | 22.62 |
| 10 | Provision for Bad Debt | - | 8.71 | - |
| 11 | Total Revenue Requirement | 897.14 | 888.98 | 771.68 |
| 12 | Less: Non-Tariff Income | 25.71 | 17.63 | 24.17 |
| 13 | Net Revenue Requirement | 871.43 | 871.35 | 747.51 |

Table 6.28: Revenue Gap/(Surplus) approved by the Commission for the FY 2017-18 (Rs crore)

| S. No. | Particulars | Approved in the Tariff Order Dated 28th April 2016 | Petitioner's submission (ARR) | Approved by the Commission (ARR) |
|-----------|--|--|-------------------------------------|--|
| 1 | Net Revenue Requirement | 871.43 | 871.35 | 747.51 |
| 2 | Revenue from Retail Sales at Existing Tariff | 735.02 | 833.49 | 881.00 |
| 3 | Net Gap / (Surplus) | 136.41 | 37.86 | (133.49) |
| 4 | Gap/(Surplus) for the previous year | | | 122.05 |
| 5 | Carrying Cost @ 9.30% | | | 11.35 |
| 6 | Total Gap/ (Surplus) | 124.91 | (59.74) | (80.0) |

Therefore, the Commission approves the estimated standalone revenue surplus of Rs. 133.49 crore for the FY 2017-18. Further, taking into consideration the revenue gap of the previous period and its carrying cost, the Commission approves a cumulative revenue surplus of Rs 0.08 crore.

Chapter 7. Open Access Charges for FY 2017-18

7.1. Allocation Matrix - Allocation of ARR into Wheeling and Retail Supply of Electricity

Petitioner's submission:

The Petitioner has not submitted details of allocation between wheeling and retail business for the FY 2017-18 as the same has not been segregated by the Petitioner so far.

Commission's analysis:

It is 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 has a firm view that there has to be a proper bifurcation of all the expenses pertaining to the Petitioner between the functions of the wheeling business (wire business) and the retail supply business. In the absence of submission of any specific allocation matrix by the Petitioner, the Commission finds it prudent to consider the allocation matrix for bifurcation of wheeling and retail ARR as considered in the previous Tariff Order. The allocation between wheeling and retail supply business for the FY 2017-18 as per the approved ARR in this Order is provided in the Table below:

Table 7.1: Allocation of ARR between Wheeling and Retail Supply as approved by the Commission (Rs crore)

| Particulars | Wire Business (%) | Retail Supply Business (%) | Wire Business Cost (Rs. crore) | Retail Supply Cost (Rs. crore) | Total Amount (Rs. crore) |
|--|-------------------------|----------------------------------|---|--------------------------------------|--------------------------------|
| Cost of Power Purchase | 0% | 100% | 0.00 | 628.19 | 628.19 |
| Employee Cost | 70% | 30% | 46.77 | 20.05 | 66.82 |
| A&G expenses | 90% | 10% | 5.71 | 0.63 | 6.34 |
| R&M Expenses | 50% | 50% | 6.48 | 6.48 | 12.97 |
| Depreciation | 90% | 10% | 15.62 | 1.74 | 17.36 |
| Interest & Fin Charges | 90% | 10% | 6.88 | 0.76 | 7.65 |
| Interest on Working Capital | 22% | 78% | 0.00 | 0.00 | 0.00 |
| Interest on Consumer Security Deposit | 22% | 78% | 2.14 | 7.59 | 9.73 |
| Return on Equity | 90% | 10% | 20.36 | 2.26 | 22.62 |
| Provision for Bad Debt | 0% | 100% | 0.00 | 0.00 | 0.00 |
| Sub-Total | | | 103.97 | 667.71 | 771.68 |
| Less: Non-Tariff Income | 0% | 100% | 0.00 | 24.17 | 24.17 |
| Less: Revenue from surplus sale of power | 0% | 100% | 0.00 | 0.00 | 0.00 |
| Net Revenue Requirement | | | 103.97 | 643.54 | 747.51 |
| Energy Sales (MU) | | | | | 1715.93 |
| Average Cost of Supply (Rs/kWh) | | | | | 4.36 |

The Commission, in line with the Petitioner's submission and the fact that the expenses of the licensee are consolidated has considered "Nil" transmission charges for the open access consumers in the State.

7.2. Voltage Wise Wheeling Charges

Petitioner's submission:

The Petitioner has not submitted any computation towards calculation of wheeling charges.

Commission's analysis:

The Commission, in order to facilitate open access has approved the Open Access Charges for the FY 2017-18. The Commission opines that despite the absence of the details of bifurcation of assets and expenses, 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 has to account for losses and sales at each voltage level. 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 Commission has considered the voltage wise losses for the FY 2017-18 as per the methodology adopted in the Tariff Order dated 10th April 2015 wherein EHT and HT loss level of Delhi was assumed for Chandigarh (3.95%) and the balance losses was assumed at LT level.

The total loss for the FY 2017-18 has been considered as approved in this Tariff Order as 12.75%. The HT and EHT loss level has been considered at 3.95% and the balancing loss has been considered as the loss at the LT level.

To arrive at the network usage, the input energy at each level has been arrived and is shown in the Table below:

| Sr. No | Particulars | UoM | Amount |
|--------|--|-----|---------|
| 1 | Sales at 11 kV and above | MUs | 253.15 |
| 2 | Losses for HT and EHT | % | 3.95% |
| 3 | Input for HT and EHT (1+2) | MUs | 263.56 |
| 4 | Total Input | MUs | 1966.68 |
| 5 | Projection of HT/EHT network usage | % | 13.40% |
| 6 | Balance Proportion of LT network usage | % | 86.60% |

Table 7.2: Determination of input energy for network usage percentage

Table 7.3: Wheeling Charges approved by the Commission for the FY 2017-18

| Particulars | UoM | Formulae | Amount |
|-------------------------------------|-------------|------------|---------|
| Wheeling Cost | Rs crore | A | 103.97 |
| Wheeling Cost at EHT and HT | Rs crore | B=A*13.40% | 13.93 |
| Energy Input for HT and EHT | MUs | С | 263.56 |
| Wheeling Charge at EHT and HT level | Rs per Unit | D=B/C*10 | 0.53 |
| Wheeling Cost at LT | Rs crore | E=A*86.60% | 90.04 |
| Energy Input at LT | MUs | F | 1703.12 |
| Wheeling Charge at LT level | Rs per Unit | G=E/F*10 | 0.53 |

7.3. Cross-Subsidy Surcharge

Petitioner's submission:

The Petitioner has not submitted any computation of Cross subsidy surcharge.

Commission's analysis:

The Government of India has notified the National Tariff Policy, 2016 on 28th January 2016. The Cross subsidy surcharge is based on the following formula given in the Tariff Policy, 2016 as below:

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

Where,

S is the surcharge

T is the tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligations;

C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligations;

D is the aggregate of transmission, distribution and wheeling charges applicable to the relevant voltage level;

L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level;

R is the per unit cost of carrying regulatory assets.

The cross subsidy surcharge shall be taken as 'NIL' if works out to be negative.

The Commission has considered Large Industrial Supply for calculation of cross-subsidy surcharge. The Computation of cross subsidy surcharge for EHT/HT consumers getting supply above 11 KV voltage level is given in the below Table:

Table 7.4: Calculation of "T" (Tariff payable) approved by the Commission for the FY 2017-18

| Particular | Sale (Mus) | Revenue from approved tariff (Rs crore) | Average Tariff (Rs/kWh) |
|---------------------------------------|------------|---|-------------------------|
| T by Large Industrial Supply category | 125.40 | 70.85 | 5.65 |

Table 7.5: Calculation of "C" (W.Avg Cost of Power Purchase) approved by the Commission for the FY 2017-18

| Particular | Energy Procured (MU) | Average Rate (Rs./kwh) | Total Power Purchase Cost (Rs. Crore) |
|--|----------------------------|------------------------------|---|
| Power Purchase at generator end excluding open access purchase | 1,867.16 | 3.08 | 575.89 |
| Less: Interstate Loss | 74.80 | | |
| C (W.Avg Cost of Power Purchase) | 1,792.37 | 3.21 | 575.89 |

Table 7.6: Cross-Subsidy Surcharge approved by the Commission for the FY 2017-18

| Cross Subsidy Surcharge | UoM | HT & EHT Industry |
|---|-------------|----------------------|
| T (Tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation) | Rs. Per kwh | 5.65 |
| C (per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligations) | Rs. Per kwh | 3.21 |
| D (aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level) | Rs. Per kwh | 0.53 |
| L (aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level) | % | 3.95 |
| R (per unit cost of carrying regulatory assets) | Rs. Per kwh | 0 |
| Surcharge | Rs. Per kwh | 1.78 |

7.4. Additional Surcharge

Petitioner's submission:

The Petitioner has not made any submission regarding additional surcharge.

Commission's analysis:

In order to promote competition through open access the Commission retains "Nil" Additional Surcharge as approved in the last Tariff Order dated 28th April 2016. The Commission may consider the same as and when the Petitioner submits a proposal to get the same approved.

Chapter 8. Tariff Principles and Design

8.1. Preamble

The Commission in determining the ARR and Retail supply tariff for FY 2017-18, 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 the MYT Regulations, 2014 notified by JERC under Section 64 of the Act which lay down the broad principles and shall guide the determination of retail tariff

8.2. Principles of Tariff Design

As per Regulation 36 of MYT Regulations, 2014, "Cross Subsidy, Allocation of Cost to Serve and Tariff Design"-

- "a. The Commission shall gradually move towards reduction of cross subsidy in accordance with Electricity Act, Tariff Policy and such other guidelines of the government as applicable.
- b. The Distribution Licensee shall compute the consumer category-wise cost of supply as per the methodology elaborated below.
- c. Allocation of Cost: The Cost to serve shall be allocated to the consumer categories in the following manner:
 - Step 1: Functional Demarcation of Cost Total cost shall be divided on the basis of functions performed such as power purchase, distribution etc.
 - Step 2: Classification of Cost –Each of the functionalized costs shall be further classified, based on its intrinsic nature into Demand related cost, Energy related cost and Customer related cost. Demand related costs shall generally be of fixed nature, related to capacity creation and shall include interest on capital borrowing, depreciation etc. Energy cost shall be related to quantum of electricity consumption of consumer, such as fuel cost, interest on working capital, etc. Consumer related cost shall include operating expenses associated with meter reading, billing and accounting.

Step 3: Allocation of Cost

- 1) Allocation of Demand Costs: Demand costs of all three functions shall be allocated among consumer categories on the basis of average coincident peak demand of the tariff categories (average of past 12 months). To facilitate determination of average coincident peak demand for the various tariff categories, load research shall be made an integral part of the operations of the DISCOMs and systematic load research exercises shall be initiated.
- 2) Allocation of Energy Costs: Energy related costs of Distribution functions shall be allocated to consumer categories on the basis of ratio of electricity consumption of each consumer category to the total electricity consumption under the purview of the

Distribution Licensee. Energy related costs of Power purchase shall be allocated to various tariff categories on the basis of block approach on merit order dispatch and incremental principle, where each tariff category shall be allocated the incremental (energy related) power purchase cost on the basis of their respective share in the incremental power purchase. For the purpose of operationalizing the block approach and incremental principle, the Commission shall identify and notify a suitable year as the "base year".

- 3) Allocation of Customer Costs: Customer related costs shall be allocated to consumer categories on the basis of the ratio of number of consumers in each category to total number of consumers under the purview of the Distribution Licensee.
- d. Summation of allocated Demand cost, Energy cost and Customer cost across functions shall be total Cost to serve for respective consumer categories. Cost to serve reduced by revenue from a consumer category shall give total subsidy for that category. Total subsidy for a consumer category reduced by Government subsidy, if any, shall be cross-subsidy for that consumer category.
- e. The consumers below poverty line who consume power below a specified level, say 30 units per month, shall receive a special support through cross subsidy.
- f. Cross-subsidy surcharge and additional surcharge in Open Access
 - 1. The amount received or to be received by the licensee on account of cross-subsidy surcharge and additional surcharge, as approved by the Commission from time to time in accordance with the Regulations specified by the Commission, shall be shown separately against the consumer category that is permitted open access as per the phasing plan.
 - 2. Cross-subsidy surcharge and additional surcharge shall be shown as revenue from the tariff from the consumer categories who have been permitted open access and such amount shall be utilized to meet the cross-subsidy requirements of subsidized categories and fixed costs of the Distribution Licensee arising out of his obligation to supply. Provided that the licensee shall provide such details in its annual filings.

g. Tariff Design

- 1) The Commission shall be guided by the objective that the tariff progressively reflects the efficient and prudent cost of supply of electricity.
- 2) After the costs have been allocated based on the method specified in clauses I and (d) above, tariffs for different consumer categories shall be designed with due regard to factors provided under section 62(3) of the Act.
- 3) The time of day tariff would be structured across three time slabs to denote normal, peak and off-peak periods. The time-periods would vary according to different seasons of the year i.e. summer, winter and the monsoon season. The peak tariff would be 10%-20% higher than the normal tariff and the off-peak tariff would be priced 5%-10% lower than the normal tariff.

4) Time of Day tariff may be introduced in a phased manner, wherein in phase 1 it would be for HT Consumers, in phase 2 – for LT consumers consuming more than 25 KW and in phase 3 for LT consumers consuming more than 10 KW."

In view of the above, the tariff needs to be designed in such a manner that cross subsidy among different categories of consumers is progressively brought within $\pm 20\%$ of the average cost of supply and that even for BPL category consumers, tariff rates are close to 50% of the average cost of supply. The Commission has taken a considerate view in this regard balancing the interest of the utility and the consumers.

Accordingly, the Commission has designed the tariff for different categories of consumers as brought out in the subsequent sections.

8.3. Tariff Proposal

Petitioner's submission:

- 1. The Petitioner has requested for modification in respect of applicability of domestic categories to include the following:
 - i. Supply to hostels and /or residential quarter attached with the private educational institutions where separately metered.
 - ii. Administrative Training Institutes/Correctional Institutes/Training Centres exclusively run/managed by the UT/State/Central Government to undertake research, consultancy/Training and allied activities to improve management efficiency.
- 2. The Petitioner has requested for modification in other applicability clauses as follows:
 - i. Supply above 5000 kW or 5555 kVA 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 shall be given at voltage level of 66KV and above only.
 - ii. Removal of Rebate for advance payment before commencement of the billing period.
 - iii. Additional clause requested for Domestic and NRS categories: Contract demand/ sanctioned load if exceeded in a month, such excess shall be charged at an additional fixed rate of Rs 750 per kVA...
 - iv. **Power Factor for HT Consumers-** For less than 0.8 PF penalty should be escalated at a rate of 2% of the bill amount for each 0.01 fall in power factor instead of the earlier 1%. For the NRS Category the lower limit of Power factor for disconnection should be dropped to 0.80.
 - v. No FPPCA for Temporary consumers/Single Point Supply (SPS)

- 3. The Petitioner has requested for the creation of a new category as follows:
 - i. **New SPS (Single Point Supply) category** for residents of JJ Clusters/ Slum Dwellers/ Unauthorized Colonies & Structures / Resident outside Lal Dora –to be given to an individual to ensure payment collection and deposits.

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

Table 8.1: Existing v/s Proposed Tariff for the FY 2017-18 submitted by the Petitioner

| | EXISTING TARIFF | | PROPOSED TARIFF | | |
|-------------------------|---------------------------|-----------------------------|---------------------------|-----------------------------|--|
| Tariff Category | Variable Cost (Rs/kWh) | Fixed Cost (Rs/kW/Month) | Variable Cost (Rs/kWh) | Fixed Cost (Rs/kW/Month) | |
| Domestic | | | | | |
| 0-150 kWh | 2.55 | 10.00 | 2.75 | 12.00 | |
| 151-400 kWh | 4.80 | 10.00 | 6.00 | 12.00 | |
| Above 400 kWh | 5.00 | 10.00 | 6.20 | 12.00 | |
| Commercial | | | - | - | |
| 0-150 kWh | 5.00 | 20.00 | 6.20 | 24.00 | |
| 151-400 kWh | 5.20 | 100.00 | 6.40 | 122.00 | |
| Above 400 kWh | 5.45 | 100.00 | 6.80 | 122.00 | |
| Industrial | | | | | |
| Large Supply | 5.65 | 100.00 | 7.00 | 122.00 | |
| Medium Supply | 5.35 | 100.00 | 6.50 | 122.00 | |
| Small Power Supply | 5.30 | 20.00 | 6.45 | 24.00 | |
| Agriculture | 2.90 | - | 2.90 | - | |
| Public Lighting | 5.35 | 100.00 | 6.50 | 122.00 | |
| Bulk Supply | 5.55 | 100.00 | 6.80 | 122.00 | |
| Others Temporary Supply | 8.10 | - | 9.90 | - | |

Commission's analysis:

The Commission has determined the retail tariff for the FY 2017-18 in view of the guiding principles as stated in the Electricity Act, 2003 and the Tariff Policy, 2016, and the suggestions/objections of the stakeholders in this regard and the Petitioner's submission are discussed above.

The relevant abstract from Tariff Policy, 2016 is as under:

"8.3. Tariff design: Linkage of tariffs to cost of service

It has been widely recognized that rational and economic pricing of electricity can be one of the major tools for energy conservation and sustainable use of ground water resources.

In terms of the Section 61(g) of the Act, the Appropriate Commission shall be guided by the objective that the tariff progressively reflects the efficient and prudent cost of supply of electricity.

The State Governments can give subsidy to the extent they consider appropriate as per the provisions of section 65 of the Act. Direct subsidy is a better way to support the poorer categories of consumers than the mechanism of cross subsidizing the tariff across the board. Subsidies should be targeted effectively and in transparent manner. As a substitute of cross subsidies, the State Government has the option of raising resources through mechanism of electricity duty and giving direct subsidies to only needy consumers. This is a better way of targeting subsidies effectively.

Accordingly, the following principles would be adopted:

- 1. Consumers below poverty line who consume below a specified level, as prescribed in the National Electricity Policy may receive a special support through cross subsidy. Tariffs for such designated group of consumers will be at least 50% of the average cost of supply.
- 2. For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the Appropriate Commission would notify a roadmap such that tariffs are brought within ±20% of the average cost of supply. The road map would also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy.
- 3. While fixing tariff for agricultural use, the imperatives of the need of using ground water resources in a sustainable manner would also need to be kept in mind in addition to the average cost of supply. Tariff for agricultural use may be set at different levels for different parts of a state depending on the condition of the ground water table to prevent excessive depletion of ground water. Section 62 (3) of the Act provides that geographical position of any area could be one of the criteria for tariff differentiation. A higher level of subsidy could be considered to support poorer farmers of the region where adverse ground water table condition requires larger quantity of electricity for irrigation purposes subject to suitable restrictions to ensure maintenance of ground water levels and sustainable ground water usage.
- 4. Extent of subsidy for different categories of consumers can be decided by the State Government keeping in view various relevant aspects. But provision of free electricity is not desirable as it encourages wasteful consumption of electricity. Besides in most cases, lowering of water table in turn creating avoidable problem of water shortage for irrigation and drinking water for later generations. It is also likely to lead to rapid rise in demand of electricity putting severe strain on the distribution network thus adversely affecting the quality of supply of power. Therefore, it is necessary that reasonable level of user charges is levied. The subsidized rates of electricity should be permitted only up to a pre-identified level of consumption beyond which tariffs reflecting efficient cost of service should be charged from consumers. If the State Government wants to reimburse even part of this cost of electricity to poor category of consumers the amount can be paid in cash or any other suitable way. Use of prepaid meters can also facilitate this transfer of subsidy to such consumers.
- 5. Metering of supply to agricultural/rural consumers can be achieved in a consumer friendly way and in effective manner by management of local distribution in rural areas

through commercial arrangement with franchisees with involvement of panchayat institutions, user associations, cooperative societies etc. Use of smart meters may be encouraged as a cost effective option for metering in cases of "limited use consumers" who are eligible for subsidized electricity."

Further, keeping in view the relevant directions given by the Hon'ble APTEL in the judgment in O.P. no. 1 of 2011 as mentioned below, the Commission has taken a considered view in this regard.

Directions given by the Hon'ble APTEL in the Judgment in O.P. no. 1 of 2011 are as follows:

| 1) | | |
|----|------|--|
| 2) | | |
| 3) | | |

Quote

- 4) In determination of ARR/tariff, the revenue gaps ought not to be left and Regulatory Asset should not be created as a matter of course except where it is justifiable, in accordance with the Tariff Policy and the Regulations. The recovery of the Regulatory Asset should be time bound and within a period not exceeding seven years at the most and preferably within Control Period. Carrying cost of the Regulatory Asset should be allowed to the utilities in the ARR of the year in which the Regulatory Assets are created to avoid problem of cash flow to the distribution licensee.
- 5) Truing up should be carried out regularly and preferably every year. For example, truing up for the financial year 2009-10 should be carried out along with the ARR and tariff determination for the financial year 2011-12.
- 6) Fuel and Power Purchase cost is a major expense of the distribution Company which is uncontrollable. Every State Commission must have in place a mechanism for Fuel and Power Purchase cost in terms of Section 62 (4) of the Act. The Fuel and Power Purchase cost adjustment should preferably be on monthly basis on the lines of the Central Commission's Regulations for the generating companies but in no case exceeding a quarter. Any State Commission which does not already have such formula/mechanism in place must within 6 months of the date of this order must put in place such formula/mechanism."

The Petitioner has proposed certain changes in the Tariff Schedule most of which were also proposed by the Petitioner in its previous petition which have been discussed in detail in the subsequent paras:

- **1.** Modification in respect of applicability of domestic categories to include the following
 - i. Domestic Tariff for Supply to hostels and /or residential quarter attached with the private educational institutions where separately metered.

The Commission observes that the Petitioner's proposal would cause shifting of consumers previously billed in the commercial category to be billed in the domestic category would not only lead to loss of revenue of the Petitioner, leading to increase in the cross subsidy level of the other consumer categories.

ii. Change in Applicability of Domestic Category

The Commission feels that administrative training institutes are equivalent to government aided educational institutes and hence should be charged with domestic tariff.

- **2.** Modification in other applicability clauses as follows:
 - i. Supply above 5000 kW or 5555 kVA can be given at 66/220kV depending on the quantum/type of load and the contract demand and availability of bus voltage and transformer winding capacity at the feeding substation wherever possible at the discretion of the supplier shall be given at voltage level of 66KV and above only.

The current provision of supply at 66 kV and above is as below

"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 the supplier."

The Commission is of the view that choice of supply voltage for a particular connected load is dependent on various factors namely type of load and contract demand, cycle of demand and availability of bus voltage and transformer winding capacity at the feeding substation. As these conditions cannot be envisaged and generalized beforehand, the Commission has already allowed the Petitioner to use its discretion in this matter. Accordingly, the Commission is not approving any modification in this condition.

ii. Rebate for advance payment before commencement of billing period has not been continued

Advance bill Payment by consumers reduces the working capital cost of the Petitioner and hence should be encouraged. Hence the submission of the Petitioner is not accepted.

iii. Contract demand/ sanctioned load is the load kW, kVA or HP, as the case may be agreed to be supplied by the licenses and contracted by the consumer and specified in the agreement. If the consumer in a month

exceeds the contract demand/ sanctioned load, such excess shall be charged at an additional rate of Rs 750 per kVA.

The proposal of the Petitioner would deter consumers from withdrawing the power above the sanctioned load and hence would lead to system stability. However, the Petitioner as of now has not got the metering infrastructure to implement the measure. Hence the proposal of the Petitioner is also rejected. The Commission directs the Petitioner to install smart meters for such consumers and accordingly, decides to continue with the existing charges of fixed charges.

iv. Power Factor for HT Consumers- For less than 0.8 PF penalty should be escalated at a rate of 2% of the bill amount for each 0.01 fall in power factor instead of the earlier 1%. For NRS Category the lower limit of Power factor for disconnection dropped to 0.80.

The Commission observes that there is no reason to increase the penalty as the Petitioner is facing no issues regarding low power factor. Hence the submission of the Petitioner is not accepted.

v. No FPPCA for Temporary consumers/Single Point Supply

The Commission notes that the Petitioner is not charging FPPCA from Temporary and SPS category un-necessarily burdening other categories of consumers. Hence the submission of the Petitioner is not accepted.

- 3. Creation of a new category
 - i. New SPS (Single Point Supply) category for residents of JJ Clusters/ Slum Dwellers/ Unauthorized Colonies & Structures / Resident outside lal dora -to be given through a leading person.

The Commission observes that the Petitioner has proposed this new category of consumers in its previous petition also for the FY 2016-17. However, the same was not accepted by the Commission.

In the present Petition also, as the Petitioner has not proposed any new reasons for supporting its proposal, the Commission finds it appropriate to continue with its existing decision in this matter.

8.4. Revenue Gap/Surplus for the FY 2017-18

Petitioner's submission:

Even though CED is a Government owned department, it has been operating under commercial principles of operation. The Commission has been regulating the tariff of Chandigarh by approving the ARR and the corresponding Tariff for recovery of the ARR since FY 2011-12, any revenue gap arising on account of these years should be allowed to be recovered from the applicable tariff in the UT and should not be passed to the Government of India. Hence the Petitioner requested that the Commission should allow inclusion of the revenue gap of Rs. 208.17 crore in the regulatory asset and allow recovery of the same by amortization of the Regulator Asset.

The Petitioner also requested the Commission to approve a liquidation schedule with regard to the regulatory asset of Rs. 265.04 crore, and allow recovery of the same in the tariff from FY 2017-18 onwards. Since the revenue gap amounting to Rs. 78.10 crore is already covered under the Regulatory Asset of Rs. 265.04 crore and shall be covered under liquidation of the Regulatory Asset, a similar amount has been reduced from the total revenue gap determined for the FY 2015-16.

The Petitioner proposed amortization of the regulatory asset including revenue gap upto FY 2013-14 of Rs. 208.17 crore as well as regulatory asset of Rs. 265.04 crore approved by the Hon'ble Commission in the MYT Order to be recovered in three equal installments and have accordingly included the first installment of Rs. 157.72 crore to be recovered as part of the Tariff approval for the FY 2017-18.

Commission's analysis:

In the previous order dated 28th April 2016, the Commission had ordered that

"The Commission is also of the view that historically, in the absence of the audited accounts, the Commission had approved expenses and income as sought by the Petitioner. However, there has been repeated non-compliance by the Petitioner i.e. on account of delay in finalization of the audited accounts based on commercial principles and the preparation of Fixed Asset Register which prevented the Commission from ascertaining the actual expenses and revenue. This has eventually resulted in substantial disallowances over a period of time and non-recovery of the actual costs in a time bound manner.

Further, 8.1.7 of Tariff Policy 2016 provides that

Quote

"..... it is desirable that the requisite tariff changes come into effect from the date of the commencement of the each financial year and any gap on account of delay in filing should be on account of licensee."

Unquote

The Commission is of the view that had the Petitioner filed the True-up Petitions for FY 2011-12, FY 2012-13 and FY 2013-14 in the stipulated time frame, the requisite tariff changes on account of additional gaps in these years would have come into effect from the date of commencement of the respective financial years. As there was substantial delay in filing of the True-ups by the Petitioner, the Commission is of the view that resultant gap should be on account of licensee only.

The Commission is strictly of the view that while inefficiencies of the Petitioner should not be passed on to the consumers, at the same time the utility should not be devoid of its due amount. The Commission orders that the Petitioner, being a Government Department, should approach the Government to provide budgetary support to meet this approved revenue gap of Rs 208.17 Crores.

Accordingly, the Commission is not carrying forward this gap of Rs 208.17 Crores in future years."

Considering the reasons detailed in the previous order, the Commission finds it appropriate to continue with its existing stand and decides against the approval of this disallowed revenue gap to be recovered in the current year's tariff.

Additionally, the Commission has kept in the view that the Petitioner, being a department of the Chandigarh Administration, has not taken any actual short-term loan from banks/FIs, unlike other corporatized departments for financing the past revenue gaps. Hence, deferring the revenue gap of past years for recovery in future years would not lead to any adverse financial impact on the health of the Petitioner. Keeping in view the same the Commission in its Previous Order had determined the tariff of the Petitioner by ensuring that it is able to recover its stand-alone revenue gap for the FY 2016-17 and a part of the revenue gap of FY 2014-15 to FY 2015-16.

As detailed in the previous chapter, the Petitioner has a cumulative revenue surplus of Rs 0.08 crore at the end of the FY 2017-18 i.e. 0.01% of the revenue for the FY 2017-18 at the existing tariff. Since the requirement of change in tariff is less than 1% to shelve the revenue surplus, the Commission finds it appropriate to continue with the existing tariff structure in the FY 2017-18 as shown in the following Table:

Approved Charges Energy Fixed Charges "K" factor for Category Average Tariff Charge (Rs. FPPCA formula (Rs/Unit)** (Rs./Kwh) kW/Month) for FY 2016-17 **Domestic** 4.01 0.78 0-150 kWh 2.55 2.64 0.51 151-400 kWh 4.80 10.00 4.95 0.96 Above 400 kWh 5.00 1.01 5.18 **Commercial** 6.06 1.18 5.04 0-150 kWh 5.00 20.00 0.98

Table 8.2: Tariff Approved by the Commission for the FY 2017-18 $\,$

| | | Approved Charges | | | |
|-------------------------|-------------------------------|------------------------------------|-------------------------------|---|--|
| Category | Energy Charge (Rs./Kwh) | Fixed Charges (Rs. kW/Month) | Average Tariff (Rs/Unit)** | "K" factor for FPPCA formula for FY 2016-17 | |
| 151-400 kWh | 5.20 | 100.00 | 5.38 | 1.05 | |
| Above 400 kWh | 5.45 | 100.00 | 11.76 | 2.29 | |
| Industrial | | | 6.17 | 1.20 | |
| Large Supply | 5.65 | 100.00 | 6.35 | 1.24 | |
| Medium Supply | 5.35 | 100.00 | 6.08 | 1.18 | |
| Small Power Supply | 5.30 | 20.00 | 5.53 | 1.08 | |
| Agriculture | 2.90 | - | 2.90 | 0.56 | |
| Public Lighting | 5.35 | 100.00 | 5.71 | 1.11 | |
| Bulk Supply | 5.55 | 100.00 | 6.14 | 1.20 | |
| Others Temporary Supply | 8.10 | - | 8.10 | 1.58 | |

^{**} Average tariff means the average revenue realization from the category i.e. revenue/sales and is inclusive of both the fixed charges and the variable charges

The revenue at approved tariff is tabulated below:

Table 8.3: Revenue at Revised Tariff Approved by the Commission for FY 2017-18

| S. | | Connected | Energy | Revised Tariff | | Revenue At Revised Tariff (Rs Crores) | | |
|-----|----------------------------|-----------|------------------|---------------------------------|------------------|--|------------------|------------------|
| No. | Category | Load (kW) | Sales (In MU) | Energy Charges (Rs /Unit) | Fixed Charges | Total Revenue | Fixed Charges | Energy Charge |
| 1 | Domestic | 8,67,998 | 792.03 | | | 317.76 | 10.42 | 307.35 |
| | 0-150 kWh | 2,46,942 | 340.57 | 2.55 | | 89.81 | 2.96 | 86.85 |
| | 151-400 kWh | 3,30,687 | 261.37 | 4.80 | 10.00 | 129.43 | 3.97 | 125.46 |
| | Above 400 kWh | 2,90,370 | 190.09 | 5.00 | | 98.53 | 3.48 | 95.04 |
| 2 | Commercial | 4,41,481 | 534.67 | | | 323.85 | 48.90 | 274.95 |
| | 0-150 kWh | 42,508 | 240.60 | 5.00 | 20.00 | 121.32 | 1.02 | 120.30 |
| | 151-400 kWh | 33,557 | 224.56 | 5.20 | 100.00 | 120.80 | 4.03 | 116.77 |
| | Above 400 kWh | 3,65,417 | 69.51 | 5.45 | 100.00 | 81.73 | 43.85 | 37.88 |
| 3 | Industrial | 1,71,141 | 273.37 | | | 168.55 | 18.64 | 149.91 |
| | Large Supply | 73,349 | 125.40 | 5.65 | 100.00 | 79.66 | 8.80 | 70.85 |
| | Medium Supply | 78,039 | 127.75 | 5.35 | 100.00 | 77.71 | 9.36 | 68.35 |
| | Small Power Supply | 19,753 | 20.21 | 5.30 | 20.00 | 11.19 | 0.47 | 10.71 |
| 4 | Agriculture | 757 | 1.49 | 2.90 | - | 0.43 | - | 0.43 |
| 5 | Public Lighting | 6,726 | 22.47 | 5.35 | 100.00 | 12.83 | 0.81 | 12.02 |
| 6 | Bulk Supply | 42,759 | 86.30 | 5.55 | 100.00 | 53.03 | 5.13 | 47.90 |
| 7 | Others Temporary Supply | 3,250 | 5.61 | 8.10 | - | 4.54 | - | 4.54 |
| | Total | 15,34,113 | 1715.93 | | | 881.00 | 83.89 | 797.10 |

The Commission accordingly approves revenue surplus of Rs 0.08 crore for the FY 2017-18 subject to True-up.

Chapter 9. Tariff Schedule

9.1. Tariff Schedule

| Sl. No | Consumer Category | Consumption | n Fixed Charge | Energy Charge |
|-----------|---|---------------|----------------------------------|------------------|
| | consumer category | Range | Rs. per kW/Month | Rs./kWh |
| | DOMESTIC SUPPLY (DS) | | | |
| 4 | | 0-150 kWh | | 2.55 |
| 1 | Domestic Supply (DS) | 151-400 kWh | Rs. 10/kW/Month | 4.80 |
| | | Above 400 kWh | | 5.00 |
| | C OMMERCIAL / NON RESIDENTIAL (N | RS) | · | |
| | | 0-150 kWh | Rs. 20/kW/Month | 5.00 |
| 2 | COMMERCIAL /NON RESIDENTIAL SUPPLY (NRS) | 151-400 kWh | for Single Phase | 5.20 |
| | SUFFLI (NKS) | Above 400 kWh | Rs. 100/kW/Month for Three Phase | 5.45 |
| 3 | Industry | | | |
| | LARGE INDUSTRIAL POWER SUPPLY (I | LS) | 1 | |
| a | Large Power Supply | All Units | 100 | 5.65 |
| | MEDIUM INDUSTRIAL POWER SUPPLY | (MS) | 1 | |
| b | Medium Power Supply | All Units | 100 | 5.35 |
| | SMALL INDUSTRIAL POWER SUPPLY (S | SP) | 1 | |
| С | Small Scale Industry | All Units | 20 | 5.30 |
| | AGRICULTURAL PUMPING SUPPLY(AR |) | | |
| 4 | Agricultural Pumping Supply | All Units | | 2.90 |
| | PUBLIC LIGHTING (PL) | 1 | 1 | |
| 5 | Public Lighting system managed by Municipal Corporation, Panchayat and Street Lights maintained / outsourced to an external Agency | All Units | 100 | 5.35 |
| J | Advertisement / Neon sign Boards- Advertisement boards, bill boards(apart from advertisement boards installed on commercial establishments and charged under commercial tariff) | All Units | 100 | 7.10 |
| 4 | Bulk Supply (BS) | | | |
| 6 | Bulk Supply | All Units | 100 | 5.55 |
| - | Temporary Supply | • | <u> </u> | |
| 7 | Temporary Supply | All Units | | 8.10 |

9.2. Applicability

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DOMESTIC SUPPLY (DS)

This schedule shall apply for light, fan, domestic pumping sets and household appliances in the following premises:

- a) Single private houses/flats.
- b) Government recognized education institutions, viz schools, colleges, universities, ITI hostels, canteens, and residential quarters attached to the educational institutions.
- c) Administrative Training Institutes/Correctional Institutes/Training Centres exclusively run/managed by the UT/State/Central Government to undertake research, consultancy/Training and allied activities to improve management efficiency
- d) Government and public sports institutions/Gymnasium halls etc. banks and PCOs exclusively for the use of educational institutions.
- e) Religious Institutions viz. Temples, Gurudwaras, Mosques, Churches, provided that the Sub Divisional officer concerned authenticates the genuineness of the place being exclusively used for worship by the general public.
- f) Housing colonies and multi storied flats/buildings as defined in the Electricity Supply Code Regulations notified by the JERC.
- g) Dispensaries / Hospitals / Public Libraries / Schools / Colleges / Working Women's Hostels / run by the Chandigarh Administration.
- h) Recognized Centers/ societies for the welfare of blind, deaf and dumb, spastic children, physically handicapped persons, mentally retarded persons, as approved by the Chandigarh Administration.
- i) Orphanages/ Cheshire Homes/ Old age homes/ charitable homes and Gaushalas.
- j) Charitable Organizations viz. Schools, Hospitals, Dispensaries, Education and Research Institutes and Hostels attached to such Institutions registered with the Income Tax authorities under Section 80G, or 80 GGA, or 35 AC. The individual organization shall apply in writing to the Electricity Department along with a certificate from the IT Department or getting considered for the tariff in the Domestic Category
- k) Shelter Homes (including Night Shelters) approved by Chandigarh Administration.

AC, 50 cycles, Single phase 230 volts or three phase 400 volts or 11 Kilo volts.

For loads up to 5 KW supply shall be connected on single phase 230 volts and above 5 KW up to 60 KW supply shall be given on three phase 400 volts. For loads above 60 KW, supply shall be connected 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 the low voltage side of the transformer instead of the high voltage side, 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

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l) Crematoriums (including electric) and Burial Grounds. The Halls or Gardens/ Lawns or any portion of the premises listed in Para (i) above let out for consideration or used for Commercial activities at any time shall be charged at Commercial Rate of Electricity Tariff.

NOTES:

- i. Where a portion of the dwelling is used for mixed load purposes the connection shall be billed for the purpose for which the tariff is higher.
- ii. Hostels shall be considered as one unit and billed under domestic supply tariff without compounding.
- iii. Private education institutions not recognized by the Chandigarh Administration shall be billed under Non Domestic Tariff.
- iv. STD/PCOs, shops attached to Religious Institutions will be billed under Non- Domestic Tariff.
- v. A room or a part of a residential house 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.
- vi. The load of common amenities for consumers of housing societies may include pumps for pumping water supply, lifts and lighting of common area. The consumption of energy for common services shall be separately metered with meters installed and sealed by the licensee and shall be billed at Domestic Tariff. The user shall inform the details of every non-domestic activity within the residential complex, such as commercial complex, industrial activity, and recreation club, along with the connected load, and shall seek a separate connection for the same under the commercial category.

COMMERCIAL / NON RESIDENTIAL SUPPLY (NRS)

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),

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 connected 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

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- 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 complexes 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.

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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 the low voltage side of the transformer instead of the high voltage side, the consumption should be computed by adding 3% extra on account of transformation losses.

LARGE INDUSTRIAL POWER SUPPLY (LS)

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 their connected load without prior approval of the Electricity department. The consumer availing supply at high tension shall indicate rated capacity of all the step down transformers installed in his premises and shall not increase the capacity of such step down transformers without prior approval of the department.

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 @ 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

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

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

APPLICABILITY

- 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 the lower voltage side of the consumer transformer instead of the high voltage side, maximum demand and energy consumption for billing purpose should be computed by adding 3% extra on units on account of transformation/cables losses. However this agreement shall in no case continue for more than three months and the 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.

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33kV and above depending upon availability of bus voltage and transformer winding capacity at the feeding substation wherever possible, at the discretion of supplier.

Contract demand is the load kW, kVA or HP, as the case may be agreed to be supplied by the licenses and contracted by the consumer and specified in the agreement. If the consumer in a month exceeds the contract demand, such excess shall be charged at an additional rate of Rs 250/kVA.

MEDIUM INDUSTRIAL POWER SUPPLY (MS)

This tariff schedule shall apply to all industrial power supply consumers having connected load ranging from 21 kW to 100 kW

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

SMALL INDUSTRIAL POWER SUPPLY (SP)

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

AC, 50 cycles, single phase 230 volts, or 3 phase, 400 volts.

AGRICULTURAL PUMPING SUPPLY (AP)

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 the relevant industrial tariff (Govt. Tubewells meant for water supply are covered under the relevant Industrial Tariff)

AC, 50 Cycles, three phase, 400 volts, Single Phase at 230 volts.

NOTE

- Pumping sets shall be ISI marked. The responsibility for ensuring installation of ISI marked pumping sets as well as shunt capacitors shall be that of the Junior Engineer concerned, who shall verify the same at the time of verification of test reports before the release of the connection.
- Supply for agriculture/Irrigation pump sets, at one point, may also be given to a registered co-operative

| APPLICABILITY | CHARACTER OF SERVICE |
|---|---|
| society or to a group of farmers recognized by the competent authority. | |
| An agriculture consumer, if he so desires, may shift the location within his premises of his connection, with the approval of the competent authority, after payment of applicable charges. | |
| PUBLIC LIGHTING (PL) | |
| 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 establishments & charged under commercial tariff). | AC, 50 cycles, Single phase at 230 Volts or three phase at 400 Volts. |
| BULK SUPPLY (BS) | |
| 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 | 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. |
| TEMPORARY SUPPLY | |
| 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 | AC, 50 cycles, Single phase at 230 Volts or three phase at 400 Volts |

9.3. General Terms and Conditions

The above mentioned LT/HT Tariffs are subjected to the following conditions, applicable to all category of consumers.

- 1) The tariffs are exclusive of electricity duty, taxes and other charges levied by the Government or other competent authority from time to time which are payable by the consumers in addition to the charges levied as per the tariffs.
- 2) Unless otherwise agreed to, these tariffs for power supply are applicable for supply at one point only.
- 3) If energy supplied for a specific purpose under a particular tariff is used for a different purpose, not contemplated in the contract for supply and / or for which higher tariff is applicable, it will be deemed as unauthorized use of electricity and shall be dealt with for assessment under the provisions of section 126 of the

Electricity Act, 2003 & Supply Code Regulation notified by JERC.

- 4) Fixed charges, as applicable, will be charged on pro-rata basis from the date of release of connection. Fixed charges, as applicable, will be double as and when bi monthly billing is carried out, Similarly slabs of energy consumption will also be considered accordingly in case of bi-monthly billing.
- 5) If connected load of a domestic category is found to be at variance from the sanctioned/contracted load as a result of replacement of appliances such as lamps, fans, fuses, switches, low voltage domestic appliances, fittings, it shall not fall under Section 126 and Section 135 of the EA 2003.
- 6) The billing in case of HT/EHT shall be on the maximum demand recorded during the month or 75% of the 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 connection 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.

7) Power Factor Charges for HT and EHT

- (a) Power factor means, the average monthly power factor and shall be the ratio expressed as percentage of total kWh to total kVAh supplied during the month. The ratio shall be rounded up to two figures.
- (b) The consumer shall maintain the monthly average power factor of the supply not less than 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 1% in power factor upto 70%(lagging).
- (c) In case the monthly average power factor of the consumer is more than 95% (95% lagging), a power factor incentive @ 1% on demand and energy charges shall be given for each increase of 1% in power factor above 95% (lagging)
- (d) If the average power factor falls below 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.

8) Additional charges for exceeding contracted load/contracted maximum demand,

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

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

9) Maximum Demand

The maximum demand of supply of electricity during a month shall be twice the largest number of Kilo-Volt Ampere hours (KVAH) delivered at the point of supply to the consumers during any consecutive 30 minutes in the month. However for the consumers having contracted demand above 4000 KVA the maximum demand shall be four times the largest number of Kilo-Volt Ampere hours (KVAH) delivered at the point of supply to the consumers during any consecutive 15 minutes in the month.

- 10) 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. Amounts less than 50 paisa shall be ignored and amounts of 50 paisa or more shall be rounded off to the next rupee. In case of permanent disconnection, delayed payment surcharge shall be charged only upto the month of permanent disconnection.
- 11) The Department shall have the right to disconnect the supply after giving 15 days' notice as per the provision of the Act and the Supply Code Regulation, if the consumer fails to pay the energy bill presented to him by the due date.
- 12) **Advance Payment Rebate:** If payment is made in advance well before commencement of the consumption period for which bill is prepared, a rebate @ 1% per month shall be given on the amount (excluding Consumer 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.
- 13) **Prompt Payment Rebate:** If payment is made at least 7 days in advance of the due date of payment a rebate for prompt payment @ 0.25 % of the bill amount shall be given. Those consumers having arrears shall not be entitled for such rebate.
- 14) The adjustment on account of Fuel and Power Purchase Cost variation shall be calculated in accordance with the FPPCA formula separately notified by the Commission under the Regulation. Such charges shall be recovered / refunded in accordance with the terms and conditions specified in the FPPCA formula.

15) The values of the 'K' factor applicable for the different consumer categories for use in the FPPCA formula shall be as specified in this Tariff Order.

16) Surcharge for Low Power Factor/Non Installation of Required rated LT Shunt Capacitors

- (a) Consumers using LT installation with welding transformers and induction meters of three HP and above and other low power factor consuming appliances shall arrange to install low tension shunt capacitors of the required rating and shall maintain these capacitors in good working condition. No service connection shall be released without the installation of shunt capacitor(s) of required rating. In case the shunt capacitor(s) are found to be missing or inoperative or damaged, 15 days notice shall be issued to the consumer by the licensee for rectification of the defect. In case the defective capacitor(s) are not replaced/rectified within 15 days of the notice, a surcharge of 20% on the billed variable energy charges shall be levied till the defective capacitor(S) are replaced/rectified to the satisfaction of the licensee.
- (b) Consumers with L.T connections where the meter provided by the licensee has 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.

| Sl. | Power Factor range | Surcharge |
|-----|------------------------|--|
| 1. | 90% and above | NIL |
| 2. | Below 90% and upto 85% | 1% of billed energy charges of that month for every 1% fall in power factor from 90% |
| 3. | Below 85% and upto 80% | 1.5 % of billed energy charges of that month for energy 1% fall in P.F from 85% |
| 4. | Below 80% and upto 75% | 2% of billed energy charges of the month for energy 1% fall in P.F from 80% |
| 5. | Below 75% | 3% of billed energy charges of that month for energy 1% fall in P.F from 75% |

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

17) Plant & Apparatus

The following features shall be installed:

- (a) LT installation with welding transformers will be required to have suitable shunt capacitor(s) installed so as to ensure power factor of not less than 90%.
- (b) Every LT consumer, including irrigation pump set consumer, whose connected load includes induction motors of 3 HP and above and other low

- power factor consuming appliances shall arrange to install Low tension Shunt capacitors of appropriate capacity at his cost across the terminals of his motor(s) so as to ensure power factor of not less than 90%.
- (c) A linked switch with fuse(s) or a circuit breaker for consumers having aggregate installed transformer/apparatus capacity up to 1000 KVA if supplied at voltage of 11 KV and 2500 kVA if supplied at voltage of 33 kV.
- (d) A circuit breaker along with linked switch for consumer having an aggregate installed transformer apparatus capacity above 1000 kVA if supplied at 11 kV and above 2500 kVA if supplied at 33 kV.
- (e) In either case, suitable automatic circuit breakers shall be installed on the low tension side of each transformer or on each LT feeder emanating from the transformer.
- (f) Extra High Tension consumer shall install a circuit breaker on the HV side of the transformer.

18) Unauthorized use of Electricity

A) Cases to be treated as Unauthorized Use of Electricity

- 1) The following acts on the part of consumer are to be considered as unauthorized use of electricity for the purpose of assessment under the provisions of Section 126 of the Act;
 - I. Use of electricity by any artificial means; or
 - II. Unauthorized use of electricity by means without the permission of the concerned person or authority or licensee; or
 - III. Use of Electricity in the premises where supply is disconnected by the licensee.
 - IV. Disconnection of neutral wire
 - V. Tampering with meter or equipment 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 the connected load of a domestic category is found to be at variance with the sanctioned/contracted load as a result of increase of load or due to replacement of lamps, fans, fuses, switches, low voltage domestic appliances, fittings, etc it shall neither fall under unauthorized use of electricity (Section 126 of EA 2003) nor under theft of electricity (Section 135 of EA 2003).
- ii. Supply to activities incidental to main activity, for example supply to chemist shop in nursing homes and hospitals; tea shop, canteen, employees' cooperative store, dispensaries, puncture shop in petrol pumps etc. provided

- that the connected load for such activities remains within 5% of the sanctioned load or 5 kW, whichever is less.
- iii. In case of domestic/non-domestic connection(s), extension of supply from connection to other portion of the building/plot including for servant quarters, own parking garages or for social requirements relating to personally religious functions, sports etc. in residential areas so long as the supply is not extended to any portion for which connection has been disconnected due to non-payment of dues and there is no change in the category of use.
- iv. Professionals such as Doctors, Engineers, lawyers, CAs, Journalists and Consultants practicing from their residence irrespective of location provided that such use shall not exceed 25% of the area of the premises or 50 sq meters, whichever is less subject to installation of MDI meters.
 - v. For cottage and commercial activities operating in residences such as repair of shoes by cobbler, dhobi, ironing of clothes, stitching/knitting, paan-shop, bakery products etc. shops, tea shops etc. with total load (maximum demand) of 5 kW domestic tariff shall be applicable subject to installation of MDI meters.
- vi. In industrial or commercial premises where the supply is used by one or more persons where partition in business takes place or division in the family occurs or where user of the connection changes due to succession.

19) Time of Day (TOD) tariff

- i. Under the Time of Day (ToD) Tariff, electricity consumption and maximum demand in respect of HT/EHT consumers for different periods of the day, i.e. normal period, peak load period and off-peak load period, shall be recorded by installing a ToD meter.
- ii. The maximum demand and consumption recorded in different periods shall be billed at the following rates on the tariff applicable to the consumer, as TOD metering is not yet implemented.

| Period of use | Hrs. | Demand Charges | Energy Charges |
|--------------------------|--|------------------|-----------------------|
| Normal period | 6:00 a.m. to 6:00 p.m | Normal Rate | Normal rate of |
| Normai periou | 0.00 a.m. to 0.00 p.m | Normal Nate | energy charges |
| Evening peak load period | 6:00 p.m to 10.00 p.m | Normal Rate | Normal rate of |
| Evening peak load period | 0.00 p.iii to 10.00 p.iii | Normal Nate | energy charges |
| Off-peak load period | period 10:00 p.m to 6:00 a.m Normal Rate | | Normal rate of |
| On-peak load period | 10:00 p.iii to 6:00 a.iii | normal Rate ener | 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.

9.4. Schedule of Other 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 | Small Power, Medium Supply and street lighting supply. | Rs 250/- | |
| iv | Large Supply and bulk supply | Rs 500/- | |
| V | Agriculture Power supply | Rs 25/- | |
| vi | Temporary metered supply | Two times the normal rates of category of permanent supply | |
| | Charges for Re-fixing/ Changing of meter/Meter Board | in the same premise on consumer | |
| | request when no additional material is required. | | |
| В | (When the cause leading to subsequent change/r | - | |
| | manufacturing defect or Department's fault then, it sh | | |
| _ | shifting of meter is done in the interest of department w | - | |
| i | | 250/- per meter | |
| ii | Three Phase Meter without CT | 500/- per meter | |
| iii | Three Phase Meter (with CTs & PTs) | 1000/- per meter | |
| iv | Trivector and special type meters | 1200/- per meter | |
| V | HT/ EHV metering equipment | 3000/- per meter | |
| C | Meter Inspection & Testing Charges | | |
| | (In case correctness/accuracy of a meter belonging to the Licensee is challenged by the consumer) | | |
| i | Single phase | 150/- per meter | |
| ii | 3-phase whole current i.e. without C.T | 500/- per meter | |
| iii | L.T. meter with CTs | 1500/- per meter | |
| iv | H.T. & E.H.F metering equipment. | 3000/- per meter | |
| | NOTE: If the challenged meter is found to be incorrect / defective, 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 in and where seals found to have been broken by the consu | _ | |

| Sr. No. | Description | Approved |
|---------|--|--|
| 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/tampered 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 | Small Power, Medium Supply and street lighting supply | Rs 500/- |
| iv | Large Supply and bulk supply | Rs 1000/- |
| v | Agriculture Power supply | Rs 250/- |
| vi | Temporary metered supply | Rs 1500/- |
| F | Testing/ Inspection of Consumer's installation | |
| A | Initial Test/ Inspection | Free of Cost. |
| В | 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 | Medium Supply/Bulk Supply loads upto 100 kW | Rs 500/- (Payable in advance for each subsequent visit for the purpose of testing the installation.) |
| iv | Large Supply/Bulk Supply (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 | |

| Sr. No. | Description | Approved |
|---------|--|---|
| | 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 |
| vii | Replacement of Passbook in case it is lost by AP Consumer | Rs 60/- each |
| viii | Replacement of identification card missing on the premises of AP Consumer | Rs 25/- each |
| ix | Temporary | Rs 60/- per card |
| Н | 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 |
| vii | 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/- each |
| В | Replacement of meter glass where the same has been tampered with or broken by the consumer | |
| | Bulk Supply | 800/- each |
| | Public Lighting | 750/- each |
| | Agriculture Power | 120/- each |
| | Others & Temporary Supply | 2000/- each |
| I | Amount of Security deposit for new/ extension of load | As per the procedure prescribed in clause 6.10 of the JERC Electricity Supply Code Regulation 2010. |
| 0 | 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/- each |
| ii | Three Phase Meter | Rs 1550/- each |
| iii | LT CT operated Solid State Meter. (Without CTs) | Rs.3000/- each |
| iv | LT CTs | |
| | a) Upto 50/5A | Rs.1,580/- each |
| | b) Above 50/5 A | Rs. 600/- each |
| | a) Solid State HT TPT metering equipment (without CT/PT | Rs.20,000/- each |

| Sr. No. | Description | Approved |
|---------|--|----------------------------------|
| | unit) | |
| | b) 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/- |
| 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 (If the accuracy of licensee's bil and a review of the bills is demanded) | ll is challenged by the consumer |
| 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 consumer | r owned /supplied by the |
| 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 | r |
| Α | 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 | у. |
| | Domestic Supply | 200/- |
| | Non-residential supply | 500/- |
| | Large Supply | 1500/- |
| | Medium Supply | 500/- |
| | Small Supply | 300/- |

9.5. Schedule for service connection charges and service rentals

Service connection charges are provided in the schedule of general and service connection charges and are to be recovered from all prospective consumers and existing consumers seeking extension in load. Schedule of service connection charges as applicable is given under:

A. Service connection charges for domestic supply

| Sr. No | Particulars | Category | Rs |
|--------|-----------------------------------|------------------------|--------|
| 1 | Single Phase Fixed Per kW Charges | | |
| 2 | Up to 1 kW | Domestic 250/- | |
| a | op to 1 kw | Non Residential Supply | 250/- |
| b | Above 1 kW and up to 3 kW | Domestic | 300/- |
| D | | Non Residential Supply | 300/- |
| | Above 3 kW and 5 kW | Domestic | 500/- |
| С | Above 5 kw and 5 kw | Non Residential Supply | 750/- |
| 2 | Three Phase Fixed Per kW Charges | | |
| а | Above 5 kW | Domestic | 750/- |
| d | ADOVE J KW | Non Residential Supply | 1000/- |

Variable Charges

No variable charges are leviable upto 75 meters of service line length from the point of interconnection. Beyond 75 meters for all loads variable charges @ Rs 125 per meter length of service line shall br 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 in the preceding clause or to pay monthly service rentals at 1.6 paisa per rupee of the estimated cost of the service line beyond the cost of 30.48 meters.
 - i) Members of Schedule Castes.
 - ii) Religious and Charitable institutions run by recognized/ registered associations or societies registered with Register of Societies
- b) All such prospective and existing consumers 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 01^{st} November 2002, if applicable already shall continue.

B. Service connection charges for industrial and bulk Supply (For new Connections):

| Sr. | Load | Service Connection |
|-----|--------------|--------------------|
| 1 | Up to 100 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 up to 100 meters

which will include 11kV line (whether overhead or cable LT line and service cable. Where this limit exceeds 100 meters, the applicant shall be required to pay the 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 the 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 up to 60 kW for extension part only. However charges for service line in excess of 100 meters shall be charged @ 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.
 - i) No charges for extension shall be recoverable where the cost of service/common part of service line had been paid by the applicant at the time of release of the 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 an independent feeder laid at the cost of the consumer. The cost of line/bay (33/66/132/220kV) paid by the consumer or 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 from the consumer in respect of clubbing cases, applicable rates to different connections as existing immediately 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 of an individual consumer at one location shall be taken into account.
- d) The "per kW", service charges for extension in load shall be as contained in Para ii 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 on "per kW" basis as applicable to the category in which total connected load after extension falls and shall be recoverable for extension of the electrical 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 'Contract Demand Charges' as follows:

| S. 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 paymer | t of one |
| | time contract demand charges for purpose of increasing contract demand | |

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 service connection charges for extension of load by consumers who had paid the full cost of the line

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

- a) If the extension in load applied by the consumer is in excess of the capacity of line already erected or more than 100 % of the original load, consumer shall pay the service connection charges as applicable to the new applicants.
- b) If during the period of 5 Years from the date of connection some load has

already been released from the line, whose entire cost has been paid by the consumer, who seeks extension in load within five years up to the extent of the capacity of the line or 100% of the original load within 5 years up to the extent of the capacity of the line or 100% of the original load, whichever is lesser, release of additional load shall be regulated as under:

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

Extension in load to the original consumer shall be allowed (within the contract demand for which the line was originally erected for the said consumer) at the cost of the electricity department, even if augmentation/erection of new lines are 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) want 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 the line so that sufficient margin in electricity carrying capacity is available to cater to the additional requirement of the original consumer.

a) Provisions of the preceding Para's of this schedule shall not be applicable where as a result of extension in load the supply voltage level of the consumer changes 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 the total length of the 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 the service line is more than 1 km (out of which LT line/Service cable route length should not exceed 500 meters), any applicant under this category shall be required to pay the cost of the new 11 kV line beyond this limit at Rs 125 per meter as additional service connection charges. However, no component of distribution substation/transmission cost would be charged.

Chapter 10. Directives

Over the years, the Commission has issued various directives to the Petitioner for necessary action at its end. It has been observed that the Petitioner is not fully complying with many of the directives issued by the Commission. In order to strengthen the effective monitoring and ensure timely implementation of all the directives in true spirit, the Commission hereby directs that the Petitioner shall now compulsorily submit:

- The detailed action plan for compliance of all the directives <u>within 1 month of</u> <u>the issuance of this Order</u>.
- The quarterly progress report as per the detailed action plan for all the directives issued in the subsequent sections within 10 days of the end of each quarter of the calendar year.

10.1. Directives continued in this Order

While examining the compliance note and supporting documents submitted by the Petitioner in the present Petition, it is observed that some of the directives issued in the previous Tariff Orders have not been fully complied with by the Petitioner.

The Commission is of the view that substantial time has already been given to the utility for compliance with these directions. Thus, the Commission hereby directs the utility to comply with the directions mentioned below in the given timeframe, failing which the Commission shall be constrained to take appropriate action under Section 142 of the Electricity Act 2003 and various other provisions of the Act, and Regulations framed by JERC.

10.1.1.Capital Expenditure

Originally Issued in Tariff Order dated 7th May 2012

Commission's Latest Directive in Tariff Order dated 28th April 2016

The Commission has noted that it has not received full 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 the subsequent quarter, failing which the Commission will be bound to take action according to the JERC Regulations and the Electricity Act, 2003. This may include the non-consideration of capital expenditure of the FY 2015-16 onwards for the purpose of True-up in all the future Orders.

Petitioner's Response in the Present Tariff Petition

The status report on this directive has been submitted to Hon'ble JERC vide memo no. 2625 Dated 28.11.2016.

Commission's Response

The action taken is noted. The capital expenditure status report was received on 02^{nd} December 2016. The Commission directs the Petitioner to submit the the detailed statement of capital expenditure incurred and capitalization for every quarter, within 15 days in the subsequent quarter.

10.1.2. Management Information System

Originally Issued in Tariff Order dated 16th July 2011

Commission's Latest Directive in Tariff Order Dated 28th April 2016

The Commission notes the submission made by the Petitioner and directs the Petitioner to continue submission of the status report and to ensure that an effective MIS is in place by 31st December 2016.

Petitioner's Response in the Present Tariff Petition

The status report on this directive has been submitted to Hon'ble JERC vide memo no. 2647 Dated 30.11.2016.

However, it is submitted that the work of processing of billing and printing of electricity bills, is assigned to M/s NIELIT who regularly generates the MIS at various parameters. On the basis of above MIS, the respective field Sub Divisions take the action to improve the efficiency etc.

It is further submitted that for effective MIS, a number of requirements/proposals were forwarded to the M/s NIELIT. In the response of that M/s NIELIT vide their Letter No. 12963 dated 28.11.2016 has informed that as lot of changes have taken place therefore, there is a need for study of requirements and the scope of the project for submitting the fresh proposal to CED.

Commission's Response

The Commission observes that the Petitioner is yet to ensure full compliance of this directive. The Commission thus directs that pending the implementation/roll out of the relevant IT module, the Petitioner shall finalize the formats (for manual compilation of MIS) within 1 month of issuance of this Order and submit quarterly MIS for the information of the Commission.

10.1.3. Metering /replacement of Non-Functional or defective/ 11KV Meters

Originally Issued in Tariff Order dated 16th July 2011

Commission's Latest Directive in Tariff Order Dated 28th April 2016

The Commission notes the submission made by the Petitioner and directs the Petitioner to continue with the submission of the status report. Further, the Commission directs the Petitioner to install smart meters as per Clause 8.4(3) of National Tariff Policy notified on 28th January 2016.

Petitioner's Response in the Present Tariff Petition

The status report on this directive has been submitted to Hon'ble JERC vide memo no. 2561 Dated 22.11.2016.

However, summary is as per under:

A. Status on consumer metering, reading and billing as on 30.9.2016:

Status on consumer metering, reading and billing as on 30.9.2016 is attached as Annexure A of the Petition

B. Status on Installation of Smart Meters as per Provision 8.4(3) of NTP notified on 6.1.2016.

In this regard, it is intimated that the Smart Grid Pilot Project for approx 30,000 consumers amounting to Rs. 28.58 Crore has got approved from National Smart Grid Mission (NSGM), Ministry of Power, New Delhi and M/s REC Power Distribution Company has been appointed as Project Management Agency. Under this project, around 30,000 smart meters will be installed in the project area.

Further, Detailed Project Report (DPR) for the implementation of Smart Grid of whole Chandigarh has been prepared within an approximate cost of Rs. 373.21 Crore and having the provision of Smart Meters for balance consumers. The same was discussed in Distribution Reforms Committee (DRC) during the meeting held on dated 16.11.2016 which is being sent to Ministry of Power for the accord of approval accordingly.

Commission's Response

The Commission has taken a serious view of the fact that the Petitioner is yet to ensure full compliance despite repeated directives of the Commission. The Commission directs the Petitioner to identify and submit a detailed action plan to ensure 100% fully functional 11 kV meters within 1 month of issuance of this order and ensure compliance of this directive before 31st December 2017. No further extension will be entertained by the Commission in this context.

10.1.4.Energy Audit

Originally Issued in Tariff Order dated 16th July 2011

Commission's Latest Directive in Tariff Order Dated 28th April 2016

The Commission notes the submission made by the Petitioner and directs the Petitioner to continue submission of the quarterly status report and ensure that Energy Audit Report of the FY 2015-16 is submitted along with next tariff filing.

Petitioner's Response in the Present Tariff Petition

The status report on this directive has been submitted to Hon'ble JERC vide memo no. 3208 Dated 15.11.2016.

However, it is submitted that the earlier estimate for Design, Supply, Erection, Testing & Commissioning of Energy Audit system with 0.2S & 0.5S AMR compatible DLMS complaint 11 kV & 66 kV HT Meters with GPRS/GSM enabled Modem was revised as per functional requirement to Rs 89.75 Lacs and has been sent to higher authorities for approval. The further course of action will be taken accordingly.

Commission's Response

The Commission has taken a serious view of the fact that the Petitioner is yet to ensure full compliance despite repeated directives of the Commission. The Commission now directs the Petitioner to expedite all pre-requisite actions for undertaking energy audit in its licensee area

and ensure compliance of this directive within this financial year only. No further extension will be entertained by the Commission in this context.

10.1.5. Demand Side Management and Energy Conservation

Originally Issued in Tariff Order dated 16th July 2011

Commission's Latest Directive in Tariff Order Dated 07th April 2016

The Petitioner was 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. The Petitioner was also directed to inform the time bound action plan for installation of TOD meters.

The Commission has received the copy of approval of UT Administration for implementation of Efficient Lighting Program by distribution of LED bulbs in the UT of Chandigarh. The Commission directs the Petitioner to submit the detailed roll out plan at the earliest.

Petitioner's Response in the Present Tariff Petition

The status report on this directive has been submitted to Hon'ble JERC vide memo no. 3212 Dated 15.11.2016.

However, the proposal received from M/s EESL was submitted to competent authority of Chandigarh Administration for the approval and accordingly certain clarification have been sought from M/s EESL vide Memo No.2447 dated 01.09.2016. However, no reply has been received from M/s EESL till date. CED has again taken up the matter with M/s EESL vide Memo No.2716 dated 22.09.2016 & Memo No.3029 dated 24.10.2016 and Memo No.3158 dated 10.11.2016. The action will be taken as per EESL reply.

Commission's Response

The Commission observes that Petitioner has not yet reverted with the status of the action plan for installation of ToD meters. The Commission also observes that the Petitioner is also yet to submit the detailed roll-out plan of LED Bulbs in the UT of Chandigarh.

The Commission directs the Petitioner to take up the matter with the highest authorities and submit the roll-out for ToD metering as well as distribution of LED bulbs in the licensee area of the CED within one month of issuance of this order so as to fully comply with both the directives before 30th November 2017. No further extension will be entertained by the Commission in this matter and any further non-compliance will be viewed seriously.

10.1.6.Manpower Deployment

Originally Issued in Tariff Order dated 16th July 2011/ Business Plan Order dated December 28th 2015

Commission's Latest Directive in Tariff Order Dated 28th April 2016

The Commission notes the submission made by the Petitioner and directs the Petitioner to expedite availability of information as desired by MoP in the meeting held on 09th March 2015.

Further the Petitioner should make recruitment of manpower as per the report approved by the Commission and submit the status report by 30th September 2016.

Petitioner's Response in the Present Tariff Petition

The status report on this directive has been submitted to Hon'ble JERC.

However, summary is as per under:-

The required information in respect of clarifications sought by the MOP, has already been forwarded to the Director (R&R) Govt. of India, Ministry of Power, New Delhi vide this Office Memo No. 1680 dated 16.6.16 for approval of Manpower Study as recommended by JERC. However the outcome is still awaited.

The case regarding approval of Manpower Study as recommended by the JERC vide its Order dated 29.12.14 has been sent to Govt. of India, Ministry of Power, New Delhi for final approval. Further, to ensure that the work may not suffer till the posts are sanctioned by the Govt. of India, a decision was taken for filing up the posts covered in previous sanction of GOI as well as now approved by JERC. Accordingly, posts have been filled up through outsource basis / promotion basis have been submitted in tabulated manner

Commission's Response

The Commission directs the Petitioner to arrange follow up at the level of the Secretary (Powe)r of the UT with the Government of India in this matter.

Further the Petitioner should make recruitment of manpower as per the report approved by the Commission and submit the status report by 30^{th} September 2017

10.1.7. Segregation of T&D losses and loss reduction trajectory

Originally Issued in Tariff Order dated 7th May 2012

Commission's Latest Directive in Tariff Order Dated 28th April 2016

The Commission notes the submission made by the Petitioner and directs the Petitioner to install the interface meters at all feeders by 30th September 2016 and revert to the Commission with quarterly segregated T&D loss data thereafter.

Petitioner's Response in the Present Tariff Petition

The status report on this directive has been submitted to Hon'ble JERC vide memo no. 2559 Dated 23.11.2016.

However, it is submitted that the earlier estimate for Design, Supply, Erection, Testing & Commissioning of Energy Audit system with 0.2S & 0.5S AMR compatible DLMS complaint 11 kV & 66 kV HT Meters with GPRS/GSM enabled Modem was revised as per functional requirement to Rs 89.75 Lacs and has been sent to higher authorities for approval.

Further, a Smart Grid Project for whole Chandigarh has been approved by Distribution Reform Committee (DRC) on dt-16/11/16 for the amount 373.21 crore. The same will be forwarded to by NSGM, GoI for further approval. This project will help in determining T&D loss of Chandigarh Area.

Commission's Response

The Commission has taken a serious view of the fact that the Petitioner has repeatedly failed to comply with the directive over the years on the pretext of ensuring compliance under one scheme or another.

The Commission now directs the Petitioner to submit the action plan for installation of interface meters at all feeders within 1 month of issuance of this order. The Commission also directs the Petitioner to submit a detailed report of voltage wise T&D losses before 31st October 2017 failing which the Commission will be constrained to take appropriate action against the Petitioner.

10.1.8.Initiate action for Corporatization of the Electricity Department

Originally Issued in Tariff Order dated 10th April 2015

Commission's Latest Directive in the Tariff Order Dated 28th April 2016

The Commission notes the submission made by the Petitioner and directs the Petitioner to submit quarterly progress reports in this matter.

Petitioner's Response in the Present Tariff Petition

The status report on this directive has been submitted to Hon'ble JERC vide memo no. 2623 Dated 28.11.2016.

However, the Executive Engineer Electricity OP Division No-1 has intimated vide memo No-7092 Dt-11/07/16 that the tender for corporatization of Electricity Department was floated on Dt-16/6/16 with pre bid meeting on dt-23/6/16 and opening date as 05/07/16 and no representative of any firm has attended the pre bid meeting and no bid was uploaded by any bidder up to on due date, i.e. 05/07/16.

Commission's Response

The Commission directs the Petitioner to expedite the compliance of the directive.

10.1.9. Strengthen the CGRF and give it wide publicity about it

Originally Issued in Tariff Order dated 10th April 2015

Commission's Latest Directive in Tariff Order Dated 28th April 2016

The Commission notes the submission made by the Petitioner and directs the Petitioner to continue its efforts to further strengthen the CGRF and submit quarterly progress reports in this matter.

Petitioner's Response in the Present Tariff Petition

The status report on this directive has been submitted to Hon'ble JERC vide memo no. 2621 Dated 28.11.2016.

However, CED has already provided 2-No.s LDCs, 1-No. steno typist and 1-No. Peon to CGRF for day to day functioning.

Further, for wide publicity, the public notice of CGRF has again been published in three newspapers like Chandigarh Tribune (English), Amar Ujala (Hindi) and Ajit (Punjabi).

Commission's Response

The Commission has noted the compliance of the Directive. The Commission further directs the Petitioner to expedite shifting of CGRF to the new office premise..

10.1.10. Renewable Purchase Obligation:

Originally Issued in Tariff Order dated 7th May 2012

Commission's Latest Directive in Tariff Order Dated 28th April 2016

The Commission notes that though the Petitioner has not made any specific submission in regard to fulfilment of this direction it has submitted a plan to fulfil RPO till the FY 2015-16. The Commission will examine the matter at the time of True-up of FY 2015-16. Further MoP has set target of 8% RPO to be achieved till 2022. As a part of this target, the Petitioner is required to install 50 MW solar capacity. The Petitioner is required to submit a road-map regarding the same.

Petitioner's Response in the Present Tariff Petition

The status report on this directive has been submitted to Hon'ble JERC vide probable memo no. 2651 Dated 30.11.2016.

However, the Renewable Purchase Obligation (RPO) up to the FY 2015-16 have already been fulfilled by the CED and no back lock is pending on the account of CED. The respective information in respect of RPO upto the FY 2015-16 had already been forwarded vide this Office Memo No. 2097 to 2100 Dated 28.07.2016.

With the consultation of M/s CREST (Nodal Agency for Installation of Solar Power Project in UT Chandigarh), the road map to install 50 MW Solar capacity in view of MOP target of 8% RPO till 2022, is as under:-

| S. | Year | Installed Capacity |
|-----|---------------------------|--|
| No. | | |
| 1. | 2015-16 | 4.42 MW (based on actual) |
| 2. | 2016-17 (till 31.03.2017) | 10 MW (Projection) (till 30.10.2016-8.03 MW) |
| 3. | 2017-18 | 16 MW |
| 4. | 2018-19 | 23 MW |
| 5. | 2019-20 | 30 MW |
| 6. | 2020-21 | 40 MW |
| 7. | 2021-22 | 50 MW |

However, the DNIT for the purchase of Non Solar Power is under consideration for approval.

Commission's Response

Action taken is noted. The Petitioner is required to comply with the revised RPO requirements of the Commission amendment in Regulations dated 22^{nd} August 2016. The non-solar requirement can be tied up with PTC.

10.1.11. Filing of Petition on time

Originally Issued in Tariff Order dated 10th April 2015/ Business Plan Order dated 28th December 2015

Commission's Latest Directive in Tariff Order Dated 28th April 2016

The Commission notes that this time there was considerable delay in filing of the Petition. The Petition was filed on 29th February i.e. 2 months after passing of MYT Order. The Petitioner should ensure that henceforth all the Tariff Petitions should be filed on or before 30th November.

Petitioner's Response in the Present Tariff Petition

CED is taking all efforts to comply with the time lines provided by the Commission.

Commission's Response

The Commission has noted that historically the Petitioner has never filed its Petition on time. The Commission now directs the Petitioner to submit the subsequent Tariff Petitions on or before 30th November failing which the Commission will be constrained to take appropriate action against the Petitioner as per the Judgement issued by the Hon'ble APTEL in OP No. 1 of 2011.

10.2. Directives dropped in this Order

While examining the compliance note and supporting documents submitted by the Petitioner in the present Petition, it has been observed that some of the directives issued in previous Tariff Orders are no longer required.

The Commission is of the view that since these directions have been complied with satisfactorily, these directions are no longer required in the present context and are required to be dropped or replaced with new directions. No further compliance/status is required to be submitted by the Petitioner for the following directives:

10.2.1.Load Forecasting Study

Originally Issued in Tariff Order dated 7th May 2012

Commission's Latest Directive in Tariff Order Dated 28th April 2016

The Commission notes the submission made by the Petitioner and directs the Petitioner to expedite the study for load forecasting for short term, medium term and long term by 30th December 2016. The Petitioner should also submit the quarterly status report for progress in this matter.

Petitioner's Response in the Present Tariff Petition

The status report on this directive has been submitted to Hon'ble JERC.

The Load Forecasting Petition was filed by Chandigarh Electricity Department, U.T Chandigarh and the same was admitted in the Commission vide Petition No. 216/2016 followed by the hearing of subject cited Petition conducted at Hon'ble JERC at Gurgaon on dated September 16th, 2016. In its Order dated 16.09.2016, Hon'ble JERC has noted the compliance of its direction and take the study report on record for future reference.

Commission's Response

The Commission notes the compliance and drops this directive.

10.2.2.Optimization of Power Purchase from short-term sources

Originally Issued in Tariff Order dated 7th May 2012

Commission's Latest Directive in Tariff Order Dated 28th April 2016

Action taken is noted. Further as per recent directive of Ministry of Power all utilities will procure short-term power from a common platform. The Petitioner is directed to comply with the same.

Petitioner's Response in the Present Tariff Petition

The status report on this directive has been submitted to Hon'ble JERC.

The CED is in process to purchase short term power as per the Ministry of Power guidelines issued on dated 06/04/16.

Commission's Response

The action taken is noted. The directive is dropped.

Annexure 1: Public Notices published by the Petitioner



कारी अभियंता (सी)

HINSTITUTE

rocure.gov.in/

on the Institute's only) and CPP app as per the No hard copy of ute. ement Officer,

RI, Shimla

SH TMENT

ad from Chail to taling & Tarring & PCC Parapets r bids called vide 14451-58 dated nistrative reasons.

at 10.00 Hrs. t 10.30 Hrs

upto 10.30 Hrs

at 11.00 Hrs.

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निगम

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हो दोपहर 02.00 बजे 21.02.17 को सांय

5 भवन का निर्माण। प्रनुमानित लागत : 15 महीने। निविदा

ार.)-॥∕सेंद्रल जोन

ोनीपत

स्थानीय निकाय /2017-3 सी-**II** ते कर दाता अधना हरवायेगा, उसको

ॉ को अनुज्ञात की गए अपने सभी

2.2017 के बाद

अलीय प्रणाली के शत अतिरिक्त खूट

ा में स्थित है. से ना बकाधा सम्पत्ति

त्र मुखतान केशलैर आदेशानुसार र निगम, सोनीपत



Distributed By : Raizel Pharma: Chandigarh. 9216199984, 9216199985, 9317954181

चंडीगढ़ प्रशासन सार्वजनिक सूचना

संयुक्त विद्युत विनियामक आयोग (जेईआरसी)

के पास अभियांत्रिकी विभाग की विद्युत शाखा द्वारा दायर वित्तीय वर्ष 2017-18 हेतु एआरआर एवं टैरिफ पेशकश के संबंध में

अभियांत्रिकी विभाग (सीईडी), यूटी चंडीगढ़ की विद्युत शाखा द्वारा प्रस्तुत वित्तीय वर्ष २०१५-१६ ट्र अप हेतु याचिका पर, वितीय वर्ष २०१६-१७ के वार्षिक निष्पादन के पुनः परीक्षण एवं कुल राजस्व आवश्यकता (एआरआर) एवं वितीय वर्ष २०१७-१८ हेतु टैरिफ पेशकश पर विभिन्न साझेधारकों से आपत्तियां/टिप्पणियां आमंत्रित हैं।

आयोग ने विभाग को यह निर्देश दिया है कि विभिन्न साझेधारकों से आपत्तियों/टिप्पणियों के आमंत्रण हेतु एक सार्वजनिक सूचना

वित्तीय वर्ष 2017-18 हेतु विद्युत व्यवसाय के इसके वितरण हेतु सीईडी द्वारा दायर याचिका का संक्षिप्त विवरण निम्नानुसार है :~

| S. No. | Particulars | Approved in TO dated 10th April 2015 | Revised Approved in T.O. 28th April 2016 | Actual |
|-----------|---|--|--|----------|
| 1. | Cost of power purchase for full year | 647.12 | 654.55 | 690.81 |
| 2. | Employee costs | 60.45 | 63.13 | 61.80 |
| 3. | Administration and general expenses | 2.73 | 3.59 | 4.39 |
| 4. | R&M expenses | 11.32 | 13.87 | 10.01 |
| 5. | Depreciation | 3.73 | 12.86 | 14.65 |
| 6. | Interest and finance charges | 6.73 | 5.71 | 6.02 |
| 7. | Interest on working capital | 3.40 | 1- | - |
| 8. | Return on NFA /Equity | 1.70 | 4.44 | 4.44 |
| 9. | Provision for Bad Debt | - | - | 7.79 |
| 10. | Interest on Security Deposit | 3.15 | 11.59 | 8.31 |
| 11. | Total Revenue Requirement | 740.33 | 769.74 | 808.22 |
| 12. | Less: Non-Tariff Income | 17.82 | 23.32 | 21.92 |
| 13. | Less: Revenue from Sale through UI | | 3.93 | 7.58 |
| 14. | Net Revenue Requirement | 722.51 | 742.50 | 778.71 |
| 15. | Revenue from'retail sales at Existing Tariff | 744.63 | 664.40 | 656.59 |
| 16. | FPPPCA billed during the year | | | 3.47 |
| 17. | Revenue Surplus/(Gap) for the Year | 22.12 | (78.10) | (118.66) |
| 18. | Gap approved as part of Regulatory Asset (in MYT Order dated 28.04.16) | | | 78.10 |
| 19. | Net Surplus/(Gap) carried forward | | | (40.56) |

(करोड़ रू. में)

| SNO | Particulars | Approved | Estimated |
|-----|--|----------|-----------|
| 1. | Cost of power purchase for full year | 728.70 | 688.20 |
| 2. | Employee costs | 65.35 | 65.93 |
| 3. | R&M Expense | 6.70 | 14.93 |
| 4. | Administration and general expenses | 6.16 | 6.16 |
| 5. | Depredation | 14.40 | 14.53 |
| 6. | Interest and finance charges | 7.19 | 7.41 |
| 7. | Interest on working capital | | |
| 8. | Return on Equity | 12.69 | 12.80 |
| 9. | Provision for Bad Debt | - | 8.11 |
| 10. | Interest on Consumer Security Deposit | 10.95 | 10.79 |
| 11. | Total Revenue Requirement | 852.15 | 828.86 |
| 12. | Less: Non-Tariff Income | 24.48 | 17.63 |
| 13. | Net Revenue Requirement (11-12-13-14) | 827.66 | 811.23 |
| 14. | Revenue from retail sales at Existing Tariff | 827.72 | 801.17 |
| 15. | FPPCA | (#) | 69.80 |
| 16. | Revenue Surplus/ (Gap) for the Year | 0.06 | 59.74 |

| 2.3 | वित्तीय वर्ष 2017-18 हेतु पुनः परीक्षण हेतु कुल राजस्व आवश्यक | ता एवं घाटा निम्न तालिका में दिया | गया है। (करोड़ रू. में) |
|-------|---|-----------------------------------|-------------------------|
| S. No | Particulars | Approved | Revised Proposed |
| 1. | Cost of power purchase for full year | 760.16 | 731.87 |
| 2. | Employee costs | 69.67 | 70.25 |
| 3. | Administration and general expenses | 6.61 | 6.61 |
| 4. | R&M expenses | 8.64 | 19.21 |
| 5, | Depreciation | 16.69 | 16.80 |
| 6. | Interest and finance charges | 9.27 | 9.47 |
| 7. | Interest on working capital | | |
| 8. | Interest on Security Deposit | 11.34 | 11.17 |
| 9. | Return on NFA /Equity | 14.77 | 14.88 |
| 10. | Provision for Bad Debt | | 8.71 |
| 11. | Total Revenue Requirement | 897.14 | 888.98 |
| 12. | Less; Non-Tariff Income | 25.71 | 17.63 |
| 13. | Net Revenue Requirement | 871.43 | 871.35 |

| | | 3333 a őz. sia Gefeel az | | Canding Front and Co | निया भूगामा अस्तर हो। |
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| 7 PG45 | 817 | 9 **** | 4 94 | 5,4 | 640 |
| 44 | 5 %. | 6 8 mm | | 511 | 314 |

| S. No. | Category / Slab of Consumers | Projected |
|-----------|---|---------------------------|
| A | Domestic | 292.14 |
| В | Commercial | 306.61 |
| C | Large Supply | 88.73 |
| D | Medium Supply | 70.01 |
| E | Small Power | 10.55 |
| F | Agriculture | 0.45 |
| G | Public Lighting | 13.03 |
| Н | Bulk Supply | 46.69 |
| I | Others Temporary Supply | 5.28 |
| | Total | 833.49 |
| 5 वित्तीय | वर्ष 2017-18 हेतु वर्तमान टैरिफ पर प्रस्तावित राजस्व अंतर निम्न तालिका में दि | या गया है (करोड़ रू. में) |
| S. No. | Particulars | FY 2017-18 |
| 1. | Net Revenue Requirement | 871.35 |
| 2. | Revenue from retail sales at Existing Tariff | 833.49 |
| 3. | Revenue Surplus / (Gap) for the Year | (37.85) |

2.6.1 सीईवी ने वीन समान किरतों में समृत जाने वाली एमार्टीश आईत में सन्तीय अधोग हुए। अधुनीतित 265.04 रू. की विनियंत्रात असित एवं 208.17 कोई रू. के विनीय को 2013-14 तक राजस्य और सीत विनियंत्रक असीत हुए। अधीन में पेशकत की है एवं उन्होंने उस अनुरूप 157.72 कोईह रू. की पहली किरत सम्बर्धीत की है जीकि विनीय को 2017-18 हेतु टैरिक अनुमेदन के एक भाग के रूप में बसूनी जाएंगे।

तदनुसार, निहित लागत सहित प्रस्तावित राजस्व अंतर निम्रानुसार होगा (करोड़ रू. में) FY 16-17 FY 17-18 Particular 15.42 (37.85) (157.72) (44.33) 59.74 (40.56) Add: Amortization of Regulatory Asset (40.56) Interest Rate 9.30% (3:77) 15.42 (180 16)

| Tariff | EXISTING | TARIFF | PROPOSI | ED TARIFF |
|---------------------------|-------------------------------|-----------------------------------|--------------------------------|---------------------------------|
| Category | Variable Cost (Rs./kWh) | Fixed Cost (Rs./ kW/ Month) | Variable Cost (Rs. /kWh) | Fixed Cost (Rs/ kW/Month) |
| Domestic | | | | |
| 0-150 kWh | 2.55 | 10.00 | 2.75 | 12.00 |
| 151-400 kWh | 4.80 | 10.00 | 6.00 | 12.00 |
| Above 400 kWh | 5.00 | 10.00 | 6.20 | 12.00 |
| Commercial | | | | |
| 0-150 kWh | 5.00 | 20.00 | 6.20 | 24.00 |
| 151-400 kWh | 5.20 | 100.00 | 6.40 | 122.00 |
| Above 400 kWh | 5.45 | 100.00 | 6.80 | 122.00 |
| Large Supply | 5.65 | 100.00 | 7.00 | 122.00 |
| Medium Supply | 5.35 | 100.00 | 6.50 | 122.00 |
| Small Power | 5,30 | 20.00 | 6.45 | 24.00 |
| Agriculture | 2,90 | | 2.90 | - |
| Public Lighting | 5.35 | 100.00 | 6.50 | 122.00 |
| Bulk Supply | 5.55 | 100.00 | 6.80 | 122.00 |
| Others . Temporary Supply | 8.10 | 100 | 9.90 | |

निर्दाय को 2017-18 होतु 180.16 करोड़ रू. का केवल जनत्व अंतर स्वीकार किया गया है एवं सभी ओपसों पर लगभग 22% तक टेरिस यूदि करने को पेशकत इसके विचारण होतु जोअतरसी के समध प्रसुत्त को गई है। तम्ही, इसी आपूर्त में कोई युद्धि नहीं है। टेरिफ यूदि के उपरांत, प्रसाधित टेरिफ पर वितरिय को 2017-18 होतु प्रयोगित जनतम्ब अंतर नियमनुस्तर होता (करोड़ रू. में)

| Particulars | FY 17-18 |
|---|----------|
| ARR for FY 17-18 | 871.35 |
| Revenue at Existing Tariff | 833.49 |
| Surplus/ (Gap) for the year | (37.85) |
| Add: Surplus/(Gap) carried forward | 15.42 |
| Add: Amortization of Regulatory Asset | (157.72) |
| Total Cap | (180.16) |
| Additional Revenue from Proposed Tariff | 182.75 |
| Sumlus/ (Gan) to carry Forward | 1.25 |

Suplus (Gap) to carry Forward 1.25 तिर्विध वर्ष 2017-18 में रिटर टेरिंगर में प्रवाशिक सरेगोर के अलगा, सोहंदी ने टेरिंगर अनुमूर्ण में निम्न पिकारोंन की भी पेक्करण की है -मूर्त अपनेवाताओं को छोड़कर रूपने टेरिंगर में प्रवाशिक सरेगोर के स्वाध एवं अन्यार्थ पून्यार्थ में मुंदि (हां) दो एवं जी हार्गियों को कम कर्त हितु लाल जीत के बादर जेने करस्टर अनीत्रिक्त कमलेवियों के निव्धास्त्र एवं प्रवन्ध निव्धास्त्र हेतु मुख्यत-प्रेम्य इंटरेशन एवं मुख्यत- वाशिक्य उद्धार के हो प्रकार को करस्टर आनुत (प्यास्त्र) टेरिंगर केणी को कार्य (हां) यह पेक्सरा की ता है कि निम्नतुम्हर पोस्तु केणी के ताल प्रशासन्क प्रशिष्य केंद्र एवं केस्कानल इंस्ट्ट्यूट होतु टेरिंगर सम्पनिष्ट किया जाए।

(III) वार पंकारत के पांच है कि निस्तुत्व कर (दू ज्या के तांत्र अस्तानक प्राराध कर दूव कर वालनान इंस्टर-टू-ह तु एटे एटे कर सावस्थ कर वाण्य ।
"असेन कुलता में मुंसा कर तें हु। अनुमान इंस्टरीमी प्रीवाण वा संबद मार्गियाल के तें हु। यूटी प्राराध के प्राराध कर है। यूटी एटे प्राराध के प्राराध के प्राराध कर प्राराध कर प्राराध के प्राराध

प्रतिस्तें में अपनित्या त्यास कर सकते हैं।

4. 2017-13 असीर हेतु ट्रीरफ सरिका को प्रतिस्त है।

4. 2017-13 असीर हेतु ट्रीरफ सरिका को प्रतिस्त है।

अधिका अधिका तिस्त असे संस्त , कमा में, 511, 5वीं मीजात, पूर्व सीचवातवा, हितलस सिविंग, सेस्टर 9-डी, पूर्व, पंजीवा-160009 से

लिखित निवंद पर प्रता किए जा सकते हैं।

5. इच्छूप स्तित्त हित्स अपने हों।

5. इच्छूप स्तित्त हित्स अपने हों।

5. इच्छूप स्तित है।

6. हिती को देशन इसे मटे कर सकती है।

6. हिती को 2017-18 है। सुमत्त होंग्ल परिका http://www.chdengineering.gov.in पर किम्मण को वेससाइट पर भी

उपनक्ष है एवं आवेग की वेससाइट http://www.jercuts.gov.in पर करतका दे एवं वासे से जाननीत की जा सकती है।

7. यह निर्देश हिता अपने प्रति मीजात है। अपनितंत कित परिवंद के तर से अकता उपनोक्का की लेगी की तर से से दास की जा रही है। प्रता निर्देश को निर्देश के असीर से हम्मण की की की तर से से हम से की की तर से से हम से की की तर से से हम ते हम से असीर हम से असीर हम से असीर हम से असीर हम ते हम से असीर हम हम से असीर हम से असीर हम से असीर हम से असीर हम हम से असीर हम हम से असीर हम हम हम हम से असीर हम हम से असीर हम हम से असीर हम हम हम हम हम हम से

दिनांक : 7.2.2017



Annexure 2: Public Notices published by the Commission for intimation of Public Hearing

JIO J GAIJUHE HIURI GOT converged network in offer a combination of oLTE, digital commerce, es, Cisco said. ANS

l in January

istrial Workers (CPI-IW) oint and stood at 274, TNS

Financial Adviser (Ministry of External Affairs), said any project initiated by Indian firms in the CLMV (Cambodia, Lao, Myanmar and Vietnam) region facing roadblocks would be assisted by the MEA to address the issue.

under the aegis of the United Forum of Bank Unions (UFBU), affected normal banking operations like cash deposits, withdrawal from branches and cheque clearances. The UFBU is an umbrella body of nine bank unions.

Major demands of the

Bank employees prot

bank employees adequate recruitme cadres, stringent m to recover bad loa accountability of to tives. The bankers h sought criminal

RY HEALTH SCHEME (ECHS) PLOYMENT NOTICE

pplications to engage following staff on 2 months, renewable for additional period:

naecologist - 01 (Ambala on thr vac ex Offrs - 07 (01 - each at Gohana, Kamal, Ambala on tfrvac ex Sonepat & Nahan. aingarh). Pharmacist - 01 (Naraingarh). Ambala, 1x Kaithal and 1x Naraingarh). kshetra and 1x Naraingarh).

fr- 03 (01 each at Sonepat, Naraingarh 'amunanagar). Lab Tech - 05 (01 each 2 at Ambala on tfr vac ex Kaithal & Dental Hyg - 02 (Panipat & Karnal). nacist-07 (01 each at Sonepat, Panipat, da & Gohana). Safaiwala - 01 (Nahan).

uneration see website www.echs.gov.in. Mar 17. Application with attested copies Documents required to be attached with Degree/diploma whatever is applicable O (for ESM) (e) Appx to AO 135/78 duly book (for ESM) (g) character Certificate, ions will not be entertained.

7 (1000h) at ECHS Cell Ambala Cantt. ing interview. TA/DA not admissible.

> Sd/- (NS Negi) Lt Col, OIC ECHS. For Stn. Cdr.



JOINT ELECTRICITY REGULATORY COMMISSION (For the state of Goa and Union Territories)

2st Floor, HSIIDC Office Complex, Vanijya Nikunj Complex, Udyog Vihar, Phase V, Gurgaon (Haryana) Ph: 0124-2342851, 2342852 Fax: 0124-2342853 Email: secy-jerc@nic.in, Website: www.jercuts.gov.in

PUBLIC NOTICE

Notice is hereby given to all interested persons that the Electricity Department of UT of Chandigarh has filed a petition for Tariff Proposal for FY 2017-18 & Aggregate Revenue Requirement (ARR), Annual Performance Review of FY 2016-17 and True-up of FY 2015-16 in respect of Chandigarh UT. The same has been admitted under Petition No. 229/2017 and is available on Commission's website www.jercuts.gov.in

The Commission shall hold a Public Hearing on the above Petition as per the schedule given below:

| Date/Day | Time | Venue |
|--|---------------------|--|
| The Company of the Co | PROGRAMO DE CONTROL | The Auditorium Hall, Govt. Museum and Art Gallery, Sector- 10C, Jan Marg, UT Chandigarh |

Interested persons may file objections/suggestions in six copies on the above Petition, in person or through e-mail: secy-jero@nic.in /registered post on or before 14.03.2017 addressed to The Secretary, JERC (for Goa & UTs) with a copy to the Superintending Engineer, Electricity Department, Electricity Operation Circle, Room no. 511, 5th Floor, UT Secretariat, Deluxe Building, Sector 9-D, UT Chandigarh- 160 009. (e-mail: seelecty@gmail.com) Sd/-

(Keerti Tewari) Secretary

INDI BASE REPA

Air Officer Cor Chandigarh inv experienced/Re outsourcing of within Aerospac Chandigarh, The would be aeros with the help of (from 01 Apr 17 www.eprocure. downloaded, Las hrs on 08 Mar 11 Room) and tenc 08 Mar 17 at Firms/Contracto AOC, Base Re Chandigarh-160 For detailed en 2641090 (Extn. except closed he davp 10802/11/0634/1

RICULTURAL G BOARD

alini, Shimla-2 11601

Procurement

irms/agencies having experience in LAN ing. The work will be



LALIT KALA AKADEMI (NATIONAL ACADEMY OF ART) Rabindra Bhawan, New Delhi

The Lalit Kala Akademi invites applications for the booking of its Art Galleries at Rabindra Bhavan, New Delhi for the year 2017-18.

Application forms can be downloaded from the Akademi's website www.lalitkala.gov.in or

The Tribune Wed, 01 March 2017

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ਨਿਮਨਹਸਤਾਖਰ ਵੱਲੋਂ ਗਵਰ ਪੰਚਾਇਤੀ ਰਾਜ, ਲੋਕ ਨਿਰਮਾਟ ਐਲ.ਐਂਡ.ਸੀ. ਸੁਸਾਇਟੀਆਂ, ਜਿ ਸਰਟੀਫਿਕੇਟ ਹੋਵੇ। ਹੇਠ ਲਿਖੇ ਕੰਮਾਂ at par the NIT ਰਾਸ਼ੀ) ਮੋਹਰਬੰ ਵਿੱਚੋਂ ਯੋਗ ਸਮਾਇਟੀਆਂ ਵੱਲੋਂ ਮਿਤ ਬਿਆਨੇ ਦੀ ਰਕਮ ਦਾ ਸਬੂਤ ਦੇ ਕੇ ਸਸਾਇਟੀ ਵੱਲੋਂ ਟੈਂਡਰ ਪਾਪਤ ਨਹੀ

Annexure 3: List of Stakeholders

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