Order in Petition No. 193/2016

Order on

True up for FY 2014-15,
Review of FY 2015-16
Aggregate Revenue Requirement for 1st MYT Control
Period (FY 2016-17 to FY 2018-19)

&

Wheeling & Retail Supply Tariff for FY 2016-17 For

DNH Power Distribution Corporation Limited



07th April 2016

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

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

QUORUM Shri S.K. Chaturvedi (Chairperson) Ms. Neerja Mathur (Member)

Petition No. 193/2016

In the matter of

Approval of True up for FY 2014-15, Review of FY 2015-16, Aggregate Revenue Requirement for 1st MYT Control Period (FY 2016-17 to FY 2018-19) & Wheeling & Retail Supply Tariff for FY 2016-17.

And in the matter of

DNH Power Distribution Corporation LimitedPetitioner

ORDER

Passed On: 07th April 2016

- a. This order is passed in respect of the Petition filed by DNH Power Distribution Corporation Limited for approval of True up for FY 2014-15, Review of FY 2015-16, Aggregate Revenue Requirement for 1st MYT Control Period (FY 2016-17 to FY 2018-19) & Wheeling & Retail Supply Tariff for FY 2016-17.
- b. As detailed in the Business Plan Order issued in Petition no. 182/2015 dated 15th December 2015, the Commission had directed the Petitioner to submit the duly approved MYT Petition for the Control period from FY 2016-17 to FY 2018-19 within m21 days of the issuance of the Order. The Commission had also directed that the retail tariff proposal is to be submitted only for the first year of the control period namely FY 2016-17 whereas ARR calculations are to be submitted for the full control period i.e. FY 2016-17 to FY 2018-19.
- c. This Order is passed by the Commission, after detailed scrutiny of the information and documents filed with the Petition, filed subsequently during the course of the technical validation session and also other information as available with the Commission.
- d. After receiving the Petition, the Commission scrutinized the contents of the Petition and called for further information/data so as to take a prudent view of the Petition. The Commission also held a technical validation session of this Petition to determine the

sufficiency of the Petition. Comments/objections/suggestions were also invited from the public/stakeholders. Public hearing was held and parties/people present were heard. The schedule of activities performed under this quasi-judicial process was as below:

| Particulars | Details |
|------------------------------|--------------------------------|
| Date of Admission | 19th January 2016 |
| Petition No. | 193/2016 |
| Technical Validation Session | 15 th February 2016 |
| Public Hearing | 19th February 2016 |

- e. The approved tariff of FY 2016-17 as detailed in the Chapter "Tariff Schedule" shall come in force with effect from 01st April 2016 and shall remain valid till further orders of the Commission.
- f. The licensee shall publish the revised tariff structure and the salient features of the tariff within one week in three daily newspapers in the respective local languages of the region, besides English, having wide circulation in its respective areas of supply.
- g. The licensee will compute fuel and power procurement cost variations and adjustments shall be made in the consumer bills based on the Fuel & Power Purchase Cost Adjustment (FPPCA) formula notified by the Commission. The approved per unit cost of power purchase (Rapproved) for use in the FPPCA formula (paisa per unit) is 328 paisa per unit for FY 2016-17.
- h. Ordered as above, read with attached document giving detailed reasons, grounds and conditions.
- i. Copy of this order may be sent to the Petitioner, CEA and Administration of DNH. It shall be placed on the website of the Commission.

Sd/-नीरजा माथुर सदस्य Sd/-सुधीर चतुर्वेदी अध्यक्ष

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

स्थान : ग्डगाँव

दिनांक: 06 अप्रैल, 2016

Certified Copy

(Keerti Tewari) Secretary

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List of Abbreviations

| | Full Form | |
|---|--|--|
| : | Administration & General | |
| : | The Electricity Act, 2003 | |
| : | Aggregate Revenue Requirement | |
| : | Compound Annualized Growth rate | |
| : | Capital Expenditure | |
| : | Current Consumption | |
| : | Central Electricity Authority | |
| : | Central Electricity Regulatory Commission | |
| : | Central Generating Station | |
| : | Commercial Operation Date | |
| : | Joint Electricity Regulatory Commission for the state of Goa and Union Territories | |
| : | Circuit Kilometer | |
| : | Deendayal Upadhyaya Gram Jyoti Yojana | |
| : | Electricity Department of Andaman and Nicobar Islands | |
| : | Central Public Sector Undertaking | |
| : | The Electricity Act, 2003 | |
| : | Fixed Charges | |
| : | Fuel & Power Purchase Cost Adjustment | |
| : | Financial Year | |
| : | Gross Fixed Assets | |
| : | Horse Power | |
| : | High Tension | |
| : | Integrated Power Development Scheme | |
| : | Joint Electricity Regulatory Commission for the state of Goa and Union Territories | |
| : | Kilo Volt Ampere | |
| : | Kilo Watt Hour | |
| : | Late Payment Surcharge | |
| : | Low Tension | |
| : | Million Unit | |
| : | Mega Watt | |
| : | Multi Year Tariff | |
| : | Non-Domestic Supply | |
| : | Net Fixed Assets | |
| : | Operation & Maintenance | |
| : | Power Grid Corporation of India Ltd. | |
| : | Plant Load Factor | |
| : | Power Exchange | |
| : | Restructured Accelerated Power Development and Reforms Programme | |
| : | Renewable Energy Certificate | |
| | | |

Multi Year Tariff Order

MYT Control Period (FY 2016-17 to FY 2018-19)

| Abbreviation | | Full Form | |
|--------------|---|--|--|
| RoE | : | Return on Equity | |
| RPO | : | Renewable Purchase Obligation | |
| R&M | : | Repair & Maintenance | |
| SBI CAPS | : | SBI Capital Market Limited | |
| SBI PLR/SBAR | : | SBI Prime Lending Rate/State Bank Advance Rate | |
| SCC | : | System Control Centre | |
| T&D | : | Transmission & Distribution | |
| UI | : | Unscheduled Interchange | |
| VC | : | Variable Charges | |

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. Office of the Commission is presently located in Gurgaon, Haryana.

1.2. Electricity Regulatory Process in Dadra & Nagar Haveli

The DNH Power Distribution Limited (Erstwhile ED –DNH) had submitted their Petitions for Determination of Aggregate Revenue Requirement and Tariff before the Commission and the Commission subsequently issued the following Tariff Orders.

Table 1-1: Details of Tariff Petitions so far submitted by the Petitioner & Tariff Orders Issued by JERC

| Sr. No. | For FY | Filing date | Date of Tariff Order |
|------------|---|--------------------------------|---------------------------------|
| 1. 2010-11 | | 06 th April 2010 | 01st November 2010 |
| 2. | 2011-12 | 08 th March 2011 | 13 th September 2011 |
| 3. 2012-13 | | 30 th November 2011 | 31 st July 2012 |
| 4. 2013-14 | 30 th November 2012 | 25 th March 2013 | |
| 5. | 2014-15 | 25 th November 2013 | 05 th May 2014 |
| 6. | 2015-16 | 02 nd December 2014 | 01st April 2015 |
| 7. | Business Plan for 1 st MYT Control Period | 8 th September 2015 | 15 th December 2015 |

1.3. Filing and Admission of Present Petition

As per clause 5.1 of the first amendment to the JERC Multi-year Distribution Tariff Regulations 2014, issued vide notification dated $10^{\rm th}$ August 2015, the Control Period for Multi-Year Tariff implementation is from FY 2016-17 to FY 2018-19.

The Commission had directed the Petitioner to submit the duly approved MYT Petition for the Control period from FY 2016-17 to FY 2018-19 within 21 days of the issuance of the Business Plan Order (issued in Petition no. 182/2015 dated 15th December 2015).

The MYT Petition was then filed vide letter dated 14th January 2016 and was received at the Commission's office on 19th January 2016.

The Commission, in the interest of timely issuance of the Order, admitted the Petition on 19th January 2016 as Petition no. 193/2016.

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 Secretariat of the Commission for carrying out the technical due diligence and validation of data of the Petitions filed by the utilities, obtaining and analyzing information/clarifications received from the utilities and submitting relevant issues for consideration of the Commission.

For purpose of analysis of the Petition, the Commission's staff held discussions with the Petitioner/Petitioner's representative, obtained information/clarifications wherever required and carried out technical validation with regard to the information provided by the Petitioner. The Commission's staff interacted regularly with the Petitioner to seek clarifications and justification on various issues essential for the analysis of the Business Plan. The Commission's staff conducted Technical validation session (TVS) with the Petitioner during which discrepancies in the Petition were pointed out and additional information as required by the Commission was indicated. The Petitioner submitted its replies, as shown below, in response to the various queries raised by the Commission during the course of analysis of the Petition, which were taken into account for finalization of the present Petition.

S.No. Subject Date 19th January 2016 1. Admission of Petition 28th January 2016 2. Deficiency note on the Petition sent by the Commission 3. 02nd March 2016 Reply to the deficiency note 4. 15th February 2016 Technical Validation Session (TVS) held at the Commission's office Reply by the Petitioner on the queries raised by the Commission 5. 02nd March 2016 during the TVS

Table 1-2: List of Interactions with the Petitioner

1.5. Public Hearing Process

The Commission directed the Petitioner to publish the summary of the present Petition in the abridged form to ensure public participation. The public notices were published by the Petitioner for inviting objections/ suggestions from the stakeholders on the True Up of FY 2014-15, Review of FY 2015-16, Aggregate Revenue Requirement for 1st Control Period (FY 2016-17 to FY 2018-19) & Wheeling and Retail Tariff Proposal for FY 2016-17:

Sr. **Place of Circulation Date** Name of Newspaper No. 23rd January 2016 1 Gujarat Samachar (Gujarati) Surat 23rd January 2016 Navbharat Times (Hindi) Mumbai 23rd January 2016 The Free Press Journal Mumbai (English)

Table 1-3: Details of public notices published by the Petitioner

The Petitioner also uploaded the Petition on its website http://powerdnh.nic.in for inviting objections and suggestions on the Petition. Interested parties/stakeholders were requested to file their objections/ suggestions on the Petition to the Commission with a copy to the Petitioner on or before 19th February 2016. The copies of the public notices published by the Petitioner are attached as **Annexure 1** to this order.

The Commission also published public notices in the leading newspapers giving due intimation to stakeholders, consumers, objectors and the public at large about the public hearings to be conducted by the Commission on 19th February 2016 at 10:00 AM in President Hall, Yatri Niwas, Silvassa as given below:

The details of the public notice published by the Commission are as below.

| S. | Date | Description | Name of Newspaper | Place of Circulation |
|-----|--------------------------------|------------------------|--------------------------|----------------------|
| No. | | | | |
| 1. | 28 th January 2016 | 1 st Notice | Gujarat Samachar | Surat |
| | | | (Gujarati) | |
| 2. | 28 th January 2016 | 1st Notice | Indian Express (English) | Vadodara |
| 3. | 28 th January 2016 | 1 st Notice | Navbharat Times (Hindi) | Mumbai |
| 4. | 15 th February 2016 | Repeat Notice | Gujarat Samachar | Surat |
| | | | (Gujarati) | |
| 5. | 15 th February 2016 | Repeat Notice | Indian Express (English) | Vadodara |
| 6. | 15 th February 2016 | Repeat Notice | Navbharat Times (Hindi) | Mumbai |

Table 1-4: Details of public notices published by the Commission

Copies of the public notice published by the Commission for intimation of the public hearings are attached as **Annexure 2** to this order.

The Commission received five written objections/suggestions on the Petition, for filing objections/suggestion. The replies to the objections during the public hearing were sent by the Petitioner after the hearing.

During the public hearing, each objector was provided with an opportunity to present his views on the Petition filed by the Petitioner. All those present in the hearing, irrespective of whether they had given a written objection or not, were given an equal opportunity to express their views. The list of objectors is attached at **Annexure 3** to this order. The list includes the objectors who gave their written objections; those who gave their written objections and presented before the Commission; and other stakeholders who did not give their written objection or prior intimation but presented before the Commission orally. The Commission has examined the issues and concerns expressed by stakeholders. The major issues raised/indicated during the public hearing, along with the comments/replies of the utility and the views of the Commission, thereon, have been summarized in **Chapter 2** of this order.

1.6.Organization of the Order

This Order is organized in the following chapters:

- ❖ Chapter 1 of the Order provides the background and brief description of the regulatory process undertaken by the Commission.
- ❖ Chapter 2 of the Order lists out various suggestions and objections raised by the objectors in writing as well as during the public hearing before the Commission. Various suggestions and objections have been summarized, followed by the response of the Petitioner and the rulings of the Commission on the various issues.
- **❖ Chapter 3** of the Order discusses the views of the Commission on True-Up of FY 2014-15.
- **❖ Chapter 4** of the Order discusses the views of the Commission on Review of FY 2015-16.
- ❖ Chapter 5 of the Order discusses various components of ARR for the MYT Control Period FY 2016-17 to FY 2018-19, key issues and Commission's ruling on the same.

- **❖ Chapter 6** of the Order discusses the Tariff Principles and Design & Category Wise Tariffs for FY 2016-17 approved by the Commission.
- **Chapter 7** of the Order discusses the Tariff Schedule approved by the Commission.
- ❖ Chapter 8 of the Order discusses the Open Access Charges for FY 2016-17 approved by the Commission.
- ❖ Chapter 9 of the Order provides necessary directions of the Commission to DNHPDCL.

2. Summary of Objections/Suggestions 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 published in the newspapers in abridged form in the given format duly inviting comments/objections from the public as per provisions of the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 and JERC (Multiyear Distribution Tariff) Regulations 2014 as amended.

The public hearing was held on 19th February 2016 at Silvassa. During the public hearing, some persons who had submitted the objections in writing presented their objections/suggestions in person before the Commission. Other participants from the general public, who did not submit written objections earlier, were also given an equal opportunity to offer their views/suggestions in respect of the present petition.

The list of objectors is attached as **Annexure 3** to this order which includes the stakeholders:

- 1) Those who gave their written objections & did not intend to present orally during the public hearing.
- 2) Those who gave their written objections & expressed desire to present orally also during the public hearing.
- 3) Those who gave their written objections but had not desired to express orally, but later chose to present orally also. They were also given an opportunity to present orally before the Commission during the public hearing.
- 4) Those who did not give their written objection or prior intimation, but participated in the hearing on the spot and/or also gave written submissions.

All stakeholders were provided the opportunity to present their suggestions. Those stakeholders who did not give prior written objections/suggestions and expressed their views, objections, suggestions during the hearing were replied to by the Petitioner after the hearing.

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

The Commission appreciates the efforts of various stakeholders for providing suggestions / comments / observations and making the Power Sector responsive and efficient. The details of the issues raised by the Stakeholders, the response of the Petitioner thereon and the views of the Commission on the same are as follows:

2.2.1. Regarding consideration of impact of Open Access transactions in projections

Stakeholder View:

The stakeholder has submitted that the energy sales data given in the table 17 is neither correct nor representative as the Petitioner has not considered the impact of Open Access transactions while projecting for MYT Control Period. The stakeholder is of the view that if the Petitioner is following the policy that it will not take the phenomena of 'Open Access' in to account and is not setting its power procurement policies accordingly, the Petitioner is incurring a loss of more than Rs.1.25 per unit on each surplus unit, which is purchased but sold out in open market. The stakeholder has accordingly requested the Commission to take this aspect into their consideration and pass on appropriate orders, to amend power purchase estimates.

The stakeholder also submitted that the increase in open access sales should result in equivalent reduction in retail sales in HT/EHT category. Further, the Petitioner should not purchase power from infirm allocations.

Petitioner Reply:

The Petitioner has submitted that the energy sales for the FY 2015-16 have been estimated based on the historical trends of energy sales witnessed in the UT of Dadra and Nagar Haveli and that the actual sales for FY 2015-16 and the power purchase shall be submitted at the time of true up for FY 2015-16. The Petitioner has further submitted that the consumers have opted for short term open access of 221 MW and the same cannot be made the basis for projection of sales for FY 2015-16. The Petitioner has considered same approach for the MYT Control Period also.

Commission View:

The Commission has considered the energy sales as approved in its order for approval of the Business Plan. Accordingly the power purchase cost has also been projected on the basis of the energy requirement approved for FY 2015-16 & MYT Control Period.

2.2.2. Due diligence in sale of Surplus Power:

Stakeholder View:

The stakeholder has submitted that DNHPDCL has sold surplus power of Rs. 7 Cr. in FY 2014-15, with estimated sales of Rs. 108 Cr. in FY 2015-16 and Rs. 161 Cr. in FY 2016-17. The average realization of approximately Rs. 3.1 per unit, as against the average power purchase cost of approximately Rs. 4.2 per unit. This is causing erosion of the surplus and will eventually lead wiping of all the accumulated surplus.

Petitioner Reply:

The Petitioner has submitted that the rate of Rs. 3.1 per unit has been arrived considering the historical rate at which surplus power has been sold by the DNHPDCL. It may be noted that the surplus power is mostly sold during the non-peak hours only during which the rate per unit is considerably less than the rates in the peak hours.

Commission View:

The Commission will like to clarify that there are always some unscheduled purchase/sale of electricity in an electrical system and the rates of such interchange is governed through various factors such as frequency and applicable regulations. Similarly, the rate of sale in power exchanges is driven by the market conditions.

However, the Commission advises the Petitioner to undertake appropriate actions for power purchase planning so as to ensure that there is no loss to the utility in case there is substantial surplus available at any stage.

2.2.3. Improper power purchase planning in absence of Load Forecasting study.

Stakeholder View:

The stakeholder submitted that the Petitioner has not been complying with the directives of the Commission regarding short term, medium term and long term load forecasting and framing schemes to meet industry demand for uninterrupted supply & commercial mechanism for continuous and non-continuous industry. In absence of such schemes and studies, DNHPDCL had always been estimating 10-11% growth in its energy requirements and thus had been increasing its contractual obligations by entering into a number of power purchase agreements. Further, DNHPDCL, not only had been avoiding ways and measures which might help in strengthening the system, but also had been endangering consumers with continuous and critical load with the threats of inconsistent power supply (unplanned and forcefully implemented load shedding & uncertain power curtailments due to over drawal reported by WRLDC).

Petitioner Reply:

The Petitioner has not submitted any response.

Commission View:

The Commission has noted that the Petitioner has provided the load forecasting study with the Tariff Petition. The Commission is of the view that it has already approved in the Business Plan Order the rationale for projecting and approving the sales and energy requirement for the MYT Control Period. The Petitioner is however advised to relook into its power purchase planning on the basis of inferences drawn from the Load Forecasting Report.

2.2.4. Renewable Purchase Obligation (RPO) Compliance by DNHPDCL

Stakeholder View:

The stakeholder submitted the following points related to compliance with Renewable Purchase Obligation (RPO) and as mentioned under chapter 3 (Review of FY 2015-16) of the ARR filed by DNHPDCL:

"For FY 15-16, till December, 2015 the DNHPDCL has procured 0.28 MU of solar energy from its rooftop solar plants and has purchased 4970 solar energy certificates renewable. Out of 4970 certificates the 3470 certificates were purchased by the open access consumer. For the period January, 2016 to March 2016 the DNHPDCL will procure the remaining 40822 solar renewable energy certificates to fulfil its solar RPO for the FY 2015-16. During the period April, 2015 to December 2015 the open access consumers had purchased 11050 non solar renewable energy certificates and the DNHPDCL had purchased 6000 non solar renewable energy certificates. Further, the DNHPDCL has purchased 30 MU of hydro power at the rate of Rs. 5.20 per unit from the Himachal Pradesh State Electricity Board Limited (HPSEBL) till December, 2015 and proposes to buy further 45 MU of hydro power from the Himachal Pradesh State Electricity Board Limited (HPSEBL) from January to March 2016 to fulfil its non-solar obligation as per the JERC's Procurement of renewable Energy Regulations, 2010."

It seems from the above statement that while reporting its compliance towards Solar RPO fulfilment, DNHPDCL has used 4970 solar RECs out of which 3470 RECs were purchased by open access consumers.

The stakeholder found it pertinent to mention and put on record that RECs purchased and submitted by open access consumers are to be used for their RPO compliance and use of the same by DNHPDCL is illegal and not in line with the provisions of the JERC (Procurement of Renewable Energy) Regulations 2010.

Further, DNHPDCL has submitted that it has purchased 30 MU of hydro power from Himachal Pradesh State Electricity Board Limited (HPSEBL) for its RPO compliance.

To this submission of DNHPDCL the stakeholder would like the Hon'ble Commission to seek clarification on following points:

- ✓ Does hydro power purchased from Himachal Pradesh State Electricity Board Limited (HPSEBL) be categorized as power from a renewable energy source? The hydro power supplied by HPSEBL might include supply from hydro power plant having capacity of 25 MW and above, which doesn't qualify as a renewable energy source as per Ministry of New and Renewable Energy (MNRE) definition of RE sources.
- ✓ The power purchases by HPSEBL from Small Hydro Plant are usually done under preferential tariff scheme for the RPO compliance of the state. So under such circumstances can DNHPDCL use purchased quantum for RPO compliance, as such power is already being used by the state of Himachal Pradesh for RPO compliance.
- ✓ DNHPDCL has submitted an solar power purchase of 0.28 MU at a cost of 16.03 crore, according to which the per unit cost comes out to be 572.50 Rs./kWh which seems highly inflated.

Petitioner Reply:

The Petitioner has not submitted any response.

Commission View:

The Commission has approved the REC quantum as per the Petitioner's additional submission, though the actual proof of REC and physical RPO is lower than as projected by the Petitioner. In the absence of any clarity from the Petitioner, the Commission has computed the backlog on the basis of submissions made by the Petitioner during the true up of FY 2010-12, FY 2011-12, FY 2012-13, FY 2013-14 and FY 2014-15. Till FY 2014-15, there is a shortfall of 208.12 MU (Solar: 61.50 MU and Non-Solar: 146.62 MU) for RPO Compliance. Further, after adjustment of estimated physical and REC purchase during the FY 2015-16 by the Petitioner as discussed in the foregoing paragraphs, the cumulative shortfall increases to 281.93 MU (Solar: 62.44 MU and Non-Solar: 219.49 MU) in FY 2015-16. The Commission has decided to approve the provision of RPO Compliance up to 31st March 2016 (including shortfall in previous years) in the review of FY 2015-16 by purchase of Solar and Non Solar REC. The Commission has further decided to approve the cost of purchase of REC (both Solar and Non Solar) at the floor price approved by the CERC.

Further, the Commission has sought proof of qualification of purchase of power from HPSEBL towards RPO compliance, against which the Petitioner has submitted the documentary proof that availability of power from HPSEBL is from small hydro stations only.

2.2.5. Distribution Losses:

Stakeholder View:

The stakeholder has raised concerns that the actual losses have gone up and reached to the level of 4.95% without any justification for the increase in losses. In fact during the year, losses should have been reduced due to infrastructure created by one of the consumers for switching over to 220 kVA transmission and the overall losses should be in range of 3% keeping in view the geographical area it serves, pattern of consumption, minimal agriculture in the UT and 98% industrial consumption.

Petitioner Reply:

The Petitioner has submitted that there is no merit in the issue sought to be raised by the objector. Only for FY 2014-15, the Petitioner had achieved losses of 4.95%. The Petitioner has already filed the report recording monthly energy as Annexure I to the ARR and Tariff Petition.

It is stated that the loss level of the Petitioner is one of the lowest in the country and the industrial consumers are getting substantial benefit if the reduced losses in the form of yearly tariff which is lesser than the industrial tariff of other States.

The Petitioner has followed the details given in Regulations 15 & 16 to the full extent. Based on the said methodology, the Petitioner has proposed a loss reduction target of 4.70 %. It is not possible to reduce the losses beyond the same and if such reduction is required, there will have to be huge capital expenditure for the same.

Commission View:

The Commission has already approved the loss reduction trajectory in the Business Plan Order issued on 15th December 2015 along with the justification and has considered same for the purpose of projections for the MYT Control Period.

2.2.6. Energy Audit

Stakeholder View:

The stakeholder has submitted that the Petitioner should submit all the documents establishing capability and Rate reasonability for awarding EA works so as to check reasonableness of the expenditure, due to which parameters like:

- ➤ T&D losses can be checked by enhancing system capabilities and identifying shortcomings,
- ➤ AT&C losses can reduced by identifying and opting ways to minimize theft and other commercial losses in the system,
- ➤ GIS & other IT implementation would be facilitated by having adequate knowledge of system which in-turn would reduce 0&M cost in longer terms

The department had been continuously avoiding energy audits and from petition till True Up exercise of TO 2014-15, DNHPDCL had been predicting losses varying from 4.70% in petition; 4.75% in review; and 4.95% in True-up.

It has to be understood now, that for EHT & HT Consumers Transmission losses are only 3% (as calculated on Pg. 80 & by the time now should have been bifurcated voltage wise) and total LT losses/AT&C losses are 23-24%. This scenario is prevalent since inception of DNHPDCL and they have done nothing to lower AT&C losses and bifurcate and determine voltage wise HT/EHT losses, which would definitely help determine voltage wise tariff.

Petitioner Reply:

The Petitioner has not submitted any response.

Commission View:

The Commission would like to highlight that the Petitioner has submitted the Energy Audit report for FY 2014-15. However, as this report is not tallying with the submission of the Petitioner in respect to sales, energy availability and losses, the Commission has directed the Petitioner to submit the revised Energy Audit report along with revised figures for FY 2014-15 by 30th September 2016 to validate the same.

2.2.7. Power Purchase Cost

Stakeholder View:

The stakeholder has submitted that the past arrears are recovered immediately from the consumers without approval of the Commission, but rebate, if any, is not passed on to the consumers.

Petitioner Reply:

The Petitioner has submitted that as per the order of the Hon'ble APTEL dated 26th March, 2015, the Petitioner had to refund an amount of Rs. 41.86 Crores to the consumers as excess recovery in the year FY 2011-12 towards FPPCA charges. The Petitioner has treated the refund in the bills of the current financial year FY 2015-16 by giving credit into the billed amount of the consumers. The same is being deducted from the ARR of the FY 2015-16.

Commission View:

The Petitioner should ensure recovery/refund of any amount due to the consumer strictly in accordance with the Orders/Regulations in this regard.

2.2.8. Review of Power Purchase agreements/allocations

Stakeholder View:

The stakeholder has submitted that looking into improvements in performance of power generators, the Petitioner should review its requirements and sources of such supply.

Right now, the utility has arrangements for getting 1075 MW power from various stations. The consumption remains around 650 - 700 MW including through open access. Earlier, when performance of the power stations was affected by various factors, net availability was around the actual requirements.

Now, the power generating stations are doing well and DNHPDCL even during the MYT period will not be able to consume the entire power allocated. Therefore, it is the right time to select power sources based upon reliability and reasonability of tariff and give up at least 200 MW. The stakeholder has estimated that if 200 MW power from stations like Mauda is given up, the power tariff in UT will go down by at least by 20 paisa per unit.

Petitioner Reply:

The Petitioner has submitted that it has noted the observations and would like to submit that appropriate steps would be taken by the utility to minimize the power purchase cost and also ensure reliable supply of power to its consumers.

Commission View:

The Commission would like to advise that the Petitioner should undertake review of existing allocations and agreements, keeping in view of the existing as well as future requirements.

2.2.9. Payment of minimum charges to RGPPL:

Stakeholder View:

The stakeholder has drawn attention of the Commission towards the note below Table 45, page 51. DNHPDCL has been paying minimum charges in spite of the fact that there was no generation from the plant and has sought direction to the DNHPDCL to recover the wrongly paid minimum charges and add it to the surplus for the year FY 2014-15, thereby passing on the benefits to the consumers.

Petitioner Reply:

The Petitioner has submitted that that to honor the terms of PPA signed with the RGGPL it has considered fixed charges to be paid to RGGPL during the MYT Control Period. However, presently the matter is sub-judice and the DNHPDCL is not paying any fixed charges to RGGPL.

Commission View:

The Commission has noted the submission of the Petitioner.

2.2.10. FPPCA of Rs. 41.86 Cr. for the year FY 2011-12

Stakeholder View:

The Petitioner has refunded Rs. 41.86 Cr. from its resources, and the stakeholder has appreciated the refund and compliance of the directions. However, the stakeholder has objected that the Petitioner has not taken any action to get it from the government where it had wrongly been transferred in the form of surplus for that year. In fact, the Petitioner must show it in the ARR, as receivables from Government and thereby its surplus for the year under review and for MYT years will go up by said amount.

Petitioner Reply:

The Petitioner has submitted that as per the order of the Hon'ble APTEL dated 26th March, 2015, the DNHPCL shall have to refund an amount of Rs. 41.86 Crores to the consumers as excess recovery in the year FY 2011-12 towards FPPCA charges. The DNHPDCL is refunding the amount of Rs. 41.86 crores in the bills of the current financial year FY 2015-16 by giving credit into the billed amount of the consumers.

Commission View:

The Commission has considered the appropriate treatment regarding the recovery of FPPCA charges in the true up exercise in accordance with the Tariff Regulations.

2.2.11. Inappropriate projections of capital expenditure and capitalization

Stakeholder View:

The stakeholder has submitted that the DNHPDCL has repeatedly, as a practice, been projecting unrealistic and unachievable targets year on year in its ARR filing. The Commission has also advised the Petitioner in the past to show expenses for the achievable targets and refrain from including unrealistic targets. The practice of the Petitioner has been to include a number of projects in the original ARR petition and get that approved by Hon'ble Commission. However, while filing the revised ARR, some of the planned projects do not find a place and the capital expenditure against the projects undertaken is so adjusted, that the total capital expenditure remains the same as approved in the original ARR petition. That translates to undertaking lesser number of projects at the higher cost.

Petitioner Reply:

The Petitioner has not submitted any response.

Commission View:

The Commission has allowed capex and capitalization for FY 2014-15 as per audited accounts. The Commission has considered the closing assets of FY 2013-14 as opening assets for FY 2014-15. Further, the Commission has detailed the reasons for approval of

capital expenditure and capitalization for the MYT Control Period in the Business Plan Order itself.

2.2.12. Non consideration of consumer contribution in Gross Fixed Assets:

Stakeholder View:

The stakeholder has submitted that the Table 25 presented by the Petitioner is erroneous, opening balance is wrong and the GFA is also subject to further reduction on account of consumer contribution, which is not accounted by the Petitioner. It is requested that Hon'ble Commission should not approve faulty GFA but insist that the Petitioner submits correct data so that review is made close to actuals.

Petitioner Reply:

There is no error in Table 25 filed by the Petitioner. The Petitioner has given all the figures as per its books which are duly audited.

Commission View:

The Commission has considered the closing assets of FY 2013-14 as opening assets for FY 2014-15, appropriately considering the impact of consumer contribution.

2.2.13. Accounting of Grant of Rs.100 Cr. by GOI

Stakeholder View:

In last year's hearing, it was pleaded by the Petitioner that it has to pay the income tax as it had received a grant of Rs.100 Cr. from the Govt. of India. Neither last year's ARR nor this year's ARR disclose as what this grant was, what was the purpose and how the utility has used it. There is no benefit which has been envisaged to the consumers because of the said grant.

Petitioner Reply:

The DNHPDCL would like to submit to the Hon'ble Commission that the Grant received by the DNHPDCL was in the form of Revenue Grant and was used in the purchase of power. Hence, the Corporation has paid the Income Tax.

Commission View:

The Commission has considered Rs.100 Crore grant from Govt. of India as a revenue grant and necessary review order has also been issued in this regard on 20th October 2015.

2.2.14. Depreciation:

Stakeholder View:

The stakeholder submitted that amount of depreciation worked out by Petitioner is still erroneous, as it is calculated on erroneous GFA. No depreciation shall be allowed on assets created by consumer contribution.

Petitioner Reply:

The respondent has not properly understood the concept of depreciation. Depreciation is allowed as a charge in lieu of the wear and tear for fixed assets. It is one of the components of tariff determination. The MYT Regulations of this Hon'ble Commission provide as under with respect to depreciation -

23. Depreciation

- (a) Depreciation shall be calculated for each year of the control period on the original cost of the fixed assets of the corresponding year.
- (b) Depreciation shall not be allowed on assets funded by capital subsidies, consumer contributions or grants.
- (c) Depreciation shall be calculated annually as per straight-line method over the useful life of the asset at the rate of depreciation. The same shall be as specified in the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2014. (The same may vary as notified by CERC from time to time.)
- (d) The residual value of assets shall be considered as 10% and depreciation shall be allowed to a maximum of 90% of the original cost of the asset while computing 90% of the original cost of the asset.
- (e) Depreciation shall be charged from the first year of operation of the asset.

Provided that in case the operation of the asset is for a part of the year, depreciation shall be charged on proportionate basis.

(f) A provision of replacement of assets shall be made in the capital investment plan.

The Depreciation for the MYT Control Period has been sought for by applying category-wise assets depreciation rates (as per CERC Regulations) on the opening balance of GFA and average of the addition during each year of the Control Period.

The Petitioner has gone by the actual gross block and the details of the capitalization available with the Petitioner in the books.

Commission View:

The Commission has considered the depreciation as per JERC Tariff Regulations 2009 and MYT Regulations 2014 and amendments therein.

2.2.15. Interest on Working Capital & Finance Charges:

Stakeholder View:

Hon'ble Commission has allowed the interest on working capital and finance charges, which will increase surplus of DNHPDCL. If these charges and interest is not approved, it will result in reduction of tariff. If DNHPDCL has really incurred any sum on these accounts, it should be allowed else normative allocation is against the principal of justice and should not be made.

Petitioner Reply:

It is stated that the interest on working capital and financial charges are being allowed by the Hon'ble Commission on a normative basis as per the MYT Regulations, 2014. Further, the DNHPDCL is now working as a corporation and will incur interest on working capital and other financial charges in the future. Hence, the Petitioner in terms of the MYT Regulations, 2014 is entitled to the interest on working capital and financial charges for the True-up for the FY 2014-15, Review for the FY 2015-16, Aggregate Revenue Requirement for the MYT Control Period FY 2016-17 to FY 2018-19 FY as submitted in the Tariff Petition.

Commission View:

The Petitioner is entitled for Interest on loan and working capital on normative basis based on JERC Tariff Regulations and amendments therein.

2.2.16. Return on Equity (RoE):

Stakeholder View:

RoE calculation needs to be rectified giving effect to consumer's contribution

Petitioner Reply:

With regard to Return on Equity, the MYT Regulations of the Hon'ble Commission provide as under-

"27. Return on equity

(a) Return on equity shall be computed on 30% of the capital base or actual equity, whichever is lower:

Provided that assets funded by consumer contribution, capital subsidies/grants and corresponding depreciation shall not form part of the capital base. Actual equity infused in the Distribution Licensee as per book value shall be considered as perpetual and shall be used for computation in this Regulation.

(b) The return on the equity invested in working capital shall be allowed from the date of start of commercial operation.

(c) 16% post-tax return on equity shall be considered irrespective of whether the Distribution Licensee has claimed return on equity in the ARR petition."

For 2014-15 and FY 2015-16, the provisions of the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 were in force which in Regulation 23 provided that the Petitioner is entitled to a return on capital base of 3% on net block of approved assets. Accordingly, the Petitioner has computed the Return on capital base at 3% of the net block at the beginning of FY 2014-15. With regard to the MYT period, the Petitioner has followed the MYT Regulations. Return on equity has been computed on actual paid up equity. The rate of return has been taken as 16% as per the MYT Regulations. The details of the same has been given in the Table 67 of the Tariff Petition.

It is not correct to state that the assets are contributed by the consumers. The Petitioner has been vested with the assets, liabilities etc. under a Statutory Transfer Scheme from the Government and in lieu thereof has issued equity shares. The Petitioner is entitled to the return on equity on the equity shares actually issued by the Petitioner and as appearing on its books of accounts. The Objector is mixing up the accounts of the Electricity Department with that of the Petitioner, which is incorrect. The primary object of the unbundling and corporatization of the Petitioner under Section 131 and other applicable provisions of the Electricity Act is to ensure that the Petitioner operates as a commercial entity and recovers tariff based on commercial principles in terms of Section 61 of the Electricity Act. If the contention of the Objector is to be accepted, the entire purpose of the unbundling of the Petitioner would be defeated. The issues raised by the Objector are not correct.

Commission View:

The Petitioner is entitled for Return on Equity on normative basis based on JERC Tariff Regulations and amendments therein.

2.2.17. Income Tax:

Stakeholder View:

The Petitioner has claimed income tax at Rs.21 Cr. based on the contention that it is fully recoverable from the consumers ignoring the ruling of Hon'ble JERC, that, as per Regulation 31(2), it has to be limited up to," ... on actual, tax on income, if actually liable to be paid, shall be limited to tax on income on equity on allowed excluding incentives". Therefore, Income tax for the year 15-16 will not exceed to Rs.2.49 Cr. Projection of Income Tax @ Rs.15 Cr. every year is not based upon estimates close to actuals and not based on reg. 31 (2). The stakeholder estimates that it will not exceed Rs.2.5 Cr. during the MYT period.

Petitioner Reply:

It is stated that as per the JERC Terms and Conditions for determination of Tariff Regulations, 2009, "Obligatory taxes, if any, on the income of the generating company or the licensee from its core / licensed business shall be computed as an expense and shall be

recovered from the customers/consumers". The DNHPDCL has made a provision of Rs. 21 Crore towards tax on income for the FY 2015-16. The provision has been made taking into account the anticipated expenses and revenue of the DNHPDCL for the FY 2015-16. Also the Petitioner has submitted the data to this Hon'ble Commission and will give a copy of the same to the Objector.

The Petitioner has made all claims strictly in accordance with the MYT Regulations and the same need to be allowed.

Commission View:

The Commission has allowed Income tax based on audited accounts for FY 2014-15. From FY 2015-16, the Commission has allowed the same based on JERC Tariff Regulations and amendments therein.

2.2.18. Bad Debts:

Stakeholder View:

No Bad Debts should be allowed. There are no previous bad debts and now the Petitioner has adequate security deposit and other means of the recovery. Over and above 98% are industrial consumers amongst whom hardly there is any chance of bad debts. No legal action has been initiated by the Petitioner for recovery of any bad debt, which is a basic requirement for claiming bad debts. Therefore, no bad debt should be allowed.

Petitioner Reply:

Bad debts are there for all utilities and it is not correct to contend that the Petitioner does not have any bad debts. Provision for bad debts is a well understood concept including for regulatory tariff determination. The Petitioner has therefore made a provision for the same. The Hon'ble Tribunal has also previously upheld the issue of provision for bad debts. The Petitioner has made all claims strictly in accordance with the MYT Regulations and the same need to be allowed.

Commission View:

The Commission has allowed bad debts based on JERC Tariff Regulations and amendments issued therein from time to time. The Commission has allowed bad debts based on audited accounts for FY 2014-15 only.

2.2.19. Tariff Related:

Stakeholder View:

The Stakeholder submitted that surplus generated should be passed on to consumers and therefore, power tariff should be revised substantially downwards. It is a settled principle

of tariff that tariff must be fixed close to actual cost. If there is deficit, tariff is increased, similarly, when there is surplus, tariff must be revised downwards.

Petitioner Reply:

No response submitted.

Commission View:

Noted.

2.2.20. Tariff to be reduced at least by 50 paisa per unit

Stakeholder View:

Tariff to be reduced at least by 50 paisa per unit

Petitioner Reply:

No response submitted.

Commission View:

Noted.

General Issues:

2.2.21. Procedure for surrender of Power by Consumers:

Stakeholder View:

Many consumers who wish to surrender the power are not able to do that because DNHPDCL is asking for seven years fixed charges, whereas supply code as approved by Hon'ble Commission provides that fixed charges are payable only if the consumer surrenders the power during the first two years connection. Once a period of two years is over, no fixed charge is recoverable. It is prayed that DNHPDCL be directed to follow the provisions of the Supply Code in this regard and make surrender of power simpler for the consumers.

DNHPDCL is also asking for minimum charge on transfer of power. It is unjustified as the transferee will be using and consuming power in the contracted period. If transfer is permissible under the Regulations, how is the minimum charge payment by the transferor justified.

Petitioner Reply:

The DNHPDCL has noted the objections.

Commission View:

The Petitioner should follow the Supply Code Regulations as issued by JERC from time to time.

2.2.22. Augmentation of Infrastructure:

Stakeholder View:

It is suggested that projects and schemes approved by JERC must be completed in time. DNHPDCL's entire supply is through single 400 kV line. In case it trips the entire UT would be without power. Bhilad has three lines availability and it is suggested that DNHPDCL must also create infrastructure as early as possible to tap power through three lines to avoid halt of manufacturing in UT.

Petitioner Reply:

The DNHPDCL has noted the objections. However, it is submitted that the details regarding augmentation of infrastructure is beyond the scope of the present proceedings which are limited to the tariff determination process.

Commission View:

The Commission has issued necessary directives to ED-Transmission Division for necessary action in this regard.

2.2.23. Slab based Tariff:

Stakeholder View:

Prior to the year 2014-15, there used to be a slab based tariff for HT consumers. Those consumers who consumed less energy, were to pay a lesser rates. That should be restored again. The restored three slabs were:

- ✓ Up to 50,000 units
- ✓ 50,001 to 5,00,000 units
- \checkmark 5.00.001 units and above

Petitioner Reply:

This Hon'ble Commission has already decided this issue in detail in the Order dated 05/05/2014. The Petitioner craves reference to the same.

Commission View:

Noted.

2.2.24. Rebate to 220 KVA consumers:

Stakeholder View:

During the public hearing on ARR for the year 14-15, two consumers who have 220 KV substations had made representations for rebate as they made investments and also their distribution losses were almost nil. In the interest of large number of consumers, Association has opposed the petition, but Hon'ble Commission found their demands justified and granted them rebate. Association has challenged the order of JERC before APTEL where appeal has been admitted and is likely to be decided soon.

JERC have provided this rebate for FY 2015-16 also. It is suggested by the stakeholder that till Hon'ble APTEL decides the matter, the JERC should not grant rebate for FY 2016-17. Also copies of submissions of the consumer's plea for rebate should be made available to the stakeholder to reply to protect the interests of large number of consumers. Also if Hon'ble APTEL decides the appeal in favor of objector, entire rebate granted should be collected back and passed on to other consumers for the FY 2014-15 & FY 2015-16.

Petitioner Reply:

The Petitioner is in agreement with the submissions made by the objector on this issue. It is respectfully submitted that though this Hon'ble Commission has already dealt with the issue being sought to be raised in the Tariff Order for FY 2014-15 dated 05/05/2014, the Petitioner is in a special position wherein most of the consumption is industrial and only a minuscule portion of domestic and agricultural consumption is present. Therefore, the special category and tariff being given to consumers at 220 KV voltage in other states cannot be simply duplicated in the case of the Petitioner.

Further, the tariff of the Petitioner is very competitive and much less as compared to the tariff for industrial consumers in other states and no additional benefit need to be given to the two consumers for operating at 220 KV. Therefore, the Petitioner has not proposed any separate tariff for consumers taking supply at 220 KV.

Commission View:

As decided earlier, the Commission will review it only after APTEL's judgement in this regard.

2.2.25. Consumer's participation in the management:

Stakeholder View:

The stakeholder suggests DNHPDCL must involve a consumer participatory approach in decision making. It is suggested that there should be three representatives in the Board of Directors from consumers, two to represent industrial consumers and one to other consumers. Right to nominate industrial director should be left to the industrial

association. For this DNHPDCL will have to amend its Articles of Association and also the company bylaws.

Petitioner Reply:

The DNHPDCL has noted the objections. However, it is submitted that the issue of consumer participant in management is beyond the scope of the present proceedings which are limited to the tariff determination process.

Commission View:

Noted.

2.2.26. Sharing of Balance Sheets

Stakeholder View:

The stakeholder requests the Commission to direct DNHPDCL to provide copies of Audited Accounts for last two years immediately as the utility has not shared these even after our request.

Petitioner Reply:

The Balance sheet is available on the website of DNHPDCL and is a public document. Any consumer can access the Balance Sheet from the website.

Commission View:

Noted.

2.2.27. Supervision Charges

Stakeholder View:

The stakeholder submitted that whenever, any new line / equipment etc. is installed, a supervision charge at 15% is taken from the consumer. JERC had it made clear that it should be only on the labour component and not on the total project cost. However, DNH PDCL is still levying on the total cost and it should refund the charges taken in excess.

The Petitioner is also charging service tax on this supervision charge but neither issuing service tax invoice nor giving the break-up which is its mandatory duty. JERC should direct the Petitioner to comply with the law and provide the tax invoice and break-up in the absence of which consumers are not able to take the credit of CENVAT.

Petitioner Reply:

It is respectfully submitted that this aspect has nothing to do with the issue of ARR and tariff. Supervision charges are charged in terms of the provisions of the Joint Electricity

Regulatory Commission (Electricity Supply Code) Regulations, 2010 which have separate provisions for charging of supervision charges with reference to the work to be carried out.

For various works, the provisions is as under -

"3.4 Service connection / extension work got done by consumers

The consumer shall have an option to get the work of drawing of service line from the licensee's distribution mains upto his premises as per the estimates and layout approved by the licensee through an appropriate class of licensed electrical contractor, and the work of extension of EHT and HT line, distribution or HT substation and LT line through an appropriate class of licensed electrical contractor as per the estimates and layout approved by the licensee. In such case the consumer himself shall procure the materials. The 12 material should, conform to relevant BIS specification or its equivalent and should bear ISI mark wherever applicable. The licensee may ask for documentary evidence to verify the quality of materials used. The consumer shall be required to pay the supervision charges as per the rates approved by the Commission.

The consumer shall get the work done within the timeframe as provided in Regulation 3.7 and if he needs more time he shall represent to the licensee with reasonable ground for extension of time and the licensee shall communicate his approval for the same to the Consumer."

3.6 Supply to Different Categories of Consumers

| LT Supply | , |
|-----------|---|
|-----------|---|

.......

- (3) (a) The licensee shall prepare an estimate for release of connection.
- (b) The estimate shall include security deposit, charges for laying the service line, distribution mains (if required) & material, and service connection charges etc, as approved by the Commission from time to time.
- (c) The Licensee shall publish a cost data book, and make it available to any interested person at a reasonable charge, and shall also place it on their website. The estimate as at (b) above shall be in accordance with the data published in the cost data book.
- (d) If the work is to be done by the developer/applicant / development authority, the Licensee may charge supervision charges as a percentage, of the estimated cost as specified in cost data book, which shall be deposited with the licensee before work begins.

(5) In case it is necessary to extend distribution mains for giving supply to the consumer, the licensee shall intimate the consumer, within 15 days in urban areas and within 20 days in rural areas, an advice containing the charges for extension of the distribution main, laying the service line, the amount of security deposit, any other charges as applicable and will also

intimate if any additional formalities are required to be carried out by the consumer. In case where the consumer has to lay the service line and extension of mains, the consumer shall pay the supervision charges on cost of extension of the distribution mains and laying the service line in addition to payment of other charges as may be applicable. The amount shall be payable in full within 7 working days along with completion of formalities, after which only any work for laying the distribution mains and service line can be taken up.

.....

5.3 Dedicated Feeder

Consumers desirous of getting power supply from dedicated feeders may make a request for such facility to the licensee. The dedicated feeder shall be extended from the power substation to the consumer's point of supply. In such cases the consumers shall be liable to pay the cost of Bay and all protection switchgears and its accessories 35 provided at the power substation for this feeder in addition to the cost of the feeder. On receipt of such request, the licensee will check the feasibility, based on merit, of providing a dedicated feeder to the consumer's premises. If found feasible, the consumer will be provided with a dedicated feeder and the consumer will be liable to pay additional charges such as supervision charges, etc. as approved by the Commission from time to time. The Licensee shall not extend electric supply to any other consumer from the dedicated feeder."

It is not clear as to which provision the objector is referring to. It is stated that there is no violation being committed by the Petitioner. The objector should not be allowed to make a general allegation and should file an appropriate petition if he is aggrieved by overcharging in any particular case.

The service tax that was being charged as per the provisions of the tax laws and cannot be waived off since it is a levy by authority of law.

Commission View:

The Commission advises the stakeholder to file a formal submission to the Commission along with documentary proof to enable the Commission to further scrutinize this issue in detail.

2.2.28. Professional Study: Line and Distribution Losses

Stakeholder View:

DNHPDCL has reported in the ARR that they have submitted a copy of the report of an expert on line & distribution losses to JERC, The stakeholder prays to the Commission to make the report public, as it apprehends that distribution losses in the categories other than 220 KVA and 66 KVA are highest in the country. An immediate action is needed in this regard. The stakeholder is willing to provide full cooperation to control and prevent the Distribution Losses.

Petitioner Reply:

It is respectfully submitted that the report has been submitted to this Hon'ble Commission, and if this Hon'ble Commission so directs, the report will be submitted to the objector.

Commission View:

The Commission directs the Petitioner to provide a copy of the said report to the respondent.

2.2.29. Non – observance of SOP in changing transformers / CTPT/ Meters / Line fault

Stakeholder View:

DNHPDCL is not following SOP prescribed by JERC in respect of changing the transformers / CTPT/ meters or in attending line faults. JERC should give directions to Petitioner to follow the SOPs and make data on line on their website.

Petitioner Reply:

It is respectfully submitted that in tariff proceedings, the objector should confine its objections to ARR and tariff related issues and not make wild allegations of non-compliance without there being any proof.

As stated hereinbefore this Hon'ble Commission has already notified the SOP Regulations and if there is any violation thereof, is it is for the appropriate consumer to approach this Commission with a specific petition and details.

Commission View:

Noted.

2.2.30. Publication of Complaints Handing Data on Website:

Stakeholder View:

DNHPDCL have reported that they have improved the complaint handling system in compliance to the direction made by Hon'ble Commission. The data should be published on the website so this Association can inspect and offer its suggestions and objections.

Petitioner Reply:

The DNHDCL would like to submit that the CGRF is in place in the UT of Dadra and Nagar Haveli and is taking care of the consumer grievances.

Commission View:

The Commission reiterates that the complaint handling mechanism should be made online for consumers so that any suggestions can be incorporated and made available to the public.

2.2.31. Refund of Registration fees:

Stakeholder View:

Petitioner is not observing JERC guideline on refund of the registration fees after releasing the power connection to the consumers. Hon'ble Commissions should issue directions that in time bound manner the Petitioner should clear all old cases and in future refund the fees promptly.

Petitioner Reply:

The Objector cannot make general statements and needs to take appropriate proceedings with adequate proof in terms of the Regulations notified by this Hon'ble Commission. In view of the above, there is no merit in the objections raised by the Objector.

Commission View:

The Commission advises the stakeholder to file a formal submission to the Commission along with documentary proof to enable the Commission to further scrutinize this issue in detail.

2.2.32. Determination of voltage-wise wheeling charges:

Stakeholder View:

The stakeholder has submitted that the Petitioner has not followed the appropriate methodology for determination of voltage-wise wheeling charges.

Petitioner Reply:

It is submitted that this objection in the context of the Petitioner is not sustainable since more than 95% of the total consumption of the consumers are industrial consumers. The concept of voltage wise wheeling charges are relevant wherein the supply is spread over a large area, various consumer categories, at various voltage levels etc. Applying the same principle to the Petitioner would only result in distorted consequences.

Commission View:

The Commission has determined the voltage wise wheeling charges as per best available information.

2.2.33. Revenue from Wheeling charges:

Stakeholder View:

DNHPDCL has collected a substantial amount as wheeling charges from the open access consumers, but the same has not been shown anywhere in the ARR.

Petitioner Reply:

It is stated that the details of the wheeling charges collected from the open access consumers will be submitted to the Hon'ble Commission.

Commission View:

The Commission has considered the wheeling charges in form of open access income in the true up of FY 2014-15, Review of ARR for FY 2015-16 and MYT for the Control Period from FY 2016-17 to FY 2018-19.

2.2.34. Operationalization of the SLDC

Stakeholder View:

The stakeholder has submitted that it's been a long time since unbundling has happened with the subsequent creation of a separate transmission division of DNH. But the SLDC in the territory has not become sufficiently operational even after implementation of open access in DNH. The SLDC should be made operational for smooth functioning and implementation of open access in DNH which will also benefit DNH in terms of proper load management and economic efficiency in terms of merit order dispatch principle.

Petitioner Reply:

No response submitted.

Commission View:

Necessary directives have been issued in this regard to ED, DNH in Transmission Tariff Order dt. 31st March 2016.

2.2.35. Reactive Energy Charges:

Stakeholder View:

The stakeholder has submitted that reactive energy charges should be levied on Open Access consumers considering their actual performance in terms of power factor. The Commission is requested to also bring clarity through it open access Regulations.

Petitioner Reply:

No response submitted.

Commission View:

Noted.

2.2.36. Methodologies opted for estimating revenue surplus/(-)gap

Stakeholder View:

An analysis of the revenue gap/surplus as filed by DNHPDCL in its petition for Aggregate Revenue Requirement (ARR) and as approved by the Hon'ble Commission vide it Tariff Orders for various financial years shows a great deviation. DNHPDCL always anticipates huge losses subjected to their projection of high expenses on system up-gradation, maintenance and low revenue generation through sale of power. DNHPDCL shows an anomaly in the methodology adopted and it seems that they unnecessary inflate their revenue gaps and suppress there surpluses, which is not in the public welfare as persons at large are getting affected by same.

Petitioner Reply:

No response submitted.

Commission View:

The Commission has calculated revenue gap/surplus based on JERC Tariff Regulations and amendments issued therein from time to time.

2.2.37. Cross-subsidy calculation:

Stakeholder View:

HT/EHT load in Dadra & Nagar Haveli is around 95%. So, the question of levying additional Cross Subsidy does not arise as there is no subsidized load in terms of domestic/farmer's category which requires to be compensated through DNHPDCL by way of levying Cross-Subsidy on Open Access consumer. The Petitioner has wrongly calculated the value of C which is the weighted average cost of power purchase of top 5% at the margin excluding liquid fuel based generation and renewable power. Top 5% MU of the costliest power includes the power from the plants includes Mauda & KGPP of which purchase cost is respectively Rs. 7.34/kwh & Rs.4.55/kwh, and hence, value for C corresponding to the top 5% MU (290.63MU) is coming to Rs. 6.47/kwh. The calculation adopted by the stakeholder is in line with the methodology adopted by the Commission in the Review Petition no. 165/2015 through its order dated 30.06.2015. As per the stakeholder's calculation, after adjusting the corrected value of C component in the formula for cross-subsidy determination, the corrected cross-subsidy surcharge is coming at negative/Nil cross subsidy surcharge. So, the cross-subsidy surcharge for FY 2016-17 would be zero for open access consumers.

Petitioner Reply:

The objection raised of the formula for cross subsidy being incorrectly implemented is baseless. The power procurement from the costliest sources cannot include Mauda & KGPP generating stations from where no electricity is being purchased by the Petitioner. The basic premise behind the formula which provides for 5% of purchase cost to be taken this that when the open access consumers source electricity from 3rd parties, the procurement of electricity can be avoided by the distribution licensee to that extent.

However, when the distribution licensee does not project the purchase of such electricity at all and further does not purchase such electricity, the question of including such electricity with the object margin for the purposes of calculation of cross subsidy surcharge does not arise.

In any event, the entire formula for determination of cross-subsidy surcharge has changed, which is now based on the average cost of power purchase. The calculations for the same have been submitted to the Hon'ble Commission for verification. In the circumstances, the objection raised is misconceived and liable to be rejected.

Commission View:

The Commission has calculated the cross subsidy surcharge as per NTP, 2016.

2.2.38. Open Access:

Stakeholder View:

The stakeholder has submitted that while implementing the policy of open access, the financial burden will be passed onto the other consumer as the licensee (DNHPDCL) will have to sell the unutilized power at lower rate in market than the purchase rate, and the loss shall be passed onto the other consumers. There are about 2 EHT consumers, 30 HT consumers at 66 kV, 824 HT consumers at 11 kV and about 2000 LT consumers at 11 kV. The stakeholder has submitted that the daily power scheduling by DNHPDCL shall be disturbed as open access consumers procure power from outside and will result in power surrendering by DNHPDCL which will further lead to burden on other industries. Approximately 300 MW is targeted in open access for FY 2016-17. This is more than 45% of the cumulative demand of DNHPDCL. Open access consumers have dual advantage of receiving power either from outside or from DNHPDCL as and when required. This results into unnecessary capacity blocking by DNHPDCL.

FPPCA burden of domestic consumers used to be taken up by industrial consumers. As FPPCA is not applicable on open access, the burden of open access is spread to rest of the consumers. Hence, FPPCA should also be charged to open access consumers.

Consumer tariff should not increase solely due to open access, rather it should be decreased. Open access should be allowed to big consumers, with the condition that either

they will surrender their power or they shall bear the loss, which may be incurred by DNHPDCL due to the adoption of open access.

The stakeholder has requested the Commission to ensure that other small consumers are not burdened due to the phenomena of open access.

Petitioner Reply:

The DNH Power Distribution Corporation Ltd (DNHPDCL), U.T. Administration of Dadra & Nagar Haveli has allowed Open Access within the territory as per JERC (Open Access in Transmission and Distribution) Regulations, 2009 as amended from time to time. Various Open Access Charges are for FY 2015-16 is approved by Hon'ble Commission in Tariff Order for FY 2015-16.

Presently, daily average demand of DNHPDCL is approximately, 650 – 700 MW. DNHPDCL does not have its own generating plants. The U.T. of DNH draws power from Central Sector Generating Stations of NTPC &NPCIL (NPC) of around 700 MW, including firm allocation of 82.5 MW, Specific allocation of 122.45 MW and allocation from 15% unallocated portion of 518.94 MW. Details of the Central Sector allocation is given in Annexure-I. Besides this, there is allocation of 38 MW from RGGPL. Since 97% of the power consumption is from the industrial consumers and DNH being a prized tourist destination, it is essential to ensure uninterrupted 24/7 power supply in territory of DNH. In order to meet power requirement of U.T. of DNH, PPAs have been tied up with NSPCL – 100 MW and EMCO- 200 MW. As per the Long term/Medium term PPAs signed with the aforesaid generating companies, it is obligated to pay Fixed Charges as per terms and conditions of tariff (For NSPCL) and the Power Purchase Agreement (PPA) (For EMCO). The variable charges are paid on the basis of actual energy scheduled.

Based on the JERC (Open Access in Transmission and Distribution) Regulations, 2009, DNHPDCL has notified procedures for Long Term Open Access and Short Term Open Access as on 6th July 2012 in Official Gazette of U.T. Administration of Dadar and Nagar Haveli.

During FY 2015-16 there were approximately 180-200 MW Demand of Open Access Consumers in Dadra and Nagar Haveli which is approximately 1/3 of total demand. Details of the Open Access consumers are presented in the report enclosed in Annexure-I.

During FY 2015-16 the Petitioner could not schedule power from various Generating Stations due to allowing of Open Access to the consumers accounting for one third of the demand. However, the Petitioner is liable to pay fixed charges to the Generators.

Apart from the Open Access charges declared and recovered from the Open Access consumers, the Petitioner has observed net deficit in recovery of the fixed charges payable to the Generators, which puts extra burden on the non-OA consumers.

It is further submitted that the basic principle of the Electricity Act is that while open access is to be provided, the charges to be paid by the open access consumers should

compensate the distribution licensee for any loss caused on account of the open access consumer procuring electricity from third parties.

In the present case, the open access consumers choose to maintain the contract demand with the distribution licensee also while procuring open access, though there is no prohibition for such open access consumers to surrender the load and procure from 3rd parties.

The fixed cost that is incurred by the distribution licensee towards payment to the generators is to the tune of about Rs. 933.08 Crores, whereas the demand charges in the schedule of tariff for the consumers is only to the tune of Rs. 181.52 Crores. It is only to rectify this anomaly that the increase in the demand charges has been sought for by the Petitioner.

It is relevant to mention that open access consumers constitute a separate class and cannot be compared with the other consumers who take supply only from the distribution licensee. This would satisfy the reasonable classification under Section 62(3) of the Electricity Act, 2003.

The decision of the Hon'ble Tribunal in the case of Bhushan Limited (Appeal No. 34 of 2006) relied on by objector has no relevance to the present case. The decision is only to the limited aspect that an open access consumer choosing to take supply from third parties through open access is not obligated to surrender its contract demand with the distribution licensee. There is no dispute to the said proposition and in fact the consumers in the Union Territory taking supply through open access also maintains the contract demand with the Petitioner. However, the above decision is not on the proposition of demand charges to be levied or the tariff design to be decided by the Hon'ble Commission.

The Petitioner seeks approval to recover the additional charge for FY 2015-16 from the Open Access consumers of FY 2015-16 on pro-rata basis. The Petitioner also seeks approval to recover additional charge in final Open Access monthly bill, or monthly electricity bills issued by DNHPDCL or any other means in line with various Regulations of Hon'ble JERC.

As per the Clause 16(iii) of JERC for the State of Goa and Union Territories (Open Access in Transmission and Distribution) Regulations, 2009, stats that,

"A consumer availing OA and receiving supply of electricity from other person than the distribution licensee shall pay additional charges to meet fixed cost of the Licensee arising out of obligation to provide supply under sub section 4 of section 42 of EA".

As per the provision of Clause 16 (iii) (a)(b)(c) of OA Regulation, DNHPDCL has to put up details to the Commission in the account of Fixed Charges paid by OA consumers and any part of fixed cost getting stranded etc. The Commission shall accordingly scrutinize and determine the amount of additional charges.

Under these circumstances DNHPDCL could not give NOC to the OA consumers for the month of March, 2016. DNHPDCL also held discussion with the representatives of the OA consumers on a meeting called by the administrator on 04/03/2016. In the meeting, the existing OA consumers agreed to share FPPCA charges for the month of March, 2016 along with the Non-OA consumers. However, it would be arbitrary to agree for sharing of FPPCA charges for only one month and not for the other month of 2015-16 and such a measure would also require approval from JERC of the existing JERC Regulations on recovery of FPPCA charges allows:

"1. Recovery Periodicity (Cycle)

The licensee shall compute fuel and power procurement cost variations on quarterly basis and adjustment shall be made in consumers bill starting after a month following the end of the quarter on units billed in month under consideration. For example, Fuel & power Purchase Cost Adjustment (FPPCA) for the quarter April-May-June shall be made in the month of July and shall be reflected in the consumer bills raised in the months of August-September and October on the units billed for the month of August, September and October respectively....."

Further computations have been made to verify whether sharing of FPPCA charges by the OA Consumers would relieve the burden passed on the non OA consumers on account of recovery of fixed charges recovered on the tariff vis a vis fixed charges payable to the generators. It is seen that such a proposition would not fully compensate the burden passed on to the non OA consumer. Accordingly, Hon'ble JERC has to allow DNHPDCL to levy additional charges in the form of the increase on the demand charges/KVA and incremental additional charges per unit on the OA consumers so that the fixed charges deficit would be passed on to all the consumers including OA consumers in an equitable manner. Since the OA charges have to be known upfront, it would be required to declare such charges on a quarterly basis by DNHPDCL considering the past data. A sample levy of such charges was shown in the ARR considering 300 MU of OA.

Commission View:

The Petitioner has a universal service obligation as per the Electricity Act and Tariff Policy to meet its requirement including open access consumers on standby basis for quality and reliable power. Further, the open access charges including additional surcharge & FPPCA charges are required to be determined and recover in accordance in the Regulations in force from time to time.

2.2.39. Open Access for small consumers:

Stakeholder View:

It is suggested that data of cross subsidy be computed every month and should be approved by Hon'ble JERC. Data should be shared with respective consumers and

associations and JERC should provide opportunity of hearing to them before approving the rate of cross subsidy. In fact, a co-operative movement for small consumers should be promoted to buy collectively for them in the UT, so that they also draw the benefits of the open access era.

Petitioner Reply:

The DNHPDCL has noted the observations and would like to state that the cross-subsidy surcharge shall be computed as per the formula notified in the Tariff Policy and at the rate approved by the Hon'ble Commission.

Commission View:

Noted.

2.2.40. Open Access Operational Issues:

2.2.40.1. Issuance of monthly NOC to open access consumers

Stakeholder View:

Present procedure to secure monthly basis NOC for open access is too cumbersome. It should be made consumer friendly. It should be done online to maintain complete transparency. Besides, the life of the NOC is only one month which is too short. It is suggested that it should be enhanced to cover the period of agreement.

Open Access consumers of DNH despite continuous follow-ups, often do not get the monthly NOC till late evening of the day previous to the bidding day. This causes last moment rush and puts the compliance of subsequent process requirements at risk. Consumers have already lost 1 day of bidding in the past.

When an Open Access permission is already given by DNHPDCL to a consumer for a period of say 1 year or till the end of the financial year, the need for monthly NOCs should be ended. This will help by being a small but important step in "ease of doing business".

Petitioner Reply:

No response submitted.

2.2.40.2. Validity of signing Open Access Agreement by DNHPDCL:

Stakeholder View:

The stakeholder has submitted that the agreement signed between Electricity Department/Distribution Licensee and the open access consumer are not valid. Validity of this agreement has to be verified to see whether legal provisions or the clauses mentioned in the agreement are in line with JERC Open Access Regulations.

Petitioner Reply:

The objector has raised a vague issue that open access agreements entered into is not valid. The said issue apart from being vague is also misconceived. Further it is also beyond the scope of the present proceedings which are limited to the tariff determination process.

The objector has neither pointed out any specific illegality, nor pointed to the consequences thereof. It is relevant to mention that open access consumers are taking benefit of the open access agreements. At this stage to challenge the validity is incorrect. The agreements entered into are binding on the parties and cannot be avoided for the reason that it is not convenient to one party to adhere to terms at a subsequent stage.

2.2.40.3. Unscheduled Outages on Open Access consumers:

Stakeholder View:

The stakeholder has submitted that DNHPDCL has inflicted financial and operational injury onto open access consumers of DNHPDCL by imposing unscheduled outages on the continuous power industries. They are imposing power cut/load shedding without giving any official intimation to continuous power industries in open access. This is their willful action to victimize open access consumers' thereby discouraging open access implementation in the territory.

The Commission is requested that the continuous power industries who are existing on dedicated feeder shall be ensured uninterrupted power supply. Any outages on these consumers shall be scheduled / planned activity of the licensee through proper intimation to the consumer by the DNHPDCL.

A compulsory mechanism to compensate the consumer for the unscheduled outages imposed by the DNHPDCL should be introduced. Liberty should only be allowed to DNHPDCL in case there is some distribution network failure on account of Force Majeure events.

Load staggering/outages during the technical constraints/network failure shall not be implemented discriminately on the open access consumers, and both open access consumers and normal consumers shall be treated on equity in the events of load staggering on a particular zone. In other words, load curtailment should be done on prorata basis indiscriminately for both open access consumers and normal consumers.

Petitioner Reply:

The objector has also further sought to raise various issues such as unscheduled outages, delay in grant of permission for increase in quantum, issuance of monthly NOC, operationalization of SLDC, etc which have no correlation and are not subject matter of the present proceedings before the Hon'ble Commission. Such issues raised are also misconceived, wrong and are denied.

The objector in fact has sought to claim compensation for over injection of electricity into the grid and non-utilization by open access consumers. Such action goes contrary to the Grid Code and the open access consumers are infact harming the grid by not adhering to the schedule. Such action is required to be penalized. Instead of seeking to adhere to the schedule given, the objector is seeking a premium on grid indiscipline by seeking compensation for over injected units. Such claim is misconceived and is liable to be dismissed.

The Hon'ble Tribunal in the case of <u>Indo Rama Synthetics (I) Ltd.</u> v. <u>Maharashtra Electricity Regulatory Commission and others</u>(Appeal No.123/2010, decided on 16.5.2011) dealing with the issue of over-injection of electricity has held as under:

"8. Unlike other goods electricity cannot be stored and has to be consumed instantaneously. The generating plants, interconnecting transmission lines and sub-stations form the grid. State grids are interconnected to form Regional Grids and interconnected regional grids form the National Grid. The SLDC prepares the generation schedule one day in advance for the intra-state generating station and drawal schedules for the distribution licensees based on the agreements between the distribution licensee and the generators/trading licensees, declared capacity by the generators and drawal schedule indicated by the distribution licensees. The generators and the licensees are expected to follow the schedule given by the SLDC in the interest of grid security and economic operation. If a generator connected to the grid injects power into the grid without a schedule, the same will be consumed in the grid even without the knowledge or consent of the distribution licensees. However, such injection of power is to be discouraged in the interest of secure and economic operation of the grid. In the present case, the expensive power was injected by the appellant without the knowledge or consent of the distribution licensee or agreement and without any schedule from SLDC. Admittedly, the appellant's power was high cost power for which none of the distribution licensees had any agreement with the appellant. Therefore, there is no substance in the contention of the appellant for compensation.

It is submitted that the objections raised are misconceived and liable to be rejected.

2.2.40.4. Delays in issuance of permission for increase in quantum/bilateral power of Open Access

Stakeholder View:

The stakeholder has submitted that the Petitioner is willfully delaying the issuance of permission to the OA consumers for increase in quantum / bilateral power, despite the fact that they are already availing open access power since a long time with all ABT metering in place.

The Commission is requested to prescribe strict timelines to be implemented for permissions to the open access consumers who are having all necessary infrastructure in place. Beyond this timeline the permission should be deemed to be granted to the

consumers of inter-state open access as envisaged in CERC Regulations on inter-state open access. This will help by being a small but important step in "ease of doing business".

Petitioner Reply:

No response submitted.

2.2.40.5. Unutilized units in Open Access on account of Distribution network failure

Stakeholder View:

As per the existing practice, DNHPDCL does not pay to the open access consumer for the open access units that were injected into the grid by the supplier, but did not reach the open access consumer. While, the supplier takes full payment for it from the open access consumer, he is at total loss as he neither got the power, nor got paid for it. The Commission is requested to devise a mechanism or direct the DNHPDCL to settle the unutilized open access units of consumer at UI rate/Deviation Settlement mechanism for any distribution network failure on account of the DNHPDCL / central utility, as even in case of central utility, DNHPDCL gets paid for it in UI settlement.

Petitioner Reply:

No response submitted.

Commission View:

The Commission would like to highlight that for the procedural aspects related to the open access, the Commission is of the view that the distribution licensee should follow the Open Access Regulation 2010 and amendments issued therein along with the Commission's directives in this regard. Further, in case of any grievance, the consumer should follow the procedure as prescribed in the Open Access Regulations in force from time to time.

2.2.41. Transmission Charges:

Stakeholder View:

Presently short term open access charges are determined by JERC in Rs/MW/Day terms which are now not applicable in the existing legislation on short term inter-state open access framed by CERC. This has led to open access consumers of DNH hving to pay Rs. 0.08/kwh as transmission charges instaed of Rs. 0.03/kwh as determined by the Commission in its tariff order for the transmission division of DNH. Industries Association of Daman (APCPI) has also filed the Petition before JERC on which the Commission passed the order to amend JERC Open Access Regulations to incorporate it in next Tariff Order (Petition no. 188/2015 in order dated 09.12.2015). The Commission is most humbly requested to complete this entire exercise of amendment to Open Access Regulations within a suitable timeline, so that the same (Transmission charges in Rs./MWh terms) can

be incorporated in the determination of short term open access transmission charges for FY 2016-17 in the Tariff Order.

Petitioner Reply:

The stakeholder has sought for amendment in the Regulations of the Hon'ble Commission in relation to the determination and applicability of transmission charges. The said issues are beyond the scope of the present proceedings which are limited only to the approval of the revenue requirements and determination of retail supply tariff. In the circumstances, the objections in regard to transmission charges and amendment of Regulations of the Hon'ble Commission are liable to be ignored.

Commission View:

Noted. The Commission is guided by the JERC (Open Access in Transmission and Distribution) Regulation, 2009 and amendments issued therein with regards to open access charges. However, in order to take a balanced view, the Commission will consider specific suggestions, if any in this regard.

2.2.42. Recovering Wheeling charges from EHT consumers (>66KV level):

Stakeholder View:

The stakeholder has submitted that wheeling charges are to be recovered from the open access consumers when it is utilizing the distribution network of the licensee for the open access procurement of power. The consumers who are directly connected with the transmission network of the transmission licensee and are not using the distribution system of the DNHPDCL, are not liable to pay wheeling charges. The Commission is requested not to impose wheeling charges on the consumers connected with higher voltage level (connected with transmission network only) as these consumers are not using the distribution network of DNHPDCL and they are using only transmission licensee network, so, they are liable to pay only transmission charges and not the wheeling charges.

It is important to mention that Dadra Nagar Haveli has its separate transmission division (transmission licensee/Electricity Department of DNH Transmission Division) and the assets of higher voltage level consumers are owned by this licensee on which it is claiming transmission charges in its ARR. So, the question of claiming wheeling charges from these consumers does not arise.

Petitioner Reply:

The Objector has contended that wheeling charges should not be made applicable to consumers taking electricity at voltages higher than 66 KV level. The objector has relied on the decision of the Hon'ble Tribunal in Appeal No. 237 of 2012 in this regard.

It is submitted that the said objection and reliance by the objector is misplaced. Firstly, the tariff as applicable in the Union Territory is unique to the nature of consumption, number

of consumers etc. and has already been appreciated by the Hon'ble Tribunal in relation to applicability of the cross subsidies reduction trajectory. It has been held that the Union Territory cannot be compared with other states in relation to tariff determination as in the present case since more than 95% of the total consumption is by industries.

Similarly, the consumers in the Union Territory are required to pay the network charge and it cannot be said that merely because one consumer takes electricity at higher voltage, the wheeling charges should not be made applicable. This would only result in a skewed tariff determination process and further burden on the general category of consumers which is impermissible.

Further the very definition of wheeling as contained in Section 2(76) includes all the facilities of the distribution licensee as well as associated facilities of the transmission licensee for the purpose of conveyance of electricity. In the circumstances, the contention that consumers taking electricity at the voltage level higher than 66 KV do not fall within the definition of wheeling is misconceived.

Further the decision of the Hon'ble Appellate Tribunal was in relation to the Regulations framed by the Punjab State Electricity Regulatory Commission, the said principle is not applicable to the present case. In any event, it is submitted that the decision of the Hon'ble Tribunal in Appeal No. 237 of 2012 has been stayed by the Hon'ble Supreme Court. Even for the state of Punjab, the consumers taking supply of electricity through open access at voltage level higher than 66 KV are paying the wheeling charges.

In the circumstances mentioned above, the submissions raised by the objector with regard to wheeling charges are misconceived and liable to be rejected.

Commission View:

The Commission determines wheeling charges on the basis of data available on record. HT & EHT consumers are presently clubbed for determination of wheeling charges.

2.2.43. Standby / Temporary charges on OA consumers:

Stakeholder View:

The stakeholder has submitted that the open access consumers are to be treated in the same manner as the normal consumers existing in the distribution area of the licensee and the licensee should also supply power to open access consumers till they are continuously paying the fixed/demand charges to the distribution licensee. Distribution licensee is bound to serve its Universal Service Obligation for the consumers for the load/contract demand for which consumers are continuously paying demand/fixed charges to the licensee. So, Standby/Temporary charges should not be imposed on open access consumers.

Also, in terms of the National Tariff Policy, Standby or Temporary charges are only applicable in the case where there is an outage from the generator supplying open access power to the consumer.

Also, in the normal scenario, when open access consumer is not bidding on exchange/not getting power from exchange, standby/ temporary tariff should not be imposed as the these consumers are continuously paying the demand/fixed charges towards the universal service obligation of the licensee. The Commission is requested to bring more clarification through its Tariff Order/amendment to JERC Open Access Regulations.

Petitioner Reply:

The objector has raised the issue that open access consumers should not be liable to be charged with standby/temporary charges when such open access supply fails and consumers take electricity from the distribution licensee on standby basis. It is submitted that the said issue firstly is beyond the scope of the present proceedings which are only on the determination of the annual revenue requirements and retail supply tariff.

Further, the said issue raised by the objectors is contrary to the Regulations framed by the Hon'ble Commission as well as the open access agreements specifically entered into by the open access consumers. Even going by the rational for levy of such charges, it is submitted that it is not open to any open access consumers to expect the supply of electricity at concessional or regular tariff in emergency situations wherein the open access supply fails. It is for the consumers to choose whether the supply is to be taken from the distribution licensee or from open access sources for which the freedom is with the consumers. However, upon the choice being made and open access being granted, it is then not open to the consumer to come back to the distribution licensee in case of emergency where the open access supply fails and thereafter claim that temporary/standby charges should not be paid.

As the very nature of such supply is when the source of supply fails and standby/temporary supply is required, standby/temporary charges are payable.

The Hon'ble Commission has also in the case of Perfect Filaments has upheld the levy of such temporary/standby charges. The objections in this regard are misconceived and liable to be rejected.

Commission View:

Noted

2.2.44. Agreement Fees and other such wrong practices with Open Access Consumers

Stakeholder View:

The stakeholder submitted that Agreement fees of Rs. 50,000/- as proposed in Section 5.4 of the Petition are not in line with the provisions of JERC Open Access in Transmission and Distribution Regulations, 2009, and such collections in the past were purely illegal, as consumers were forced through issuance of demand notice.

Section 13 & 14 of JERC Open Access in Transmission and Distribution Regulations, 2009 states

Section 13 Procedure for Short-Term Open Access

A short-term open access user shall submit an application for transmission/distribution access to the State Load Dispatch Centre.

The application shall contain the details such as capacity needed, point(s) of injection, point(s) of drawl, duration of availing open access, peak load, average load and such other additional information that may be specified by the State Load Dispatch Centre;

- iii) The application shall be accompanied by a non-refundable application fee of Rupees five thousand payable in the name and in the manner to be decided by the State Load Dispatch Centre;
- iv) The reserved capacity shall not be transferred by a short-term open access user to any other person.

Section 14 Reservation of Capacity for Short-term Users

- (i) In case of short-term open access users, at given point of time, if the capacity sought to be reserved is less than the available capacity, each short-term open access user shall pay the transmission or wheeling charges in accordance with Regulation 16.
- (ii) In case of short-term open access, if the capacity sought to be reserved by the open access users is more than the available capacity at that point of time, reservation of capacity shall be considered in accordance with the following procedure, namely –
- (a) The State Load Dispatch Centre concerned shall invite snap bids through fax/e-mail.
- (b) The floor price for the bidding shall be the price determined in accordance with Regulation 16.
- (c) The bidders shall quote price in terms of percentage points above the floor price.
- (d) The reservation of capacity shall be made in decreasing order of the price quoted.

- (e) In case of equal price, if required (e.g., due to capacity being short), the reservation of capacity shall be made pro rata to the capacity sought.
- (f) The open access user getting reservation for a capacity less than the capacity sought by him shall pay charges for the capacity allotted at the rate quoted by him.
- (g) The State Load Dispatch Centre shall, within 45 days, formulate a detailed procedure for reservation of transmission and distribution capacity to short-term open access users, including the detailed procedure for bidding.

And Section 2.8.1 of notifications as per Procedure for Short Term Open Access in Intra-State transmission system, 2012 issued by Electricity Department of Silvassa, states

- 2.1.8 The following shall be enclosed along with the application:
- a) Copies of the agreements /MoUs / PPA entered between the buyer/seller/trader.
- b) Consent in prescribed format (Format-2) from the Distribution Licensee in case the applicant is using distribution license's network or / and applicant is an existing consumer of the distribution licensee.
- c) Copy of the "Connection Agreement" between the concerned parties and the

Transmission Licensee as per the State Grid Code. The Connection Agreement if not executed earlier, shall be executed with transmission licensee.

- d) Single Line Diagram showing point of injection/drawl.
- e) One time non-refundable application processing fee of Rs. 5000/- (Rupees five thousand only) by Bank draft/cheque drawn in favour of "Executive Engineer, Electricity Department", payable at Silvassa. The application fee is valid for a specified injection / drawl point. Any change in the injection / drawl point shall be treated as a fresh application.

Petitioner Reply:

No response submitted.

Commission View:

The consumer needs to give its grievance through a proper application / petition before the appropriate authority in accordance with the Regulations.

2.2.45. Tariff of HT (Ferro Metallurgical / Steel Melting / Steel Rerolling Power intensive) Category:

Stakeholder View:

The stakeholder submitted that the existing power tariff, minimum charges and fixed charges are high for HT (B) (Ferro Metallurgical/Steel Melting/Steel Rerolling Power Intensive) category. The Commission has not explained any reason for higher tariff of this

category of consumers in comparison to other consumers. The stakeholder has requested for a treatment at par with other HT (A) consumers.

Petitioner Reply:

No response submitted.

Commission View:

Noted.

2.2.46. Recovery of differential amount from high voltage category

Stakeholder View:

In the tariff order dt. 5th May 2014, JERC had created another tariff category for high voltage consumers and fixed their tariff at 20 paisa per unit less that other consumers. It was neither justified, nor lawful and nor warranted. Thus, this Association has appealed before Hon'ble APTEL, and the matter is under consideration. JERC should make directions to recover the differential amount and keep it as reserved with the DNHPDCL, so that when Hon'ble APTEL decides in favor of this Association, other consumers are given adjustments / refunds immediately.

Petitioner Reply:

This issue will be settled depending on the outcome of the appeal filed and pending before the Hon'ble Tribunal.

Commission View:

Noted.

3. True-up for FY 2014-15

3.1. Applicable Provisions of Tariff Regulations 2009

The True-up of FY 2014-15 is to be carried out as per the following provisions of Regulation 8 of Tariff Regulations, 2009:

Quote

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

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

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

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

While approving such expenses/revenues to be adjusted in the future years as arising out of the Review and / or Truing up exercises, the Commission may allow the carrying costs as determined by the Commission of such expenses/revenues. Carrying costs shall be limited to the interest rate approved for working capital borrowings.

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

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

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

Unquote

3.2. Approach for True-Up of FY 2014-15

The Petitioner, in its True-up Petition for FY 2014-15 has submitted the details of expenditure and revenue for FY 2014-15 based on the audited accounts submitted for FY 2014-15. The Petitioner provided the comparison of actual revenue and expenditure against each head with the revenue and expenditure approved by the Commission.

It is to be noted that the Petitioner had submitted the True-up Petition for FY 2014-15 along with audited accounts for FY 2014-15. In this Chapter, the Commission has analyzed all the elements of actual revenue and expenses for FY 2014-15 based on the audited accounts submitted by the Petitioner, and has carried out the true up of expenses and revenue with reference to the final actual figures as per the audited accounts, after prudence check and has permitted necessary adjustments in cases where variations are for reasonable and justifiable reasons.

3.3.Energy Sales

Petitioner Submission:

The Petitioner had submitted the category-wise actual energy sales of 5166.23 MU for FY 2014-15.

Commission Analysis:

The Petitioner had forecasted the energy sales of 5374.90 MU in its ARR and Tariff Petition for FY 2014-15, and the Commission had approved sales of 5387.61 MU in its ARR and Tariff Order dated 05th May 2014. Further, the Commission during the approval for the Review of FY 2014-15 had approved sales for the period FY 2014-15 at 5223.86 MU (dated 01st April 2015). The Petitioner has submitted the energy sales of 5166.23 MU to be considered for truing up of FY 2014-15. Since the actual sales and consumer data is available for FY 2014-15 the Commission considers it appropriate to take into consideration the actual sales and consumers for FY 2014-15. In reply to data gaps the Petitioner stated that there has been a sale of 24.92 MU on account of open access sales.

The Petitioner in its annexure to the petition had submitted the energy audit report for FY 2014-15 which is not tallying with the submission of the Petitioner in respect to sales, energy availability and losses. The Petitioner is directed to submit the revised energy audit report along with revised figures for FY 2014-15 to validate the same.

The Commission has observed that the Petitioner has submitted the sales for the LIG category as 2.70 MU. The Petitioner has submitted the number of consumers for the LIG category as 14223. The Commission has computed the consumption of consumers under the LIG category considering 2X40W bulbs/ 6 hours per day/consumer adopting the

guidelines as considered by the Commission in previous orders. On the basis of the above, the Commission approves the normative sales for the LIG consumers as 2.49 MU.

Further, the Commission finds the energy sales for the other consumer categories (other than the LIG category) to be an uncontrollable factor for the utility. The variation in sales from the approved values (as per Tariff Order dated 01^{st} April 2015) is mainly on account of reduction in energy sales in industrial HT category, which comprises about 93.66% of the total energy consumption of DNH Power Distribution Corporation Limited **Therefore, the Commission approves the total sales of 5166.02 MU for FY 2014-15 based on actuals submitted by the Petitioner.** The detailed category wise sales as projected by the Petitioner and approved by the Commission are given below:

| | | FY 2014-15 | | | | | | | |
|--------|-----------------------------|--|---|---------------------------------------|---|--|--------------------------------------|--|--|
| S. No. | Category / Consumption Slab | (Petitioner's submission) in ARR | Approved in T.O. dt. 05.05.14 for FY 2014-15 | Petitioner's submission for APR | Approved in Review Order dt.01.04.15 | Petitioner's Submission for True -Up | True-Up Approved By Commission | | |
| A | Domestic | 81,31 | 91.09 | | | | 92.92 | | |
| 1 | 0-50 units | 16.42 | 16.84 | | | | 15.93 | | |
| 2 | 51-200 units | 29.32 | 17.13 | | | | 27.94 | | |
| 3 | 201 - 400 units | 12.88 | 31.12 | 101.43 | 94.95 | 93.13 | 27.94 | | |
| 4 | 401 and above | 19.27 | 23.56 | | | • | 18.63 | | |
| 5 | Low Income Group (LIG) | 3.42 | 2.44 | | | | 2.49 | | |
| В | Commercial | 32.35 | 35.71 | | | | 27.05 | | |
| 1 | 1- 100 units | 3.42 | 6.82 | 28.38 | 27.36 | 27.05 | 10.11 | | |
| 2 | 101 and above units | 28.92 | 28.89 | 20.00 | | | 16.94 | | |
| C | Agriculture | 4.48 | 4.91 | | | | 4.31 | | |
| 1 | Up to 10 HP | 0.58 | 0.64 | 4.38 | 4.75 | 4.31 | 2.99 | | |
| 2 | Above 10 HP | 3.9 | 4.27 | | | | 1.32 | | |
| D | LTP Industry | 184.25 | 186.26 | 189.73 | 191.04 | 187.51 | 187.51 | | |
| Е | Public Lighting | 5.99 | 6.63 | 6.73 | 8.27 | 7.76 | 7.76 | | |
| F | Public Water Works | - | - | 2.8 | 2.8 | 3.23 | 3.23 | | |
| G | НТ | 5064.4 | 5060.1 | | | 4840.64 | 4840.64 | | |
| 1 | Up to 66 kV | 1714.77 | 1719.97 | 4843.53 | 4894.4 | 3517.44 | 3517.44 | | |
| 2 | Above 66 kV | 2948.95 | 2957.9 | 4843.33 | 4894.4 | 935.35 | 935.95 | | |
| 3 | HT Ferro | 400.68 | 382.23 | | | 387.25 | 387.25 | | |
| I | Hoardings/ Signboards | - | - | | | | | | |
| J | Temporary | 2.12 | 2.91 | 0.27 | 0.29 | 2.60 | 2.60 | | |
| | | | | | | | | | |
| K | Total | 5,374.90 | 5387.61 | 5,177.25 | 5,223.86 | 5,166.23 | 5,166.02 | | |

Table 3-1: Energy Sales for FY 2014-15 (MU)

3.4. Surplus Energy Sale/UI sales

Petitioner Submission:

The Petitioner has submitted the actual under drawal of nil MU under UI mechanism for FY 2014-15 but has claimed Rs.7.09 Crores as revenue from sale of surplus power during FY 2014-15.

Commission Analysis:

The Commission has verified the weekly summary sheets/bills of UI from the WRPC for the complete year of FY 2014-15 and for the purpose of this order has considered the over

drawal and under drawal of UI separately. The Commission has considered the UI over-drawal of 34.04 MU and UI under drawal of 26.30 MU for FY 2014-15 as per the UI bills for FY 2014-15. The Petitioner in its petition has shown UI over drawal of 38.64 MU whereas in the technical formats annexed to the petition it has shown the same as 32.75 MU.

For the purpose of the true-up of FY 2014-15, the Commission has considered the surplus energy sale of 26.30 MU as verified from the UI bills from the WRPC for FY 2014-15.

3.5.Inter-State Transmission losses

Petitioner Submission:

The Petitioner has submitted the energy balance for FY 2014-15, wherein it has considered the actual pool losses as 193.52 MU at 3.44%.

Commission Analysis:

The Commission in its Tariff Order for FY 2014-15 dated 05th May 2014 had approved the loss level of 3.67% considering the actual figures of regional pool losses of 3.67% for FY 2014-15 as inter-state loss of DNH Power Distribution Corporation Limited (Erstwhile ED-DNH) based on the pooled losses of the Western Region as per the data available on the WRLDC site. Now with the introduction of the new POC transmission charges and losses, the methodology for the apportionment of losses of the region to beneficiaries has undergone a change. Accordingly, the Commission has considered inter-state transmission losses based on energy scheduled by the licensee and the energy scheduled at the generation end.

The Commission has verified weekly WRPC UI bills and the actual schedule for the Petitioner was 5450.05 MU including open access purchase. The Commission has verified the open access purchase by open access consumers of the Petitioner from REA statement and found drawal from IEX to the tune of 25.69 MU. This results in 5424.36 MU as energy scheduled for the Petitioner excluding open access purchase. The total power available to the Petitioner as verified from the power purchase bills and REA was 5657.05 MU. Therefore the inter-state transmission losses are 232.70 MU, which is 4.11% of the gross energy purchased.

The Commission considers the inter-state transmission loss level of 4.11% as reasonable and approves the same for True up of FY 2014-15 as the same is beyond the control of the utility.

3.6.Intra-State Transmission and Distribution losses

Petitioner Submission:

The Petitioner has submitted that the actual loss level achieved in FY 2014-15 was 4.95% as against the loss level of 4.70% approved by the Commission in its Tariff Order dated 05^{th} May 2014.

Commission Analysis:

The Commission in its Tariff Order for FY 2014-15 dated 05th May 2014 had approved the targeted T&D loss level of 4.70%. The Petitioner in its reply to the data gaps has submitted sale to open access consumers of 24.92 MU as against an open access purchase of 25.69 MU. The Commission has considered the schedule drawal from WRPC i.e. 5457.79 MU including open access injection as against 5460.06 MU submitted by the Petitioner. Accordingly, the Commission approves the intra-state transmission and distribution loss level of 4.89% as below:

FY 2014-15 Approved Sr. No. **Particulars** (Petitioner's Approved Petitioner's Petitioner's True-Up in T.O. dt. submission) in submission in Review Order Submission Approved ENERGY REQUIREMENT 5374.90 5223.86 5166.23 5387.61 5177.27 5166.02 Energy sales within the State/UT Open Access Sales 0.00 0.00 0.00 24.92 24.92 Total Sales within the State/UT 3 5374.90 5387.61 5177.27 5223.86 5191.15 5190.94 4 **Distribution losses** 5.00% 4.70% 4.75% 4.70% 4.95% 4.89% i) 282.89 257.63 **Energy required at State Periphery for** 5653.32 5657.79 5435.45 5481.49 5460.06 5457.79 Sale to Retail Consumers

Table 3-2: Variation of Intra-State Transmission and Distribution Losses (in% age)

3.7.Energy Requirement

Petitioner Submission:

The Petitioner has submitted the energy requirement for FY 2014-15, based on the actual sales, power purchase quantum and actual losses for FY 2014-15.

Commission Analysis:

The Commission has approved the T&D losses and the inter-state transmission losses as elaborated in the foregoing paragraphs. The Commission has considered the actual drawal of 5457.79 MU including open access sales at the ex-bus periphery of the licensee as per the weekly UI sheets of WRPC for FY 2014-15. The Petitioner in its petition has submitted that the energy availability from the generator end excluding open access purchase by open access purchase by consumers of the Petitioner was 5666.64 MU. The energy requirement for FY 2014-15 is drawn based on the approved inter-state and intra-state transmission and distribution losses and the approved energy sales. The gross energy requirement

approved for FY 2014-15 is shown in the Table below, along with the energy requirement submitted by the Petitioner in its true-up petition for ARR of FY 2014-15.

| FY 2014-15 | | | | | | | |
|------------|--|--|---|---------------------------------------|--|--|--------------------------------------|
| Sr. No. | Particulars | (Petitioner's submission) in ARR | Approved in T.O. dt. 05.05.14 for FY 2014-15 | Petitioner's submission for APR | Approved in Review Order dt.01.04.15 | Petitioner's Submission for True -Up | True-Up Approved By Commission |
| I | ENERGY REQUIREMENT | | | | | | |
| 1 | Energy sales within the State/UT | 5374.90 | 5387.61 | 5177.27 | 5223.86 | 5166.23 | 5166.02 |
| 2 | Open Access Sales | 0.00 | 0.00 | 0.00 | 0.00 | 24.92 | 24.92 |
| 3 | Total Sales within the State/UT | 5374.90 | 5387.61 | 5177.27 | 5223.86 | 5191.15 | 5190.94 |
| 4 | Distribution losses | | | | | | |
| i) | % | 5.00% | 4.70% | 4.75% | 4.70% | 4.95% | 4.89% |
| ij | MU | 282.89 | 265.71 | 258.18 | 257.63 | 268.91 | 266.85 |
| 5 | Energy required at State Periphery for Sale to Retail Consumers | 5657.79 | 5653.32 | 5435.45 | 5481.49 | 5460.06 | 5457.79 |
| 6 | Add: Sales to common pool consumers/ UI | 1.32 | 0.00 | 273.00 | 218.08 | 38.75 | 26.30 |
| A | Sales outside state/UT : UI | 1.32 | 0.00 | 273.00 | 218.08 | 38.75 | 26.30 |
| 7 | Total Energy Requirement for State | 5659.11 | 5653.32 | 5708.45 | 5699.57 | 5498.81 | 5484.09 |
| 8 | Transmission losses | | | | | | |
| n | % | 3.56% | 3.67% | 3.56% | 3.71% | 3.44% | 4.11% |
| i) | MU | 208.90 | 215.12 | 210.72 | 219.60 | 193.52 | 232.70 |
| II | ENERGY REQUIRED AT GENERATOR END | 5868.01 | 5868.44 | 5919.17 | 5919.17 | 5692.33 | 5716.79 |
| 9 | Gross Availability | 5868.01 | 5868.44 | 5708.44 | 5699.57 | 5692.33 | 5716.79 |
| i | Power Purchase from Renewable Sources | 0.00 | 0.00 | 177.80 | 177.80 | 51.50 | 51.36 |
| ii | NPCIL | 375.47 | 385.77 | 386.70 | 386.70 | 398.08 | 398.03 |
| iii | Unscheduled Interchange | 0.00 | 0.00 | 32.75 | 32.75 | 32.75 | 34.04 |
| iv | Power Purchase from other sources | 5492.54 | 5482.67 | 5111.19 | 5102.32 | 5184.32 | 5207.67 |
| ν | Open Access Purchase | 0.00 | 0.00 | 0.00 | 0.00 | 25.69 | 25.69 |

Table 3-3: Gross Energy Requirement for FY 2014-15 (MU)

Accordingly, the Commission approves the energy requirement of 5691.09 MU (5716.79 MU – 25.69 MU) excluding open access purchase of 25.69 MU at generator end for the true-up of FY 2014-15.

3.8. Power Purchase Quantum & Cost for FY 2014-15

Petitioner Submission:

The Petitioner has submitted that the actual power purchase for FY 2014-15 is Rs. 2233.13 Crores to procure 5666.64 MU of energy for FY 2014-15 (revised submission including energy purchased through UI over drawal excluding open access purchase by open access consumers of the Petitioner), as against the power purchase cost of Rs. 2249.05 Crores to procure 5699.57 MU as approved by the Commission in its Tariff Order dated 01st April 2015.

Commission Analysis:

The Commission had approved the power purchase cost including transmission charges at Rs. 2249.05 Crores for purchase of 5699.57 MU in its review for FY 2014-15 and Tariff Order dated 01st April 2015. The Petitioner in its true-up petition has submitted that the actual power purchase for FY 2014-15 is Rs. 2233.13 Crores (in reply to the data gaps as submitted) including transmission costs during FY 2014-15 to procure 5628.66 MU for FY 2014-15 (including UI over drawal & excluding open access purchase by the consumers of the Petitioner). The Petitioner has submitted that it has considered the source-wise power purchase cost including transmission charges as per the audited accounts of FY 2014-15. The total power purchase cost as submitted by the Petitioner in the true-up includes the arrears on account of revision in CERC Regulations, revision in Income tax and increase in coal charges along with rebate on the prompt payment received by the utility. Further, during the Technical Validation Session held on 15th February 2015 and in reply to the data gaps pointed out by the Commission, the Petitioner submitted the month wise power purchase quantum and cost along with its summary for full FY 2014-15 which stated that the Petitioner has purchased 5666.64 MU with a cost of Rs. 2229.69 Crores. This has resulted in an overall discrepancy of 37.98 MU and Rs.3.44 Crores between the petition and the reply to the data gaps as submitted by the Petitioner for the true up of FY 2014-15. The Commission, as part of prudence checks verified the month and station-wise bills of power purchase cost submitted by the Petitioner for FY 2014-15 and has considered the month and summary wise cost as verified from bills and audited accounts for FY 2014-15. Further, the quantum has been verified from Regional Energy Accounts and power purchase bills. The Petitioner in its reply to the data gaps has submitted that it would be purchasing 0.14 MU of solar and 51.36 MU of non-solar power to meet its RPO. The Commission has verified this from the bills as submitted by the Petitioner and found the same incorrect in case of solar power.

As mentioned in the foregoing paragraphs of this order, the Commission has considered the separate effect of UI over drawal / under drawal for FY 2014-15; therefore the UI over drawal of 34.04 MU and UI under drawal of 26.30 MU (verified from the weekly UI bills as available with WRPC) under UI mechanism for FY 2014-15 are considered for the purpose of true-up.

The Petitioner in its submission has submitted that it has procured nil Renewable Energy Certificates for FY 2014-15. The Commission has observed that in order to comply with the RPO, the Petitioner has to procure 170.48 MU from the renewable energy sources for FY 2014-15. Further, in reply to the data gaps pointed out by the Commission, the Petitioner has submitted that it has purchased 51.50 MU of physical power (Solar – 0.14 MU and Non-Solar 51.36 MU) and 95 REC's (Solar – 30 and Non-Solar - 65).

The Commission has verified the power purchase cost and units from the power purchase bills for FY 2014-15 and arrived at Rs 2258.23 Crores for 5691.09 MU as against the audited figures of Rs 2275.81 Crores for 5691.09 MU. The Commission allows the power purchase cost of 2275.81 Crores as per the audited accounts and 5691.09 MU as per the

REA statement and power purchase bills for FY 2014-15. Further, the Commission has reduced the wrong adjustment of Rs 0.85 Crores on account of stores & spares, power purchase rebate as considered under Non-Tariff Income i.e. Rs 41.82 Crores and refund of FPPCA of FY 2011-12 to the tune of Rs 41.86 Crores. In accordance with the Power purchase cost as per the audited accounts, Auditor's report, and JERC Tariff Regulations, 2009; the Commission has found it reasonable and therefore considers Rs. 2191.27 Crores (Rs 2275.81 Crores – Rs 0.85 Crores – Rs 41.82 Crores & Rs 41.86 Crores) with reference to the final actual figures as per the audited accounts for the purpose of further analysis of true-up for 5691.09 MU.

The summary of power purchase quantum and costs, for FY 2014-15 as approved by the Commission after the true-up including UI over drawal, is given in the following table:

Table 3-4: Power Purchase Units approved by the Commission and actuals submitted by the Petitioner for FY 2014-15 (MU)

| | Power Purchase - Quantum (MUs) & Cost (Rs Crores) | | | | | | | | | | |
|---------|---|----------------------------|------------------|------------|--------|-------------|--------|----------|-------------------------|--|--|
| | | | | FY 2014-15 | | Cost (Rs Cı | rores) | | | | |
| Sr. No. | Particulars | Petitioner's Submission | True Up Order | Difference | Fixed | Variable | Other | Total | Per Unit (Paisa/kWh) | | |
| A | NTPC | 2,940.16 | 2,940.39 | (0.22) | 413.78 | 469.18 | 117.49 | 1,000.45 | 340.24 | | |
| 1 1 | KSTPP 1&2 | 386.37 | 386.37 | 0.00 | 19.91 | 41.63 | 2.68 | 64.22 | 166.22 | | |
| 2 | KSTPP 3 | 166.06 | 166.06 | 0.00 | 25.77 | 17.81 | 4.89 | 48.48 | 291.91 | | |
| 3 | VSTPP 1 | 304.94 | 304.94 | 0.00 | 19.39 | 48.60 | 20.22 | 88.20 | 289.25 | | |
| 4 | VSTPP 2 | 237.95 | 237.95 | 0.00 | 15.14 | 35.98 | 16.53 | 67.65 | 284.28 | | |
| 5 | VSTPP 3 | 259.47 | 259.47 | 0.00 | 27.90 | 38.76 | 17.14 | 83.80 | 322.97 | | |
| 6 | VSTPP 4 | 318.21 | 318.21 | (0.00) | 46.26 | 47.49 | 10.45 | 104.19 | 327.42 | | |
| 7 | KAWAS GPP | 194.28 | 194.28 | 0.00 | 46.11 | 54.11 | 7.77 | 107.99 | 555.84 | | |
| 8 | Gandhar GPP | 97.41 | 97.63 | (0.22) | 42.44 | 24.55 | 5.43 | 72.42 | 741.73 | | |
| 9 | SIPAT 1 | 644.81 | 644.81 | (0.00) | 89.20 | 93.39 | 17.60 | 200.19 | 310.47 | | |
| 10 | SIPAT 2 | 234.78 | 234.78 | (0.00) | 29.02 | 33.92 | 11.25 | 74.19 | 316.00 | | |
| 11 | KHSTPS 2 | 21.70 | 21.70 | (0.00) | 2.31 | 4.80 | 0.76 | 7.87 | 362.66 | | |
| 12 | MAUDA | 74.19 | 74.19 | 0.00 | 50.33 | 28.16 | 2.77 | 81.26 | 1,095.35 | | |
| | | | | | | | | | | | |
| В | NSPCL | 771.07 | 767.10 | 3.98 | 109.81 | 168.68 | 2.46 | 280.95 | 366.25 | | |
| 1 | BHILAI (ALLOCATED) | 771.07 | 767.10 | 3.98 | 109.81 | 168.68 | 2.46 | 280.95 | 366.25 | | |
| | NDON | 200.00 | 200.00 | 0.05 | | 405.05 | 2.20 | 405.45 | 250.00 | | |
| C | NPCIL KAPPS | 398.08 | 398.03 | 0.05 | - | 105.27 | 2.20 | 107.47 | 270.00 | | |
| 1 | | 90.86 | 90.85 | 0.02 | - | 20.86 | - 2.20 | 20.86 | 229.56 | | |
| 2 | TAPPS 3&4 | 307.22 | 307.18 | 0.03 | - | 84.41 | 2.20 | 86.61 | 281.96 | | |
| D | OTHERS | 1,473.08 | 1,500.18 | (27.10) | 412.73 | 245.11 | 2.88 | 660.72 | 440.43 | | |
| 1 | RGPPL | 1,473.00 | 1,300.10 | (27.10) | 12.75 | 0.02 | - | 12.77 | 440.43 | | |
| 2 | EMCO (BILATERAL) | 1,473.08 | 1,480.26 | (7.18) | 399.98 | 245.09 | 2.88 | 647.95 | 437.73 | | |
| 3 | JPL (BILATERAL) | - | 19.92 | (19.92) | - | - | - | - | | | |
| |). 5 (5.555) | | 17.72 | (17.72) | | | | | | | |
| Е | UI | 32.75 | 34.04 | (1.29) | - | 15.89 | - | 15.89 | 466.73 | | |
| | | - | - | - | - | - | - | - | - | | |
| F | RPO | 51.50 | 51.36 | 0.14 | - | 25.50 | - | 25.50 | 496.51 | | |
| 1 | Solar | 0.14 | - | 0.14 | - | - | - | - | | | |
| 2 | Non-Solar | 51.36 | 51.36 | (0.00) | - | 25.50 | - | 25.50 | 496.51 | | |
| | | | | | | | | | | | |
| G | Other Charges | - | - | - | - | - | - | 167.25 | | | |
| 1 | PGCIL CHARGES | - | - | - | - | - | - | 164.14 | | | |
| 2 | Reactive charges | - | - | - | - | - | - | 2.27 | | | |
| 3 | WRLDC | - | - | - | - | - | - | 0.84 | | | |
| Н | Power Purchase as per Bills | 5,666.64 | 5,691.09 | (24.45) | 936.32 | 1,029.63 | 125.03 | 2,258.23 | 396.80 | | |
| I | Power Purchase as per Audit Accounts | | | | | | | 2,275.81 | | | |
| J | Less: Stores and Spares wrongly Considered | | | | | | | 0.85 | | | |
| К | Less: PP Rebate wrongly considered in other income | | | | | | | 41.82 | | | |
| L | Less: FPPCA extra charged in FY 12 adjusted in FY 15 as against petitioner submission in FY 16 | | | | | | | 41.86 | | | |
| М | Power Purchase as per Audit Accounts after above 3 adjustments | | 5691.09 | | | | | 2191.27 | 385.04 | | |

During the review for FY 2014-15 against the proposal of the Petitioner for T&D Loss level of 4.75% for FY 2014-15, the Commission had approved T&D loss level of 4.70% as the Commission views that the loss level is at optimum level and it would be difficult to reduce

it further. In view of the audited accounts submitted for the truing up of FY 2014-15, the Commission approves the intra-state transmission and distribution loss level of 4.89% with reference to the audited figures of quantum of power purchase, energy sales (including separate effect of UI over drawal / under drawal as per the bills) and actual energy drawal of FY 2014-15. The Commission therefore in accordance with Regulation 9 of JERC Tariff Regulations, 2009 (reproduced below) finds it reasonable to disallow excess power purchase cost in view of the under-achievement of the norms laid down by the Commission.

As per Regulation 9 of the Tariff Regulations 2009,

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

Quote

- 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."

Unquote

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 % of losses in the Review Order for FY 2014-15 for the same sale of power. The excess in the power purchase cost due to higher percentage losses is to be deducted from the power purchase cost to be allowed in the true-up for FY 2014-15. The approved per unit power purchase cost (paisa per kWh) has been determined after considering energy requirement at state periphery minus open access power purchase and cost as approved by the Commission as per the audited accounts minus revenue from open access sales.

| Particulars | FY 2014-15 | | | |
|---|------------|---------|--|--|
| Particulars | Approved | Actual | | |
| Retail sales within the UT | 5166.02 | 5166.02 | | |
| Open Access Sales | 24.92 | 24.92 | | |
| Total Sales including Open Access | 5190.94 | 5190.94 | | |
| T&D Loss within the UT | 4.70% | 4.89% | | |
| Energy required at UT Periphery for Sale to Retail Consumers | 5446.95 | 5457.79 | | |
| Excess Power Purchase | 10.84 | | | |
| Approved Per unit Power Purchase Cost (Paisa per kWH) | 402 | | | |
| Penalty for Underachievement | 4.3 | 86 | | |

Table 3-5: Assessment of Losses for FY 2014-15

Keeping in view of the above mentioned provisions of the Regulations, the Commission disallows Rs 4.36 Crores from the power purchase cost considered in the true up for FY 2014-15.

The Commission after the verification of the audited accounts for FY 2014-15, and deducting the excess power purchase cost of Rs 4.36 Crores as discussed in the foregoing paragraph, considers the final power purchase cost of Rs 2186.91 (Rs 2191.27 Crores – Rs 4.36 Crores) for the purpose of True up of ARR for FY 2014-15 towards the purchase of 5691.09 MU.

Renewable Purchase Obligations

As per JERC (Procurement of Renewable Energy) Regulations 2010 Regulation 1 sub clause (1):

Quote

"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."

Unquote

The Petitioner had to purchase 3.30% of the total power purchase from renewable sources for FY 2014-15 including 0.60% for Solar and 2.70% for Non-Solar. The Commission has observed that in order to comply with the RPO, the Petitioner has to procure 170.48 MU from renewable energy sources for FY 2014-15.

In accordance with the JERC (Procurement of Renewable Energy) Regulations 2010 Regulation 4:

Ouote

"4. 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. It shall also be liable for penalty as may be provided by the Commission under Section 142 of Electricity Act, 2003.

Provided

- 1. That the fund so created shall be utilized as may be directed by the Commission for purchase of the certificates.
- 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.

- 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.
- 4. That in case of genuine difficulty in complying with the renewable purchase obligation because of non-availability of certificates, the obligated entity can approach the Commission for carry forward of compliance requirement to the next year."

Unquote

The treatment of the shortfall in RPO's is detailed in the review of FY 2015-16.

3.9. Operation and Maintenance Expenses

Petitioner Submission:

The Petitioner has submitted that the Operation and Maintenance expenses comprise of the following heads:

- **Employees Expenses** which includes the salaries, dearness allowance, dearness pay, other allowances and retirement benefits paid to the staff;
- **Repair and Maintenance (R&M) Expenses**, which include all expenditure incurred on the maintenance and upkeep of transmission and distribution assets; and
- Administrative and General Expenses, which include all expenditure incurred in operating a business such as telephone charges, regulatory and consultancy fees such as energy auditing and chartered accountant fees, conveyance and travel expenses, water charges etc.

Employee Expenses

The Petitioner has submitted the employee expenses of Rs. 9.10 Crores in its true-up petition for FY 2014-15 as compared to the employee expenses of Rs. 8.73 Crores approved by the Commission in its Tariff Order dated 05^{th} May 2014 and Rs. 8.65 Crores for FY 2014-15 in its ARR and Tariff Order dated 01^{st} April 2015.

Administration and General Expenses

The Petitioner has submitted the A&G expenses of Rs. 6.18 Crores in its true-up petition for FY 2014-15 as compared to the A&G expenses of Rs. 3.38 Crores approved by the Commission in its Tariff Order dated 05th May 2014 and Rs. 4.77 Crores for FY 2014-15 in its ARR and Tariff Order dated 01st April 2015.

Repair and Maintenance Expenses

The Petitioner has submitted the R&M expenses of Rs. 5.51 Crores in its true-up petition for FY 2014-15 as compared to the R&M expenses of Rs. 4.93 Crores approved by the Commission in its Tariff Order dated 05th May 2014 and Rs. 5.63 Crores for FY 2014-15 in its ARR and Tariff Order dated 01st April 2015.

Commission Analysis:

Operation and Maintenance expenses comprise of the following heads:

- **Employees Expenses** which includes the salaries, dearness allowance, dearness pay, other allowances and retirement benefits paid to the staff;
- **Repair and Maintenance (R&M) Expenses**, which include all expenditure incurred on the maintenance and upkeep of transmission and distribution assets; and
- Administrative and General Expenses, which include all expenditure incurred in
 operating a business such as telephone charges, regulatory and consultancy fees
 such as energy auditing and chartered accountant fees, conveyance and travel
 expenses, water charges etc.

Employee Expenses

The Petitioner has submitted the employee expenses of Rs. 9.10 Crores in its true-up petition for FY 2014-15 as compared to the employee expenses of Rs. 8.73 Crores approved by the Commission in its Tariff Order dated 05th May 2014 and Rs. 8.65 Crores for FY 2014-15 in its ARR and Tariff Order dated 01st April 2015. The Petitioner has submitted the detailed break-up of employee expenses on each of the expenditure heads for consideration by the Commission. The Commission has verified the same through the audited accounts of the Petitioner for FY 2014-15 and found it correct and **accordingly approves the employee expenses at Rs 9.10 Crores as given in the Table below.**

| | | FY 2014-15 | | | | | | | |
|--------|-------------------------|--|---|---------------------------------------|---|--|---|--|--|
| Sr. No | Particulars | (Petitioner's submission) in ARR | Approved in T.O. dt. 05.05.14 for FY 2014-15 | Petitioner's submission for APR | Approved in Review Order dt.01.04.15 | Petitioner's Submission for True -Up | True-Up Approved By Commission | | |
| | | | | | | | | | |
| 1 | Total Employee Expenses | 12.24 | 8.73 | 8.76 | 8.65 | 9.10 | 9.10 | | |

Table 3-6: Employee Expenses for FY 2014-15 (Rs. Crores)

Administration and General Expenses

The Petitioner has submitted the A&G expenses of Rs. 6.18 Crores in its true-up petition for FY 2014-15 as compared to the A&G expenses of Rs. 3.38 Crores approved by the Commission in its Tariff Order dated 05th May 2014 and Rs. 4.77 Crores for FY 2014-15 in its ARR and Tariff Order dated 01st April 2015. The Petitioner has submitted the detailed break-up of Administrative and General Expenses on each of the expenditure heads for consideration by the Commission. The Commission has verified the same through the audited accounts of the Petitioner for FY 2014-15 and found it on the higher side as the Petitioner has considered a donation of Rs 2.00 Crores under Adarsh Gram Society which needs to be covered under Corporate Social Responsibility. This amount is not considered under ARR and accordingly the Commission approves the administration and general expenses at Rs 4.18 Crores as in the Table below:

Approved Petitioner's Approved Petitioner's (Petitioner's True-Up Sr. No **Particulars** in T.O. dt. submission) in submission in Review Order Submission Approved 05.05.14 for FY ARR for APR dt.01.04.15 for True -Up By Commission 2014-15 Total A&G Expenses 3.56 3.38 4.84 4.77 6.18 4.18

Table 3-7: Administrative and General Expenses for FY 2014-15 (Rs. Crores)

Repair and Maintenance Expenses

The Petitioner has submitted the R&M expenses of Rs. 5.51 Crores in its true-up petition for FY 2014-15 as compared to the R&M expenses of Rs. 4.93 Crores approved by the Commission in its Tariff Order dated 05th May 2014 and Rs. 5.63 Crores for FY 2014-15 in its ARR and Tariff Order dated 01st April 2015. The Petitioner in its reply to the data gaps has submitted the detailed breakup of R&M expenses and the Commission has verified the same from the audited accounts for FY 2014-15 and accordingly the Commission approves R&M expenses at Rs 5.51 Crores as in the table below:

Table 3-8: Repair and Maintenance Expenses for FY 2014-15 (Rs. Crores)

| | | FY 2014-15 | | | | | | |
|--------|--------------------|--|---|---------------------------------------|---|--|----------------|--|
| Sr. No | Particulars | (Petitioner's submission) in ARR | Approved in T.O. dt. 05.05.14 for FY 2014-15 | Petitioner's submission for APR | Approved in Review Order dt.01.04.15 | Petitioner's Submission for True -Up | Approved Rv | |
| | | | | | | | | |
| 1 | Total R&M expenses | 5.28 | 4.93 | 5.70 | 5.63 | 5.51 | 5.51 | |

3.10. Capitalization, GFA & Depreciation

Petitioner Submission:

The Petitioner in its true-up petition for FY 2014-15 has submitted that the actual capital expenditure incurred by the utility is Rs. 57.18 Crores and capitalization achieved during FY 2014-15 is Rs. 3.33 Crores which is much less than the capitalization of Rs. 25.29 Crores approved by the Commission for FY 2014-15 in its Tariff Order dated 01st April 2015.

The Petitioner has computed the depreciation at Rs.13.61 Crores as against the depreciation of Rs. 16.12 Crores approved by the Commission for FY 2014-15 in its Tariff Order dated 01st April 2015. The Petitioner has submitted that the depreciation has been computed by applying the depreciation rates as given in the depreciation schedule of CERC (Terms and Conditions of Tariff) Regulations, 2009 on the opening Gross Fixed Assets and the subsequent additions to it in FY 2014-15 as shown in the audited accounts for FY 2014-15.

Commission Analysis:

Regulation 26 (1) (i) of the JERC Tariff Regulations, 2009 specifies "the value base for depreciation shall be historical cost of assets, that is actual expenses limited to approved capital cost where such capital cost has been approved by the Commission".

The Commission had approved Rs 305.92 Crores as closing value of GFA for FY 2013-14 in Tariff Order dated 01st April 2015 and the Commission has considered the same as the opening GFA for FY 2014-15 along with capitalization of Rs 3.33 Crores during the FY 2014-15. Accordingly the Commission approves depreciation of Rs 13.61 Crores in the true up petition for FY 2014-15 as projected by the Petitioner as per table below.

| | | FY 2014-15 | | | | | | | | |
|--------|-------------------------------------|--|---|---------------------------------------|---|--|---|--|--|--|
| Sr. No | Particulars | (Petitioner's submission) in ARR | Approved in T.O. dt. 05.05.14 for FY 2014-15 | Petitioner's submission for APR | Approved in Review Order dt.01.04.15 | Petitioner's Submission for True -Up | True-Up Approved By Commission | | | |
| | | | | | | | | | | |
| 1 | Opening Gross Fixed Assets | 568.12 | 367.96 | 429.37 | 305.92 | 386.43 | 305.92 | | | |
| 2 | Addition During the FY | 114.74 | 114.74 | 25.29 | 25.29 | 3.33 | 3.33 | | | |
| 3 | Adjustment/Retirement During the FY | - | • | - | 1 | - | - | | | |
| 4 | Closing Gross Fixed Assets | 682.86 | 482.70 | 455.02 | 331.21 | 389.76 | 309.25 | | | |
| 5 | Average Gross Fixed Assets | 625.49 | 425.33 | 442.20 | 318.57 | 388.10 | 307.58 | | | |
| 6 | Rate of Depreciation (%) | 5.07% | 5.10% | 0.00% | 5.06% | 3.51% | 4.42% | | | |
| 7 | Depreciation for the FY | 31.74 | 21.69 | 22.50 | 16.12 | 13.61 | 13.61 | | | |

Table 3-9: Gross Fixed Assets, Capitalization and Depreciation for FY 2014-15 (Rs. Crores)

3.11. Interest and Finance Charges

Petitioner Submission:

The Petitioner has considered the opening balance of Loans for FY 2014-15 as approved by the Commission in its Tariff Order dated 01st April 2015 for the Review of the ARR for FY 2014-15. The normative loan addition in FY 2014-15 has been computed as 70% of the capitalization for FY 2014-15 which works out to Rs. 2.33 Crores. The capitalization for FY was Rs. 3.33 Crores as per the annual accounts for FY 2014-15. In line with the approach adopted by the Commission in its previous Tariff Orders, 10% of the opening loans have been considered as the repayment during the year. Further the rate of interest has been considered as equal to the SBI PLR of 14.45%. The Petitioner has claimed the interest and finance charges of Rs. 7.16 Crores to be considered for true up of FY 2014-15.

Commission Analysis:

As per Regulation 25 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009

Quote

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.

Unquote

The Commission places reliance on Section 23 of the JERC Tariff Regulations which is reproduced below:

Quote

"23. Debt-Equity Ratio

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:

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: .

(2) 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.

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."

Unquote

These Regulations mandate the debt equity ratio for assets deployed. The Commission has gone through the Petitioner's submission and has found that the Petitioner has wrongly considered the average interest rate of 14.58% to arrive at the figure of Rs 7.16 Crores instead of 14.45% given in its submission in the true-up petition. Further, the Commission has considered the actual capitalization of assets as proposed by the Petitioner at Rs 3.33 Crores during FY 2014-15. The Commission for the purpose of funding of the capitalization, has considered the normative debt equity ratio of 70:30, whereby it has considered the addition in normative loan at Rs. 2.33 Crores for the FY 2014-15 and the opening normative loan of Rs. 50.45 Crores as approved by the Commission in its Tariff Order dated 01st April 2015 for the Review of the ARR for FY 2014-15. 10% of the opening loans have been considered as the repayment during the year. Further, the Commission has

considered the weighted average interest rate (SBI PLR) for the FY 2014-15 (https://www.sbi.co.in/portal/web/interest-rates/benchmark-prime-lending-rate-historical-data). The calculation for the interest on the normative loan is given below:

| | | | | FY 2014 | I-15 | | |
|--------|---|--|---|---------------------------------------|---|--|---|
| Sr. No | Particulars | (Petitioner's submission) in ARR | Approved in T.O. dt. 05.05.14 for FY 2014-15 | Petitioner's submission for APR | Approved in Review Order dt.01.04.15 | Petitioner's Submission for True -Up | True-Up Approved By Commission |
| | | | | | | | |
| 1 | Opening Normative Loan | 98.24 | 93.88 | 52.90 | 50.45 | 50.45 | 50.45 |
| 2 | Add: Normative Loan during the year | 80.32 | 80.32 | 17.71 | 17.70 | 2.33 | 2.33 |
| 3 | Less: Normative Repayment 10% of Opening in FY 15 | 4.91 | 9.39 | 3.53 | 16.12 | 5.05 | 5.05 |
| 4 | Closing Normative Loan | 173.65 | 164.81 | 67.08 | 52.03 | 47.74 | 47.73 |
| 5 | Average Normative Loan | 135.95 | 129.35 | 59.99 | 51.24 | 49.09 | 49.09 |
| 6 | Rate of Interest (@SBAR rate) | 14.45% | 14.75% | 14.45% | 14.75% | 14.58% | 14.75% |
| 7 | Interest on Normative Loan including bank charges | 19.64 | 19.08 | 8.67 | 7.56 | 7.16 | 7.24 |

Table 3-10: Interest and Finance Charges for FY 2014-15 (Rs. Crores)

In view of the submissions made by the Petitioner and the capitalization considered for FY 2014-15 in the foregoing para of this order, the Commission has considered the Normative Interest on loans at Rs. 7.24 Crores (including Interest Expenses and Bank Charges as per Audited Accounts) as reasonable and approves the same for true-up of FY 2014-15.

3.12. Interest on Working Capital

Petitioner Submission:

The Petitioner has computed the interest on working capital for FY 2014-15 on the normative principles outlined by the Commission in the JERC (Terms and Conditions for determination of Tariff), Regulations, 2009. The Petitioner has computed interest on working capital at 14.45% as equal to the SBI PLR as Rs. 20.95 Crores as against Rs. 19.76 Crores approved by the Commission in its Tariff Order dated 01st April 2015 for FY 2014-15 and Rs. 20.82 Crores in its Tariff Order dated 5th May 2014.

Commission Analysis:

As per Regulation 29 of JERC Tariff Regulations

Quote

- 29. Working Capital and Interest Rate on Working Capital
- 1) For generation and transmission business, the working capital shall be as per CERC norms.
- 2) Subject to prudence check, the working capital for distribution business shall be the sum of one month requirement for meeting:
 - a. Power purchase cost.

- b. Employees cost.
- c. Administration & general expenses and
- d. Repair & Maintenance expenses.
- 3) Subject to prudence check, the working capital for integrated utility shall be the sum of one month requirement for meeting:
 - a. Power purchase cost
 - b. Employees cost
 - c. Administration & general expenses
 - d. Repair & Maintenance expenses.
 - e. Sum of two-month requirement for meeting Fuel cost.
- 4) The rate of interest on working capital shall be equal to the short term Prime Lending Rate of State Bank of India on the 1st April of the relevant financial year. The interest on working capital shall be payable on normative basis notwithstanding that the generating company / licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan amount worked out on the normative figures.

Unquote

The Commission has considered the calculation of the different components of the interest on working capital as per JERC Tariff Regulations. The Commission has gone through the Petitioner's submission and has found that the Petitioner has wrongly considered the average interest rate of 15.09% to arrive at the figure of Rs 20.95 Crores instead of 14.45% of its submission in the true-up petition.

Further, as the consumer security deposit has not been kept in any separate account and is available to the Petitioner to meet its working capital requirements, the Commission has therefore considered that the average amount against the consumer security deposit available till 31st March 2015 to meet the working capital required for FY 2014-15 is Rs 48.96 Crores. The Petitioner has wrongly reduced the closing security deposit as on 31st March 2015 i.e. Rs 42.86 Crores as against the average security deposit available in FY 2014-15 of Rs 48.96 Crores. Further, the Commission has considered the interest rate (SBI PLR) as on 01st April 2014 (https://www.sbi.co.in/portal/web/interest-rates/benchmark-prime-lending-rate-historical-data). The calculation for the interest on the working capital is given below:

| | | | | FY 20 | 14-15 | | |
|--------|--|--|---|---------------------------------------|---|--|---|
| Sr. No | Particulars | (Petitioner's submission) in ARR | Approved in T.O. dt. 05.05.14 for FY 2014-15 | Petitioner's submission for APR | Approved in Review Order dt.01.04.15 | Petitioner's Submission for True -Up | True-Up Approved By Commission |
| 1 | F 10 10 2 1 | | | | | | |
| 1 | Fuel Cost for 2 months | - | - | - | - | - | - |
| 2 | Power Purchase Cost for one month | 180.57 | 182.65 | 187.58 | 187.42 | 186.09 | 182.61 |
| 3 | O&M Cost for one month | 1.76 | 1.42 | 1.61 | 1.59 | 1.74 | 1.57 |
| 4 | Total Working Capital requirement for one month | 182.33 | 184.07 | 189.19 | 189.01 | 187.83 | 184.17 |
| 5 | Security Deposit | 19.75 | 42.94 | - | 55.06 | 42.86 | 48.96 |
| 6 | Total Working Capital after deduction of Security Deposit from Working Capital Requirement | 162.58 | 141.13 | 189.19 | 133.95 | 144.97 | 135.21 |
| 7 | SBI PLR (%) | 14.45% | 14.75% | 14.45% | 14.75% | 14.45% | 14.75% |
| 8 | Interest on Working Capital | 23.35 | 20.82 | 27.34 | 19.76 | 20.95 | 19.94 |

Table 3-11: Interest on Working Capital for FY 2014-15 (Rs. Crores)

In view of the discussion in the above paragraphs, the Commission has considered the Interest on Working Capital at Rs. 19.94 Crores as reasonable and approves the same for true-up of FY 2014-15.

3.13. Interest on Security Deposit

Petitioner Submission:

The Petitioner has claimed Rs 4.33 Crores as the interest on security deposit from consumers for FY 2014-15.

Commission Analysis:

Interest on Security Deposit

In terms of 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 opening and closing security deposit along with interest paid on the security deposit to the consumers for FY 2014-15 from the audited accounts of FY 2014-15 and approves Rs 4.33 Crores for FY 2014-15 as below:

FY 2014-15 Approved Approved Petitioner's (Petitioner's Petitioner's Sr. No **Particulars** in T.O. dt. in Review submission) in submission Submission 05.05.14 for FY Order ARR for APR for True -Up By Commission

Table 3-12: Interest on Security Deposit for FY 2014-15 (Rs. Crores)

1.74

2014-15

3.86

dt.01.04.15

11.16

4.96

4.33

True-Up

Approved

3.14. Return on Capital Base/Return on Equity

Petitioner Submission:

The Petitioner has computed the return at 3% on net block of approved assets as per the Tariff Regulations of the Commission. The return on equity of Rs. 5.14 Crores has been claimed by the Petitioner for true up of FY 2014-15.

Commission Analysis:

The Commission is of the view that the Petitioner, being an integrated utility (as considered by the Commission in its last Tariff Order $01^{\rm st}$ April 2015) is eligible for the return on capital base under the provisions of Schedule VI of the repealed Electricity (Supply) Act, 1948 vide provision under Regulation 23 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. The Commission has considered the opening GFA for FY 2014-15 and accumulated depreciation till FY 2013-14 for arriving at the net block for FY 2014-15. It has computed the return at 3% on net block of approved assets as below:

FY 2014-15 Approved Approved True-Up Petitioner's (Petitioner's Petitioner's Sr. No **Particulars** in T.O. dt. in Review Approved submission) submission Submission 05.05.14 for **Order** By in ARR for APR for True -Up Commission FY 2014-15 dt.01.04.15 367.96 Gross block at beginning of the FY/Opening GFA or equity 40.00 386.43 305.92 305.92 Accumulated depreciation/Addition in Equity at begining of FY 57.19 142.74 214.99 142.74 Net block at beginning of the FY /Closing Equity 40.00 310.77 163.18 171.44 163.18 Accumulated consumer contribution Net fixed assets at beginning of the FY /Average Equity 40.00 310.77 163.18 171.44 163.18 Amount/Net Capital Base Reasonable return @3% of NFA till FY 16 6.40 12.75 4.90 12.22 5.14 4.90

Table 3-13: Return on Capital Base for FY 2014-15 (Rs. Crores)

The Commission considers the Return on Capital Base of Rs. 4.90 Crores as reasonable and approves the same for true up of FY 2014-15.

3.15. Income Tax

Petitioner Submission:

The Petitioner has claimed Rs 21.26 Crores against the Income Tax in its true-up petition for FY 2014-15.

Commission Analysis:

The Commission has considered the actual income tax paid based on audited accounts for FY 2014-15 i.e. Rs 21.26 Crores.

3.16. Provision for bad and doubtful debts

Petitioner Submission:

The Petitioner has claimed Rs 6.88 Crores against the bad and doubtful debts in its true-up petition for FY 2014-15.

Commission Analysis:

As specified in Regulation no. 28 of JERC Tariff Regulations

Quote

"28. Bad and Doubtful Debts

The Commission may, after the generating company/licensee gets the receivables audited, allow a provision for bad debts up to 1% of receivables in the revenue requirement of the generating company/licensee. (Information to be furnished in format 18)"

Unquote

Thus the JERC Tariff Regulation allows a provision for bad and doubtful debts up to 1% of receivables in the revenue requirement. The Petitioner has passed a provision for bad and doubtful debts under other expenses head in the audited accounts for FY 2014-15. The Commission has verified the same based on the audited accounts of FY 2014-15 and found that trade receivables are Rs 235.05 Crores as on 31st March 2015.

The Commission has, therefore, considered 1% of trade receivables i.e. Rs 2.35 Crores expenses on account of bad & doubtful debt for true-up of ARR for FY 2014-15.

3.17. Non-Tariff Income

Petitioner Submission:

The non-tariff income comprises of metering, late payment charges, interest on staff loans, reconnection fee, miscellaneous revenue etc. The Petitioner claimed actual non-tariff Income for FY 2014-15 as Rs. 41.51 Crores as against Rs. 12.14 Crores approved by the Commission in its Tariff Order dated 05th May 2014 and Rs 30.81 Crores approved in the Tariff Order dated 01st April 2015. The Petitioner has further submitted that variation in non-tariff income is uncontrollable and accordingly requested the Commission to allow the variation in non-tariff Income as uncontrollable for the purpose of truing up.

Commission Analysis:

It is evident from the Table below that income from these charges are primarily of non – tariff nature as per the Provision 33 of the JERC Terms and Conditions of Tariff Regulations 2009. The Commission has verified the non-tariff income from the audited accounts of FY

2014-15 of the Petitioner and found it to be correct and the same has been represented below:

| | | FY 2014-15 | | | | | | |
|--------|-------------|--|---|---------------------------------------|---|--|---|--|
| Sr. No | Particulars | (Petitioner's submission) in ARR | Approved in T.O. dt. 05.05.14 for FY 2014-15 | Petitioner's submission for APR | Approved in Review Order dt.01.04.15 | Petitioner's Submission for True -Up | True-Up Approved By Commission | |
| | | - | - | - | - | - | - | |
| 1 | Total | 0.76 | 12.14 | 30.81 | 30.81 | 41.51 | 41.51 | |

Table 3-14: Non-Tariff Income for FY 2014-15 (Rs. Crores)

The Commission has, therefore, considered Rs 41.51 Crores expenses on account of Non-Tariff Income for True-up of ARR for FY 2014-15.

3.18. Revenue from Sale of Surplus Power

Petitioner Submission:

The Petitioner has submitted the actual under drawal of nil MU under UI mechanism for FY 2014-15 but has claimed Rs 7.09 Crores as revenue from sale of surplus power during FY 2014-15.

Commission Analysis:

The Commission has verified the weekly summary sheets/bills of UI from the WRPC for the complete year of FY 2014-15 and for the purpose of this Order has considered the over drawal and under drawal of UI separately.

For the purpose of the true-up of FY 2014-15, the Commission has considered the surplus energy sale of 26.30 MU (as verified from the UI bills from the WRPC for the complete year of FY 2014-15) under the UI mechanism for FY 2014-15 at Rs 7.09 Crores as per audited accounts.

3.19. Revenue at approved retail tariff of FY 2014-15

Petitioner Submission:

The Petitioner has submitted the actual revenue of Rs. 2297.43 Crores (including the amount received on account of FPPCA charges) as against Rs. 2113.11 Crores and Rs. 2292.67 Crores as approved by the Hon'ble Commission vide its Tariff Orders dated 05th May 2014 and 01st April 2015 respectively. The Petitioner in its petition has submitted the detailed reconciled statement of revenue from sale of power at existing tariff with reference to the final actual figures of income & expenditure as per the audited accounts of FY 2014-15.

Commission Analysis:

The Petitioner has submitted the final actual figures of revenue from sale of power at approved tariff of FY 2014-15; therefore the Commission has considered the final actual figures of revenue from sale of power as per the audited accounts of FY 2014-15 for true up of FY 2014-15. The Petitioner in its reply to the data gaps has submitted that there was an open access sale of 24.92 MU as discussed in the foregoing paragraphs. The audited accounts for FY 2014-15 do not support a separate bifurcation for open access income. Therefore, the Commission has considered the open access charge of Rs 0.12/kWh as per Tariff Order dated 05th May 2014 and calculated income from open access i.e. Rs 0.30 Crores.

As per sub-Regulation 2 (i) of Regulation 8 of JERC Tariff Regulations 2009, the Commission has considered the final actual figures of Revenue from the sale of Power including the revenue from retail tariff and recovery on account of FPPCA variations only as per audited accounts and approved Rs. 2297.43 Crores (including open access income) as revenue from retail sales for true-up of FY 2014-15.

3.20. Aggregate Revenue Requirement, Revenue Surplus/Deficit for true-up of FY 2014-15 and Carrying Cost

Petitioner Submission:

The Petitioner has submitted the gross revenue requirement of Rs. 2291.75 Crores (Total Revenue Requirement – Non-Tariff Income) and excluding income from sale of surplus power of Rs 7.09 Crores for FY 2014-15 and has estimated a revenue gap/(surplus) of Rs. (12.77) Crores for the purpose of true up of FY 2014-15.

Commission Analysis:

The Commission has considered and approved the true-up of ARR for FY 2014-15 based on the items of expenditure discussed in the preceding Chapters and the same has been summarized in the table below vis-à-vis the Petitioner's claim in the true-up petition for FY 2014-15.

As per sub-Regulation 2 (i) of Regulation 8 of JERC Tariff Regulations 2009, the Commission has considered the final actual figures as per audited accounts for the purpose of true-up of FY 2014-15 as below:

Table 3-15: Aggregate Revenue Requirement and Revenue Surplus/Deficit for true-up of FY 2014-15 (Rs. Crores)

| | | | | FY 201 | 4-15 | | |
|--------|--|--|---|---------------------------------------|---|--|---|
| Sr. No | Particulars | (Petitioner's submission) in ARR | Approved in T.O. dt. 05.05.14 for FY 2014-15 | Petitioner's submission for APR | Approved in Review Order dt.01.04.15 | Petitioner's Submission for True -Up | True-Up Approved By Commission |
| | | | | | | | |
| 1 | Cost of fuel | - | - | - | - | - | - |
| 2 | Cost of power purchase for full year | 2,166.89 | 2,191.80 | 2,250.96 | 2,249.05 | 2,233.13 | 2,186.91 |
| | Provision for RPO Compliance | - | 51.88 | - | - | - | - |
| | Employee costs | 12.24 | 8.73 | 8.76 | 8.65 | 9.10 | 9.10 |
| | Administration and General Expenses | 3.56 | 3.38 | 4.84 | 4.77 | 6.18 | 4.18 |
| | Repair and Maintenance Expenses | 5.28 | 4.93 | 5.70 | 5.63 | 5.51 | 5.51 |
| | Depreciation | 31.74 | 21.69 | 22.50 | 16.12 | 13.61 | 13.61 |
| - | Interest and Finance charges | 19.64 | 19.08 | 8.67 | 7.56 | 7.16 | 7.24 |
| | Interest on Working Capital | 23.35 | 20.82 | 27.34 | 19.76 | 20.95 | 19.94 |
| | Interest on Security Deposit | 1.74 | 3.86 | 11.16 | 4.96 | 4.33 | 4.33 |
| 11 | Return on NFA /Equity | 6.40 | 12.75 | 12.22 | 4.90 | 5.14 | 4.90 |
| | Provision for Bad Debt | 22.86 | 10.67 | 4.50 | - | 6.88 | 2.35 |
| | Income Tax | - | - | 10.00 | 2.52 | 21.26 | 21.26 |
| 14 | Incentive on achievement of norm of T&D loss | - | - | - | - | - | - |
| 15 | Total Revenue Requirement | 2,293.70 | 2,349.59 | 2,366.65 | 2,323.91 | 2,333.26 | 2,279.34 |
| 16 | Less: Non Tariff Income | 0.76 | 12.14 | 30.81 | 30.81 | 41.51 | 41.51 |
| 17 | Less: Revenue from Surplus Power Sale/UI | 0.17 | - | 91.73 | 73.27 | 7.09 | 7.09 |
| 18 | Less: Revenue from Short term sale | - | - | - | - | - | - |
| 19 | Net Revenue Requirement | 2,292.77 | 2,337.45 | 2,244.11 | 2,219.83 | 2,284.66 | 2,230.74 |
| 20 | Revenue from Retail Sales at Existing Tariff | 2,132.60 | 2,379.90 | 2,230.92 | 2,264.36 | 2,297.43 | 2,297.43 |
| 21 | Net Gap / (Surplus) | 160.17 | (42.45) | 13.19 | (44.53) | (12.77) | (66.69) |
| 22 | Recovery on account of PPC variations | 153.60 | - | 28.30 | 28.30 | - | - |
| 23 | Gap after adjusting PPC variations | 6.57 | (42.45) | (15.11) | (72.83) | (12.77) | (66.69) |
| 24 | Gap/(Surplus) for the previous year | 99.17 | 42.82 | - | (139.27) | (139.27) | (212.76) |
| 25 | Carrying Cost | - | - | - | (20.54) | - | (31.38) |
| 26 | Past Arrears/Refunds to Consumers | - | - | - | - | - | - |
| 27 | Total Gap/ (Surplus) | 105.74 | 0.37 | (15.11) | (232.64) | (152.04) | (310.83) |

While the Petitioner, has not considered any carrying cost for carry forward of the revenue surplus of Rs 212.76 Crores (approved during true up for FY 2013-14 dated 01st April 2015 and review order dated 20th October 2015) during the true-up of FY 2014-15, the Commission, considering the carry forward of the revenue surplus of Rs.66.69 Crores along with carrying cost, has estimated the revenue surplus of Rs.310.83 Crores as reasonable and approves the same for true-up of FY 2014-15. This estimated surplus is carried over to the next year and has accordingly been considered in Review of ARR of FY 2015-16.

4. Review of FY 2015-16

4.1. Applicable Provisions of Tariff Regulations 2009

The Review of FY 2015-16 is to be carried out as per the following provisions of Regulation 8 of Tariff Regulations, 2009:

Quote

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

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

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

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

While approving such expenses/revenues to be adjusted in the future years as arising out of the Review and / or Truing up exercises, the Commission may allow the carrying costs as determined by the Commission of such expenses/revenues. Carrying costs shall be limited to the interest rate approved for working capital borrowings.

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

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

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

Unquote

4.2. Approach for Review of FY 2015-16

The review of aggregate revenue requirement 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 actual data for six months for power purchase cost and sales, and revised estimates of FY 2015-16 based on six months actuals for O&M expenses, interest and depreciation submitted by the Petitioner.

4.3. Energy Sales

Petitioner Submission:

The Petitioner has submitted the revised estimates of 5420.28 MU for FY 2015-16. The actual energy sale in the DNH periphery in the first nine months of the FY 2015-16 was 3660.20 MU. Further, the Petitioner highlighted that DNHPDCL overall sales is significantly dependent on HT/EHT Consumers with close to 96% of total sales to this category.

Commission Analysis:

The Commission has noted the actual audited sales figures for FY 2014-15 and nine months unaudited sales figures for FY 2015-16. The Commission has noted the Petitioner concern in respect of HT consumers moving to open access to procure energy for the functioning of their industries (with a combined connected load of 221 MW) between July 2015 to December 2015. The Commission while approving the Business Plan for MYT Control Period from FY 2016-17 to FY 2018-19 has considered FY 2015-16 as the base FY and revised the sales for FY 2015-16 on 15th December 2015. Since this is a review for FY 2015-16 the Commission has considered the base figures as considered for FY 2015-16 in the Business Plan Order dated 15th December 2015 for projecting sales, number of consumers and connected load. The Petitioner has not submitted the detailed slab wise breakup of sales, connected load and number of consumers for FY 2015-16 in its petition. The Commission, based on the breakup as available for FY 2014-15 has bifurcated the sales, number of consumers and connected load for FY 2015-16. The detailed category wise sales as approved are shown below:

| | | | FY 20 | 15-16 | |
|--------|-----------------------------|-------------------|------------------------|-------------------|----------|
| S. No. | Category / Consumption Slab | ARR Submission | ARR TO dt. 01.04.15 | APR Submission | APR TO |
| | | | | | |
| A | Domestic | ļ | | | 103.28 |
| 1 | 0-50 units | | | | 17.70 |
| 2 | 51-200 units | _ | 108.67 | 106.59 | 31.05 |
| 3 | 201 - 400 units | | 100.07 | 100.05 | 31.06 |
| 4 | 401 and above | | | | 20.71 |
| 5 | Low Income Group (LIG) | | | | 2.77 |
| В | Commercial | | | | 30.55 |
| 1 | 1- 100 units | - 30.62 30.27 | | 11.42 | |
| 2 | 101 and above units | | | | 19.13 |
| С | Agriculture | | | | 4.86 |
| 1 | Up to 10 HP | - | 5.23 | 4.74 | 3.37 |
| 2 | Above 10 HP | | | | 1.49 |
| D | LTP Industry | - | 208.25 | 204.4 | 201.95 |
| Е | Public Lighting | - | 10.25 | 9.62 | 10.01 |
| F | Public Water Works | - | 2.94 | 3.4 | 3.39 |
| G | НТ | | | | 5122.45 |
| 1 | Up to 66 kV | | 5212.54 | 5058.46 | 3722.22 |
| 2 | Above 66 kV |] -] | 3414.34 | 3036.40 | 990.44 |
| 3 | HT Ferro | | | | 409.79 |
| I | Hoardings/ Signboards | - | | | 0.00 |
| J | Temporary | - | 0.31 | 2.80 | 0.00 |
| К | Total | 5.529.42 | 5578.81 | 5420.28 | 5.476.49 |

Table 4-1: Sales Approved for FY 2015-16 (MU)

4.4.Intra-State Transmission & Distribution Loss

Petitioner Submission:

The Petitioner has considered the distribution losses of 4.70% for FY 2015-16 as approved by the Commission in its last Tariff Order dated 01st April 2015.

Commission Analysis:

The Commission is of view that the T&D loss level in DNH, currently approved for FY 2015-16 at 4.70%, is already at a very optimal level. The Petitioner has submitted two different figures for Intra-State Transmission & Distribution Loss at 4.70% and 4.95% (Table 19 and Table 44), though the total loss in MU is the same. Thus the Commission has retained the loss level of 4.70% as submitted by the Petitioner for the purpose of Review of FY 2015-16 and approved by the Commission in its Tariff Order dated 01st April 2015. However, the sharing of gain if any, on account of over-achievement of target specified by the Commission will be dealt in the true up of FY 2015-16 on the basis of actual T&D loss level and audited figures of the quantum of power purchase and sales for FY 2015-16.

Accordingly, the Commission has considered the loss level of 4.70% as the T&D loss level for the purpose of Review of ARR of FY 2015-16.

4.5.Inter-State Transmission losses

Petitioner Submission:

The Petitioner has considered the recent 52-week moving average of regional losses available at the level of 3.56% for estimating the power availability at the periphery.

Commission Analysis:

The Petitioner has submitted two different figures for Inter-State Transmission Loss at 226.41 MU and 222.88 MU (Table 19 and Table 44). The Commission in its Tariff Order for FY 2015-16 had considered the recent 52-week moving average of regional losses and approved 3.71% as the inter-state transmission loss for FY 2015-16.

Since the recent 52 week moving average of regional losses is 3.66% for the week ending 27th February 2015, the Commission now considers the figures of regional pool losses of 3.66% as the inter-state loss and approves the same for review of ARR of FY 2015-16 which would be revised based on actuals during the truing up exercise.

4.6. Energy Requirement

Petitioner Submission:

The Petitioner has considered the overall energy requirement at the generator end for FY 2015-16 as 6260.61 MU excluding open access.

Commission Analysis:

The Petitioner has submitted two different figures for energy requirement at the generator end at 6359.91 MU and 6260.61 MU (Table 19 vs Table 44). Both also includes a surplus sale of 350.13 MU as per the Petitioner projections. The Commission has considered the actual under drawal of 22.64 MU as per the weekly UI sheets of WRPC for first six months of FY 2015-16. The Petitioner in its reply to the data gaps has submitted an open access purchase of 776.36 MU (July 15 to Dec 15). The energy requirement for FY 2015-16 is drawn based on the approved inter-state and intra-state transmission & distribution losses and the approved energy sales as discussed in the foregoing paragraphs and actual open access sales for FY 2015-16 (till Feb 16 and proportionately escalated for remaining one month) i.e. 843.08 MU. The Commission has verified the open access purchase by open access consumers of the Petitioner from the REA statement and found drawal to the tune of 873.41 MU. The gross energy requirement approved for FY 2015-16 is shown in the Table below, along with the energy requirement submitted by the Petitioner in its review petition for ARR of FY 2015-16.

| | | | FY 20 | 15-16 | |
|---------|--|-------------------|------------------------|-------------------|---------|
| Sr. No. | Particulars | ARR Submission | ARR TO dt. 01.04.15 | APR Submission | APR TO |
| I | ENERGY REQUIREMENT | | | | |
| 1 | Energy sales within the State/UT | 5529.44 | 5578.79 | 5420.28 | 5476.49 |
| 2 | Open Access Sales | 0.00 | 0.00 | 478.96 | 843.08 |
| 3 | Total Sales within the State/UT | 5529.44 | 5578.79 | 5899.24 | 6319.57 |
| 4 | Distribution losses | | | | |
| a | % | 4.70% | 4.70% | 4.70% | 4.70% |
| i) | MU | 272.70 | 275.13 | 290.94 | 311.67 |
| 5 | Energy required at State Periphery for Sale to Retail Consumers | 5802.14 | 5853.92 | 6190.17 | 6631.24 |
| 6 | Add: Sales to common pool consumers/ UI | 0.00 | 0.00 | 326.08 | 22.64 |
| 7 | Total Energy Requirement for State | 5802.14 | 5853.92 | 6516.25 | 6653.88 |
| 8 | Transmission losses | | | | |
| 2 | % | 3.56% | 3.71% | 3.56% | 3.66% |
| i) | MU | 214.18 | 225.55 | 240.54 | 219.60 |
| II | ENERGY REQUIRED AT GENERATOR END | 6016.32 | 6079.47 | 6756.79 | 6873.49 |
| 9 | Gross Availability | 6016.32 | 6079.47 | 6756.79 | 6873.49 |
| i | Power Purchase from Renewable Sources | 175.39 | 175.39 | 75.28 | 75.37 |
| ii | NPCIL | 357.67 | 370.00 | 357.67 | 377.96 |
| iii | Unscheduled Interchange | 0.00 | 3.16 | 0.00 | 0.46 |
| iv | Power Purchase from other sources | 5483.26 | 5530.92 | 5827.66 | 5344.44 |
| v | Open Access Purchase | 0.00 | 0.00 | 496.18 | 873.41 |
| vi | PXIL (Buy) to match the energy requirement | 0.00 | 0.00 | 0.00 | 201.85 |

Table 4-2: Energy Requirement Approved for FY 2015-16(MU)

Accordingly, the Commission approves the energy requirement of 6000.08 MU (6873.49 MU - 873.41 MU) excluding open access purchase of 873.41 MU at generator end for the review of FY 2015-16.

4.7. Power Purchase Quantum & Cost for FY 2015-16

Petitioner Submission:

The Petitioner has furnished that it has revised estimates of FY 2015-16 based on six months actuals and remaining six months projections. For projection of remaining six months of power purchase for FY 2015-16, firm and infirm allocation from various generating stations has been considered. The Petitioner had also submitted that the per unit variable cost, fixed cost and other charges for the remaining period have been considered at the same level as the actuals from April 2015 to September 2015. The Petitioner has also submitted that it has projected 200 MW power from EMCO energy during FY 2015-16.

The Petitioner further submitted that the Government of India, Ministry of Power has allocated 2% (38 MW) power to the Petitioner on a long-term basis from RGPPL. The

Petitioner has executed PPA with RGPPL and Transmission Service Agreement (TSA) with MSETCL for transmission of the allocated power of RGPPL. The state of Maharashtra has 95% share allocation from RGPPL and they are not scheduling power due to non-availability of natural gas to this project. Due to non-availability of technical minimum schedule to run the plant, presently there is no generation from the plant. Therefore, for the period April 2015 to March 2016 the Petitioner has not considered any power purchase from RGPPL. However, as per the terms of the PPA signed with RGPPL, the Petitioner will have to pay the capacity charges for the allocated capacity share from the plant. Therefore, the fixed charges have been considered by the Petitioner for the period April 2015 to March 2015 as per the fixed charges paid during the first nine months of FY 2015-16. The Petitioner had according projected the revised estimates of purchase of 6260.61 MU at Rs. 2520.55 Crores.

Commission Analysis:

As brought out in the section on energy requirement, the power purchase quantum approved by the Commission in its last Tariff Order dated 01st April 2015 for FY 2015-16 was 6079.47 MU at an approved power purchase cost of Rs. 2272.67 Crores including transmission charges.

The Commission, as part of its prudence check, verified the station-wise power purchase bills as submitted by the Petitioner for FY 2015-16 for the first six months. The Commission has considered the submissions made by the Petitioner after verification of power purchase bills of the first six months of FY 2015-16. The Commission noticed errors at some places and therefore has verified the actual quantum of power purchase from the REA reports on actual basis. The Commission has considered the actual rebate availed by DNHPDCL on the power purchase bills of first six months and the actual arrears paid as part of review of FY 2015-16. The verified quantum of power purchase units and cost including transmission charges is mentioned in the Table below as per the power purchase bills submitted by the Petitioner for first six months of FY 2015-16:

Table 4-3: Power Purchase (MU) and Cost (Rs. Crores) for FY 2015-16 (April to September)

| | | | F | Y 2015-16 | | | | | |
|---------|--------------------|-------------------|------------|------------|--------|----------|--------------|----------|-----------------------------|
| | | | Energy MUs | | | (| Cost (Rs Cro | res) | |
| Sr. No. | Particulars | APR Submission | APR Order | Difference | Fixed | Variable | Other | Total | Per Unit (Paisa/kWh) |
| | NTPC | 1,499.41 | 1,512.56 | (13.15) | 198.62 | 245.87 | 22.33 | 466.82 | 308.63 |
| A 1 | KSTPP 1&2 | 195.90 | 195.90 | 0.00 | 9.44 | 20.43 | (1.00) | 28.86 | 147.34 |
| 2 | KSTPP 1&2 | 73.98 | 73.98 | 0.00 | 11.33 | 7.63 | (3.07) | 15.89 | 214.79 |
| 3 | VSTPP 1 | 162.98 | 162.99 | (0.01) | 9.14 | 25.00 | 2.11 | 36.26 | 222.45 |
| 4 | VSTPP 2 | 107.39 | 102.99 | (0.01) | 6.86 | 16.14 | 1.45 | 24.45 | 227.68 |
| 5 | VSTPP 3 | 131.73 | 131.73 | (0.00) | 13.10 | 19.21 | 1.43 | 33.89 | 257.24 |
| 6 | VSTPP 4 | 185.45 | 185.46 | (0.00) | 20.40 | 27.43 | 13.47 | 61.29 | 330.46 |
| 8 | KAWAS GPP | 147.02 | 157.21 | (10.19) | 21.78 | 49.23 | (4.31) | 66.71 | 424.33 |
| 9 | Gandhar GPP | 56.66 | 59.60 | (2.94) | 19.76 | 18.20 | (3.47) | 34.49 | 578.62 |
| | SIPAT 1 | 298.96 | 298.96 | (0.00) | 42.03 | 39.78 | (1.69) | 80.12 | 268.00 |
| 11 | SIPAT 2 | 113.74 | 113.74 | 0.00 | 13.60 | 15.34 | 0.17 | 29.10 | 255.88 |
| | KHSTPS 2 | 11.19 | 11.19 | 0.00 | 1.22 | 2.73 | (0.27) | 3.67 | 327.81 |
| 13 | MAUDA | 14.42 | 14.42 | (0.00) | 29.97 | 4.74 | 17.39 | 52.10 | 3,613.73 |
| - 15 | | 12 | 22 | (0.00) | 2,1,7, | 11, 1 | 17107 | 02.10 | 0,010.70 |
| В | NSPCL | 351.08 | 350.93 | 0.16 | 57.50 | 76.04 | 0.01 | 133.55 | 380.58 |
| 1 | BHILAI (ALLOCATED) | 351.08 | 350.93 | 0.16 | 57.50 | 76.04 | 0.01 | 133.55 | 380.58 |
| | | - | - | - | - | - | - | - | |
| С | NPCIL | 193.46 | 193.46 | - | - | 53.77 | 4.08 | 57.86 | 299.05 |
| | KAPPS | 30.38 | 30.38 | - | - | 7.21 | (0.18) | 7.04 | 231.61 |
| 2 | TAPPS 3&4 | 163.09 | 163.09 | - | - | 46.56 | 4.26 | 50.82 | 311.62 |
| | | - | - | - | - | - | - | - | |
| D | OTHERS | 772.63 | 772.63 | - | 211.06 | 130.87 | 2.71 | 344.64 | 446.07 |
| 1 | RGPPL | - | - | - | 2.10 | - | | 2.10 | |
| 2 | EMCO (BILATERAL) | 772.63 | 772.63 | - | 208.96 | 130.87 | 2.71 | 342.54 | 443.34 |
| E | UI | | 0.46 | (0.46) | - | 0.72 | - | 0.72 | 1,578.35 |
| F | Other Charges | - | - | - | - | - | - | 54.87 | |
| 1 | PGCIL CHARGES | - | - | - | - | - | - | 54.78 | |
| 2 | POSOCO | - | - | - | - | - | - | 0.43 | |
| 3 | MSTCL | - | - | - | - | - | - | 0.29 | |
| 4 | Reactive charges | - | - | - | - | - | - | 0.18 | |
| 5 | Less: Rebate | - | - | - | - | - | - | (0.80) | |
| G | TOTAL | 2,816.58 | 2,830.04 | (13.45) | 467.19 | 507.27 | 29.13 | 1,058.47 | 375.80 |

Power Purchase Quantum and Cost for remaining six months of FY 2015-16

The Petitioner has firm allocation in the Central Sector Generating Stations of NTPC, NPCIL, NSPCL and others from the following stations

- Korba Super Thermal Power Station I, II and III.
- Vindhyachal Super Thermal Power Station I, II, III, IV and V (Commissioned on 30th October 2015)
- Kawas Gas Power Station
- Gandhar Gas Power Station
- Sipat Super Thermal Power Station- I &II
- Ratnagiri Gas and Power

- Kahalgaon Super Thermal Power Station II (Eastern Region)
- Kakrapara Atomic Power Station (KAPS)
- Tarapur Atomic Power Station (TAPS)
- NSPCL-Bhilai
- EMCO-GMR

The Commission while estimating the energy availability from the above stations has considered the following assumption:

Allocation of Share: The Commission has considered the firm allocation and allocation from the unallocated quota from the above stations, except Kahalgaon STPS-II and RGPPL, as per the notification of the Western Region Power Committee vide WRPC/Comml-l/6Alloc/2015/8945 Dated October 27, 2015. The allocation for Kahalgaon STPS-II is considered as per the notification of the Eastern Region power Committee (http://www.erpc.gov.in/uploads/meeting/ 1437652669merged_document_71.pdf). For RGPPL, the Commission has considered nil allocation for FY 2015-16 since FY 2015-16 is over with nil generation allocated to DNH in the first six months of FY 2015-16.

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 for the past five years. 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 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and as approved by the Commission in its Tariff Order dated 01st April 2015. As mentioned in the foregoing paragraphs of this order, the Commission has considered the separate effect of UI over- drawal / under- drawal for FY 2015-16 (First Six Months); therefore the UI over- drawal of 0.46 MU (verified from the weekly UI bills as available with WRPC) under UI mechanism for FY 2015-16 is considered for the purpose of review of FY 2015-16. The Petitioner in its reply to the data gaps has submitted the RPO compliance till FY 2015-16 (Feb 16) wherein it has submitted that it has bought physical power of 63.20 MU (Solar - 0.37 MU and 62.83 MU from Non-Solar) and REC certificates to the tune of 45.24 Units (Solar – 0 Units and Non-Solar 45.24 Units). The Commission while approving the quantum of RPO in physical non-solar power purchase has considered it as 75 MU as projected in the petition to be purchased from HPSEBL. Accordingly, the Commission has approved the quantum including cost and the same would be revisited during the true up of FY 2015-16.

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

The Commission has considered the following assumptions to arrive at the Power purchase cost for the remaining six months of FY 2015-16:

Fixed Charges: The fixed charges are considered based on the formula specified for the stations in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. The Annual Fixed Charges for each station have been taken as per the latest Tariff Orders for the respective stations as applicable with 5% escalation in each FY. However, the fixed charges of EMCO have been taken as per the actual fixed cost submitted by the Petitioner.

Variable Charges: The Commission has considered the average variable cost for the period April 2015 to September 2015 verified by it from the power purchase bills submitted by the Petitioner for consideration of the per unit variable charges for the remaining six months of FY 2015-16.

Approved Power Purchase Quantum and Cost for FY 2015-16

For determining the power purchase cost, merit order dispatch principles have been applied. The must-run stations have been assumed at the top of the merit order and variable cost incurred for meeting the energy requirement within the state has been calculated from the plants at the top of the merit order. As a result, there is a requirement of 201.85 MU to be purchased from PXIL/IEX and that has been estimated to be purchased at Rs 3 per Unit. The transmission charges for FY 2014-15 for the remaining six months have been considered as per the POC charges applicable for FY 2015-16 (No.L-1/44/2010-CERC Dated 03.11.2015) and for the first six months as per bills submitted by the Petitioner based on half yearly actuals. The other charges (POSOCO, Reactive Energy, WRPC, rebate etc.) have been extrapolated for full FY based on actual six months of FY 2015-16. The Commission has considered payment to RGPPL based on fixed cost only as per share allocation. The purchase from solar power has been estimated at Rs.5/kWh, whereas for non-solar power it has been estimated at Rs.5.20/kWh and the same would be revisited at the time of true up for FY 2015-16.

Based on the above, the total power purchase quantum and cost from various sources (including over drawal of power under UI mechanism and transmission charges) as approved for review of FY 2015-16 is mentioned below:

Table 4-4: Approved Power Purchase (MU) and Cost (Rs Crores) for FY 2015-16

| | | ower Purchase - | FY 2015-1 | | croresj | | |
|------------|----------------------------|-----------------|-----------|------------------|---------|----------|-------------------------|
| | | | | Cost (Rs | Crores) | | |
| Sr. No. | Particulars | Energy MUs | Fixed | Variable | Other | Total | Per Unit (Paisa/kWh) |
| A | NTPC | 3,092.12 | 444.49 | 504.62 | 22.33 | 971.43 | 314.16 |
| 1 | KSTPP 1&2 | 385.20 | 20.93 | 40.17 | (1.00) | 60.10 | 156.01 |
| 2 | KSTPP 3 | 156.29 | 25.48 | 16.12 | (3.07) | 38.53 | 246.53 |
| 3 | VSTPP 1 | 316.89 | 20.68 | 48.61 | 2.11 | 71.41 | 225.33 |
| 4 | VSTPP 2 | 224.45 | 15.87 | 33.74 | 1.45 | 51.05 | 227.45 |
| 5 | VSTPP 3 | 255.75 | 29.38 | 37.30 | 1.57 | 68.25 | 266.87 |
| 6 | VSTPP 4 | 349.24 | 47.05 | 51.65 | 13.47 | 112.17 | 321.18 |
| 7 | VSTPP 5 | 71.01 | 5.14 | 8.81 | - | 13.94 | 196.33 |
| 8 | KAWAS GPP | 289.31 | 50.11 | 90.60 | (4.31) | 136.41 | 471.49 |
| 9 | Gandhar GPP | 156.07 | 45.58 | 47.67 | (3.47) | 89.78 | 575.23 |
| 10 | SIPAT 1 | 598.92 | 91.03 | 79.69 | (1.69) | 169.04 | 282.24 |
| 11 | SIPAT 2 | 221.88 | 31.08 | 29.92 | 0.17 | 61.17 | 275.69 |
| 12 | KHSTPS 2 | 20.27 | 2.65 | 4.94 | (0.27) | 7.32 | 361.04 |
| 13 | MAUDA | 46.84 | 59.50 | 15.39 | 17.39 | 92.28 | 1,970.24 |
| n | NSPCL | 600.14 | 120 57 | 140.22 | 0.01 | 277.01 | 402.27 |
| B 1 | BHILAI (ALLOCATED) | 689.14 | 128.57 | 149.33 149.33 | 0.01 | 277.91 | 403.27 |
| 1 | BRILAI (ALLUCATED) | 689.14 | 128.57 | 149.33 | 0.01 | 277.91 | 403.27 |
| С | NPCIL | 377.96 | - | 104.34 | 4.08 | 108.42 | 286.86 |
| 1 | KAPPS | 74.20 | - | 17.62 | (0.18) | 17.44 | 235.08 |
| 2 | TAPPS 3&4 | 303.76 | - | 86.72 | 4.26 | 90.98 | 299.51 |
| | | 000.70 | | 00.72 | 1.20 | 70.70 | 277.01 |
| D | OTHERS | 1,563.19 | 299.58 | 264.77 | 2.71 | 567.06 | 362.76 |
| 1 | RGPPL | - | 18.91 | - | - | 18.91 | - |
| 2 | EMCO (BILATERAL) | 1,563.19 | 280.66 | 264.77 | 2.71 | 548.14 | 350.66 |
| | | | | | | | |
| Е | UI | 0.46 | - | 0.72 | - | 0.72 | 1,578.35 |
| | | | | | | | |
| <u>F</u> | RPO | 75.37 | - | 55.02 | - | 55.02 | - |
| 1 | Solar | 0.37 | - | 0.19 | - | 0.19 | 500.00 |
| 2 | Non-Solar | 75.00 | - | 39.00 | - | 39.00 | 520.00 |
| 3 4 | Solar REC Non Solar REC | - | - | 15.83 | - | 15.83 | - |
| 4 | NOII SOIAI REC | - | - | - | - | - | - |
| G | PXIL | 201.85 | - | 60.56 | - | 60.56 | 300.00 |
| Н | Other Charges | - | - | - | - | 179.85 | - |
| 1 | PGCIL CHARGES | - | - | - | - | 179.67 | - |
| 2 | POSOCO | | _ | _ | - | 0.85 | - |
| 3 | MSTCL | - | - | - | - | 0.58 | - |
| 4 | Reactive charges | - | - | - | - | 0.35 | - |
| 5 | Less: Rebate | - | - | | - | (1.60) | - |
| I | TOTAL | 6,000.08 | 872.63 | 1,139.35 | 29.13 | 2,220.97 | 370.16 |

The Commission considers the power purchase cost for FY 2015-16 of Rs. 2220.97 Crores for procurement of 6000.08 MU of energy as reasonable and approves the same for Review of FY 2015-16.

4.8. Renewable Energy Obligation

Petitioner Submission:

The Petitioner in its petition had submitted a provision of Rs 57.58 Crores in FY 2015-16 to meet its renewable purchase obligation.

Commission Analysis:

As per JERC (Procurement of Renewable Energy) Regulations 2010 clause 1 sub clause (1)

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

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

The Petitioner in its additional submission has stated that during the period from April 15 to February 16 it has bought physical power of 63.20 MU (Solar – 0.37 MU and 62.83 MU from Non-Solar) and REC certificates of 45.24 Units (Solar – 0 Units and Non-Solar 45.24 Units). The Commission has considered the Petitioner's submission in this regard except in physical non-solar power purchase wherein the Commission has considered it as 75 MU as projected in the petition to be purchased from HPSEBL. The Commission accordingly has considered the same as per the Petitioner's submission and the quantum including cost would be revisited during the true up of FY 2015-16. The Petitioner in its reply to the data gaps has only submitted proof of REC certificates as bought on 27th January 2016 as follows:

Table 4-5: REC Certificates Purchased by the Petitioner as submitted for FY 2015-16

| Sr. No | Particulars | Agency | Units | Rate |
|--------|-------------|--------|-------|----------|
| 1 | Solar REC | PXIL | 10000 | 3500/MWh |
| 2 | Solar REC | IEX | 10000 | 3500/MWh |

As can be confirmed from the above submission and discussed in the foregoing paragraphs, the Commission has approved the REC quantum as per the Petitioner's additional submission, though the actual proof of REC's and physical RPO is lower than as projected by the Petitioner. In the absence of any clarity from the Petitioner, the Commission has computed the backlog on the basis of submissions made by the Petitioner during the true up of FY 2010-12, FY 2011-12, FY 2012-13, FY 2013-14 and FY 2014-15. Till FY 2014-15,

there is a shortfall of 208.12 MU (Solar: 61.50 MU and Non-Solar: 146.62 MU) for RPO Compliance. Further, after adjustment of estimated physical and REC purchase during FY 2015-16 by the Petitioner as discussed in the foregoing paragraphs, the cumulative shortfall increases to 281.93 MU (Solar: 62.44 MU and Non-Solar: 219.49 MU) in FY 2015-16. The Commission has decided to approve the provision of RPO Compliance up to 31st March 2016 (including shortfall in previous years) in the review of FY 2015-16 by purchase of Solar and Non Solar REC. The Commission has further decided to approve the cost of purchase of REC (both Solar and Non Solar) at the floor price approved by the CERC (http://www.cercind.gov.in/2014/Regulation/ord16.pdf) as below:

Table 4-6: Computation of RPO backlog up to FY 2015-16 and Provision for RPO Compliance (MU and Rs. Crores)

| Sr. No | Particulars | FY 2010-11 | FY 2011-12 | FY 2012-13 | FY 2013-14 | FY 2014-15 | FY 2015-16 |
|--------|---|------------|------------|------------|------------|------------|------------|
| 1 | Sales Within UT | 3,896.99 | 4,232.02 | 4,591.12 | 4,959.89 | 5,166.02 | 5,476.49 |
| 2 | RPO Obligation (in MU) | 38.97 | 84.64 | 137.73 | 148.80 | 170.48 | 194.42 |
| | - Solar | 9.74 | 12.70 | 18.36 | 19.84 | 31.00 | 46.55 |
| | -Non Solar | 29.23 | 71.94 | 119.37 | 128.96 | 139.48 | 147.87 |
| 3 | RPO Compliance (Actual Purchase) | - | - | - | • | 51.50 | 75.37 |
| | - Solar | - | - | - | - | 0.14 | 0.37 |
| | -Non Solar | = | - | - | - | 51.36 | 75.00 |
| 4 | RPO Compliance (REC Certificate Purchase) | | 58.00 | 128.00 | 40.00 | 95.00 | 45.24 |
| | - Solar | = | - | - | - | 30.00 | 45.24 |
| | -Non Solar | - | 58.00 | 128.00 | 40.00 | 65.00 | - |
| 5 | Total RPO Compliance | - | 58.00 | 128.00 | 40.00 | 146.50 | 120.61 |
| | - Solar | = | - | - | - | 30.14 | 45.61 |
| | -Non Solar | = | 58.00 | 128.00 | 40.00 | 116.36 | 75.00 |
| 6 | Cumulative Requirement till current year | 38.97 | 123.61 | 261.34 | 410.14 | 580.62 | 775.03 |
| | - Solar | 9.74 | 22.44 | 40.80 | 60.64 | 91.64 | 138.19 |
| | -Non Solar | 29.23 | 101.17 | 220.54 | 349.50 | 488.98 | 636.85 |
| 7 | Cumulative Compliance till current year | | 58.00 | 186.00 | 226.00 | 372.50 | 493.10 |
| | - Solar | = | - | - | - | 30.14 | 75.74 |
| | -Non Solar | - | 58.00 | 186.00 | 226.00 | 342.36 | 417.36 |
| 8 | Net Shortfall in RPO Compliance till current year | 38.97 | 65.61 | 75.34 | 184.14 | 208.12 | 281.93 |
| | - Solar | 9.74 | 22.44 | 40.80 | 60.64 | 61.50 | 62.44 |
| | -Non Solar | 29.23 | 43.17 | 34.54 | 123.50 | 146.62 | 219.49 |
| 9 | Floor Price of REC Certificates /MWH | - | - | - | - | - | - |
| | - Solar | = | - | - | - | - | 3,500.00 |
| | -Non Solar | = | - | - | - | - | 1,500.00 |
| 10 | Total Provision for RPO Compliance | - | - | - | | | 54.78 |
| | - Solar | - | - | - | - | - | 21.86 |
| | -Non Solar | - | - | - | - | - | 32.92 |

The Commission thus approves a provision of RPO Compliance of Rs. 54.78 Crores for the review of FY 2015-16. The Commission in its Business Plan Order 182/2015 dated 15th December 2015 has reiterated that all pending RPO's up-to 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 control period FY 2016-17 to FY 2018-19.

4.9. Operation and Maintenance Expenses

Petitioner Submission:

The Petitioner has submitted that the Operation and Maintenance expenses comprise of the following heads:

- **Employees Expenses** which include the salaries, dearness allowance, dearness pay, other allowances and retirement benefits paid to the staff;
- **Repair and Maintenance (R&M) Expenses**, which include all expenditure incurred on the maintenance and upkeep of transmission and distribution assets; and
- Administrative and General Expenses, which include all expenditure incurred in operating a business such as telephone charges, regulatory and consultancy fees such as energy auditing and chartered accountant fees, conveyance and travel expenses, water charges etc.

Employee Expenses

The Petitioner has submitted the employee expenses of Rs. 9.64 Crores in its review petition for FY 2015-16 as compared to the employee expenses of Rs. 9.17 Crores approved by the Commission in its Tariff Order dated 01st April 2015.

Administration and General Expenses

The Petitioner has submitted the A&G expenses of Rs. 5.98 Crores in its review petition for FY 2015-16 as compared to the A&G expenses of Rs. 5.97 Crores approved by the Commission in its Tariff Order dated 01st April 2015.

Repair and Maintenance Expenses

The Petitioner has submitted the R&M expenses of Rs. 6.55 Crores in its review petition for FY 2015-16 as compared to the R&M expenses of Rs. 5.05 Crores approved by the Commission in its Tariff Order dated 01st April 2015.

Commission Analysis:

As per the Regulation 27 of JERC Tariff Regulations 2009

Quote

- 27. Operation and Maintenance Expenses
- 1) 'Operation & Maintenance expenses' or 'O&M expenses' shall mean & include repair and maintenance (R&M) expenses, employee expenses and administrative & general (A&G) expenses including insurance. While determining the O&M expenses for generation functions within the State, the Commission shall be guided, as far as feasible, by the principles and methodologies of CERC on the manner, as amended from time to time.
- 2) While determining the O&M expenses for transmission functions within the State, the Commission shall be guided, as far as feasible by the principles and methodologies specified by CERC on the matter, as amended from time to time: Provided further that the Commission may, if it considers it just, practical and proper considering the size of the total transmission

system of, and the quantum of electricity handled by, an integrated utility, treat its transmission system as an integral part of its distribution system itself.

- 3) *O&M* expenses for distribution functions shall be determined by the Commission as follows:
- a) 0&M expenses as approved by the Commission for the first time for a year shall be considered as base 0&M expenses for determination of 0&M expenses for subsequent years;
- b) Base O&M expenses as above shall be adjusted according to variation in the rate of WPI per annum to determine the O&M expenses for subsequent year, where WPI is the Wholesale Price index on April 1 of the relevant year;
- c) In case of unbundling of the Electricity Department and formation of separate distribution companies, the Commission will make suitable assessment of base O&M expenses of individual distribution companies separately and allow O&M expenses for subsequent years for individual companies on the basis of such estimation and above principle.

Unquote

Operation and Maintenance expenses comprise of the following heads:

- **Employees Expenses** which include the salaries, dearness allowance, dearness pay, other allowances and retirement benefits paid to the staff;
- **Repair and Maintenance (R&M) Expenses**, which include all expenditure incurred on the maintenance and upkeep of transmission and distribution assets; and
- Administrative and General Expenses, which include all expenditure incurred in operating a business such as telephone charges, regulatory and consultancy fees such as energy auditing and chartered accountant fees, conveyance and travel expenses, water charges etc.

Employee Expenses

The Petitioner has submitted the employee expenses of Rs. 9.64 Crores in its review petition for FY 2015-16 as compared to the employee expenses of Rs. 9.17 Crores approved by the Commission in its Tariff Order dated 01st April 2015. As specified in Regulation 27 (3) (b) of JERC Regulations, 2009 the 0&M expenses will be adjusted according to variation in WPI per annum to determine the 0&M expenses for subsequent FYs. The Commission has therefore considered the actuals of FY 2014-15 as a revised base for calculating the employee cost for FY 2015-16. The escalation factor used by the Commission is 5.11% per annum. The WPI index up to March 2015 has been used (as available on the website of Economic Advisor, Ministry of Commerce and Industry) for estimation of the increase in the average of WPI index from FY 2011-12 to FY 2014-15. The employee expenses approved for FY 2014-15 have been escalated by the WPI factor of 5.11% to determine the employee expenses for FY 2015-16.

The Commission considers the employee cost of Rs. 9.56 Crores as reasonable and approves the same for Review of ARR for FY 2015-16.

Administration and General Expenses

The Petitioner has submitted the A&G expenses of Rs. 6.55 Crores in its review petition for FY 2015-16 as compared to the A&G expenses of Rs. 5.05 Crores approved by the Commission in its Tariff Order dated 01st April 2015. The Commission is of the view that the actual audited data of FY 2014-15 is a true depiction of expenses incurred by the utility. The Commission has therefore considered the actuals of FY 2014-15 as a revised base for calculating the A&G expenses for FY 2015-16 in line with the JERC Tariff Regulations.

The Commission has considered the WPI index up to March 2015 (as available on the website of Economic Advisor, Ministry of Commerce and Industry) for estimation of the increase in the average of WPI index from FY 2011-12 to FY 2014-15. The actual expenses for FY 2014-15 have been escalated by the WPI factor of 5.11% to determine the expenses for FY 2015-16.

The Commission considers the employee cost of Rs. 4.39 Crores as reasonable and approves the same for Review of ARR for FY 2015-16.

Repair and Maintenance Expenses

The Petitioner has submitted the R&M expenses of Rs. 5.98 Crores in its review petition for FY 2015-16 as compared to the R&M expenses of Rs. 5.97 Crores in its Tariff Order dated 01st April 2015. The Commission has considered the actuals of FY 2014-15 as a revised base for calculating the repair and maintenance expenses for FY 2015-16. The escalation factor used by the Commission is 5.11% per annum. **Therefore, the Commission considers the Repair and Maintenance expenses of Rs. 5.79 Crores as reasonable and approves the same for Review of ARR for FY 2015-16.**

4.9.1. Summary of Operation and Maintenance Expenses

Petitioner Submission:

The Petitioner has projected a total O&M Expenses of Rs. 22.17 Crores in its review petition for FY 2015-16.

Commission Analysis:

The Commission based on the analysis done in the foregoing paragraphs has approved total O&M Expenses of Rs. 19.75 Crores in the review petition for FY 2015-16 as compared to the O&M expenses of Rs. 20.19 Crores in its Tariff Order dated 01st April 2015.

4.10. Capital Expenditure and Capitalization

Petitioner Submission:

The Petitioner has projected a total capital investment of Rs. 26 Crores in the Review of FY 2015-16 along with capitalization of Rs 15.60 Crores. The Petitioner further submitted that

each year drafts an Annual Plan for the capital investment for new schemes and for continuing schemes which it plans to incur in the ensuing year. Due to lower allocation of funds from the Government of India as compared with the requested funds, the actual capital expenditure has been lower than the planned capital expenditure in the previous years. Therefore, the capital expenditure for the subsequent years is higher as it includes the schemes for which the funds were not allocated in the previous capital expenditure proposal. The capitalization of new schemes has been considered at 60% of the planned capital expenditure in the same year while the balance 40% has been capitalized in the subsequent year.

Commission Analysis:

The Commission observes that the capital expenditure and the capitalization submitted by the Petitioner for FY 2015-16 is required to maintain the reliable supply for the consumers of UT of Dadra and Nagar Haveli. It is also a deep concern for the Commission that as against the approved capital expenditure and capitalization of Rs. 331.21 Crores and Rs 85.79 Crores as approved by the Commission on 01st April 2015, the Petitioner has revised its estimate to Rs 26.00 Crores and Rs. 15.60 Crores respectively. The Commission provisionally approves the capital expenditure of Rs. 26 Crores and capitalization of Rs.15.60 Crores proposed by the Petitioner for Review of ARR for FY 2015-16. A detailed statement of the capital expenditure incurred quarterly, the assets capitalized and added in the gross fixed assets up to 31.03.2016 on different dates during the year may be provided for true up for FY 2015-16.

4.11. GFA and Depreciation

Petitioner Submission:

The Petitioner in the ARR and Tariff Petition for FY 2015-16 had submitted that the opening Gross Fixed Assets (GFA) as Rs. 389.76 Crores in FY 2015-16. Based on the provisional asset capitalization during FY 2015-16, assets amounting to Rs. 15.60 Crores have been estimated to be added to the GFA during FY 2015-16.

Depreciation is charged on the basis of straight-line method on the Gross Fixed Assets in use at the beginning of the year and addition in assets during the financial year. The depreciation is based on the original cost of the Gross Fixed Assets. Based on the CERC norms, the Petitioner has applied the depreciation rates as specified by CERC in the Tariff Regulations for FY 2009-10 to FY 2013-14.

Commission Analysis:

Regulation 26 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 specifies that depreciation for the assets shall be calculated annually at the rates specified by CERC from time to time. The depreciation rates for distribution assets as specified by CERC (Terms and Conditions of Tariff) Regulations, 2014 have been used to

calculate the depreciation. Addition in assets has been fully considered in Plant & machinery and the same would be trued up based on actuals and audit accounts for FY 2015-16. Addition in Asset has been considered in Plant & machinery and the same would be trued up based on actuals and audited accounts for FY 2015-16. The Commission considered the weighted average depreciation rate of 6.35% for calculation of depreciation,

Table 4-7: GFA & Depreciation submitted by the Petitioner and approved in the review for FY 2015-16 (Rs. Crores)

| | | | FY 20 | 15-16 | |
|---------|-------------------------------------|-------------------|------------------------|-------------------|--------|
| Sr. No. | Particulars | ARR Submission | ARR TO dt. 01.04.15 | APR Submission | APR TO |
| | | | | | |
| 1 | Opening Gross Fixed Assets | 455.02 | 331.21 | 389.76 | 309.25 |
| 2 | Addition During the FY | 85.79 | 85.79 | 15.60 | 15.60 |
| 3 | Adjustment/Retirement During the FY | - | - | - | - |
| 4 | Closing Gross Fixed Assets | 540.81 | 417.00 | 405.36 | 324.85 |
| 5 | Average Gross Fixed Assets | 497.92 | 374.11 | 397.56 | 317.05 |
| 6 | Rate of Depreciation (%) | 4.70% | 5.06% | 5.05% | 6.35% |
| 7 | Depreciation for the FY | 25.44 | 18.93 | 20.07 | 20.13 |

The Commission provisionally approves the depreciation of Rs.20.13 Crores for Review of ARR for FY 2015-16

4.12. Interest and Finance Charges

Petitioner Submission:

The Petitioner has claimed the Interest charges of Rs. 7.41 Crores on long-term loans in the revised estimates of FY 2015-16.

Commission Analysis:

As per Regulation 25 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009

Quote

- 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.

Unquote

The Commission places reliance on the Section 23 of the JERC Tariff Regulations which is reproduced below:

Quote

"23. Debt-Equity Ratio

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:

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: .

(2) 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.

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."

Unquote

The above stated Regulations mandate the debt equity ratio for assets deployed, post the commencement of the IERC Tariff Regulations. The Commission has gone through the Petitioner's submission and has found that the Petitioner has wrongly considered the average interest rate of 14.58% to arrive at figure of Rs 7.41 Crores instead of 14.45% of its submission in the review petition. Further, the Commission has considered the actual capitalization of assets as approved in the foregoing paragraphs at Rs 15.60 Crores during FY 2015-16. The Commission for the purpose of funding of the capitalization has considered the normative debt equity ratio of 70:30, whereby it has considered the addition in normative loan at Rs. 10.92 Crores for the FY 2015-16 and the closing normative loan of Rs. 47.73 Crores as opening loan for FY 2015-16 as approved by the Commission in true up for FY 2014-15. 10% of the opening loans have been considered as the repayment during the year. Further, the Commission has considered the weighted average interest rate (SBI PLR) for FY 2015-16 (https://www.sbi.co.in/portal/web/interest-rates/benchmark-prime-lending-rate historical-data). The calculation for the interest on the normative loan is given below:

| | | | FY 201 | 5-16 | |
|---------|---|-------------------|------------------------|-------------------|--------|
| Sr. No. | Particulars | ARR Submission | ARR TO dt. 01.04.15 | APR Submission | APR TO |
| | | | | | |
| 1 | Opening Normative Loan | 67.08 | 52.03 | 47.74 | 47.73 |
| 2 | Add: Normative Loan during the year | 60.05 | 60.05 | 10.92 | 10.92 |
| 3 | Less: Normative Repayment 10% of Opening in FY 15 | 6.36 | 18.93 | 4.77 | 4.77 |
| 4 | Closing Normative Loan | 120.77 | 93.15 | 53.89 | 53.88 |
| 5 | Average Normative Loan | 93.93 | 72.59 | 50.81 | 50.81 |
| 6 | Rate of Interest (@SBAR rate) | 14.45% | 14.75% | 14.58% | 14.29% |
| 7 | Interest on Normative Loan including bank charges | 13.57 | 10.71 | 7.41 | 7.26 |

Table 4-8: Interest and Finance Charges for FY 2015-16 (Rs. Crores)

In view of the submissions made by the Petitioner and the capitalization considered for FY 2015-16 in the foregoing para of this order, the Commission has considered the Normative Interest on loans at Rs.7.26 Crores as reasonable and approves the same for review of FY 2015-16.

4.13. Interest on Working Capital

Petitioner Submission:

The Petitioner has projected the normative interest on working capital for FY 2015-16 as Rs. 24.43 Crores. A rate of interest of 14.45% has been considered for FY 2015-16 on the working capital requirement as approved by the Commission in its last Tariff Order.

Commission Analysis:

The Commission has considered the approved estimates of power purchase expenses of FY 2015-16 and approved O&M expenses to work out the normative working capital required for FY 2015-16

As per Regulation 29 of JERC Tariff Regulations

Quote

29. Working Capital and Interest Rate on Working Capital

For generation and transmission business, the working capital shall be as per CERC norms. Subject to prudence check, the working capital for distribution business shall be the sum of one-month requirement for meeting:

- a. Power purchase cost.
- b. Employees cost.

- c. Administration & general expenses and
- d. Repair & Maintenance expenses.
- 1) 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.
- 2) 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.

Unquote

In accordance with Section 47(4) of the Electricity Act 2003, the distribution licensee is required to pay interest on security deposit collected from the consumers. The Commission has considered the security deposit available with the Petitioner as a source to meet working capital requirements and has deducted this amount from the working capital requirement considered for interest for review of FY 2015-16. Further, the Commission has considered the SBI PLR rate of 14.75% as on 1st April 2015 for Review of ARR of FY 2015-16. The detailed calculation of interest on working capital is depicted below:

Table 4-9: Interest on Working Capital for FY 2015-16 (Rs. Crores)

| | | FY 2015-16 | | | | |
|---------|--|-------------------|------------------------|-------------------|--------|--|
| Sr. No. | Particulars | ARR Submission | ARR TO dt. 01.04.15 | APR Submission | APR TO | |
| 1 | Fuel Cost for 2 months | | | _ | | |
| 2 | Power Purchase Cost for one month | - | 189.39 | 210.05 | 185.08 | |
| 3 | O&M Cost for one month | - | 1.68 | 1.85 | 1.65 | |
| 4 | Total Working Capital requirement for one month | - | 191.07 | 211.90 | 186.73 | |
| 5 | Security Deposit | - | 55.06 | 42.86 | 42.86 | |
| 6 | Total Working Capital after deduction of Security Deposit from Working Capital Requirement | - | 136.01 | 169.04 | 143.86 | |
| 7 | SBI PLR (%) | | 14.75% | 14.45% | 14.75% | |
| 8 | Interest on Working Capital | 20.67 | 20.06 | 24.43 | 21.22 | |

The Commission has considered the Interest on Working Capital at Rs.21.22 Crores as reasonable and approves the same for review of FY 2015-16.

4.14. Interest on Security Deposit

Petitioner Submission:

The Petitioner has claimed it has made a provision to pay Rs.4.33 Crores as interest on consumer security deposit in FY 2015-16 as against Rs.4.50 Crores approved by the Commission in its last Tariff Order.

Commission Analysis:

In terms of 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 security deposit for FY 2014-15 from the audited accounts of FY 2014-15. The Commission has considered the closing security deposit for FY 2014-15 as the opening security deposit for FY 2015-16. No addition in security deposit has been envisaged during FY 2015-16 and the same would be revisited from the audited accounts for FY 2015-16 at the time of true up of FY 2015-16. The Commission has considered the RBI bank Rate for calculation of Interest rate as on 01st April 2015 i.e. 8.50% and the detailed calculation is shown below:

Sr. No. Particulars

ARR ARR TO dt. APR Submission

1 Interest on Security Deposit

4.50

4.33

3.64

Table 4-10: Interest on Security Deposit for FY 2015-16 (Rs. Crores)

The Commission has considered the Interest on Security Deposit at Rs.3.64 Crores as reasonable and approves the same for review of FY 2015-16.

4.15. Return on Capital Base/Return on Equity

Petitioner Submission:

The Petitioner has computed the return at 3% on net block of approved assets as per the Tariff Regulations of the Commission. The return on equity of Rs.4.84 Crores has been claimed by the Petitioner for review of FY 2015-16.

Commission Analysis:

The Commission is of the view that the Petitioner being an integrated utility (as considered by the Commission in its last Tariff Order 01^{st} April 2015) is eligible for the return on

capital base under the provisions of Schedule VI of the repealed Electricity (Supply) Act, 1948 vide provision under Regulation 23 of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. The Commission has considered the opening GFA for FY 2015-16 and accumulated depreciation till FY 2014-15 for arriving at the net block for FY 2015-16. It has computed the return at 3% on the net block of approved assets as below:

| Sr. No. | | FY 2015-16 | | | | |
|---------|---|----------------|------------------------|-------------------|--------|--|
| | Particulars | ARR Submission | ARR TO dt. 01.04.15 | APR Submission | APR TO | |
| | | | | | | |
| 1 | Gross block at beginning of the FY/Opening GFA or equity | - | 331.21 | 389.76 | 309.25 | |
| 2 | Accumulated depreciation/Addition in Equity at begining of FY | - | 158.86 | 228.57 | 156.35 | |
| 3 | Net block at beginning of the FY /Closing Equity | - | 172.35 | 161.19 | 152.90 | |
| 4 | Accumulated consumer contribution | - | - | - | - | |
| 5 | Net fixed assets at beginning of the FY /Average Equity Amount/Net Capital Base | - | 172.35 | 161.19 | 152.90 | |
| 6 | Reasonable return @3% of NFA till FY 16 | 23.90 | 5.17 | 4.84 | 4.59 | |

Table 4-11: Return on Capital Base for FY 2015-16 (Rs. Crores)

The Commission considers the Return on Capital Base of Rs. 4.59 Crores as reasonable and approves the same for review of FY 2015-16.

4.16. Income Tax

Petitioner Submission:

The Petitioner has claimed Rs.21.00 Crores against Income Tax in its review petition for FY 2015-16.

Commission Analysis:

As specified in Regulation no. 31 (2) of JERC Tariff Regulations, 2009 "subject to the true up based on actual, tax on income, if actually liable to be paid, shall be limited to tax on return on equity allowed excluding incentives". The Commission has allowed return on capital base to the Petitioner and hence the tax shall be limited to the tax on return on capital base or actual whichever is lower as below:

| Sr. No. | Particulars | FY 2015-16 | | | | | |
|---------|---------------------------------|-------------------|---------------------------|-------------------|--------|--|--|
| | | ARR Submission | ARR TO dt. 01.04.15 | APR Submission | APR TO | | |
| | | | | | | | |
| 1 | Return on Capital base | 0.00 | 0.00 | 0.00 | 4.59 | | |
| 2 | Rate of Income Tax (%) | 0.00% | 0.00% | 0.00% | 33.99% | | |
| 3 | Gross Up Return on Capital base | 0.00 | 0.00 | 0.00 | 6.95 | | |
| 4 | Income Tax | 10.00 | 2.66 | 21.00 | 2.36 | | |

Table 4-12: Income Tax for FY 2015-16 (Rs. Crores)

The Commission considers income tax of Rs. 2.36 Crores as reasonable and approves the same for review of FY 2015-16.

4.17. Provision for bad and doubtful debts

Petitioner Submission:

The Petitioner has claimed Rs.2.41 Crores against provision for bad and doubtful debts in its review petition for FY 2015-16.

Commission Analysis:

As specified in Regulation no. 28 of JERC Tariff Regulations

Quote

"28. Bad and Doubtful Debts

The Commission may, after the generating company/licensee gets the receivables audited, allow a provision for bad debts up to 1% of receivables in the revenue requirement of the generating company/licensee.

Unquote

As FY 2015-16 is not actual and is based on projections, no amount is considered for Provision for bad and doubtful debts for FY 2015-16.

4.18. Non-Tariff Income

Petitioner Submission:

The Petitioner has claimed Rs.43.58 Crores against non-tariff income in its review petition for FY 2015-16.

Commission Analysis:

The Commission has escalated the actuals for FY 2014-15 by 5% to arrive at the non-tariff income for FY 2015-16. **The Commission considers non-tariff income of Rs.43.58 Crores as reasonable and approves the same for review of FY 2015-16**.

4.19. Revenue from Sale of Surplus Power

Petitioner Submission:

The Petitioner has submitted revenue from sale of surplus power/UI under drawal of 326.08 MU for FY 2015-16 (after adjustment of revised open access sales as submitted in response to the data gaps and T&D loss) and has claimed Rs.108.72 Crores as revenue from sale of surplus power during FY 2015-16.

Commission Analysis:

The Commission has verified the weekly summary sheets/bills of UI from the WRPC for the complete year of FY 2015-16 (Apr-Sep) and for the purpose of this order has considered the over drawal and under drawal of UI separately.

For the purpose of the review of FY 2015-16, the Commission has considered the surplus energy sale of 22.64 MU (as verified from the UI bills from the WRPC) under UI mechanism for FY 2015-16 at Rs.3.58 Crores.

4.20. Revenue at approved retail tariff of FY 2015-16

Petitioner Submission:

The Petitioner has submitted the projected revenue of Rs.2426.74 Crores (Including FPPCA of Rs 18.49 Crores) as against Rs. 2415.61 Crores as approved by the Hon'ble Commission vide its Tariff Order dated 01st April 2015. Further, the Petitioner has refunded an amount of Rs 41.86 Crores on account of refund of excess FPPCA.

Commission Analysis:

The Petitioner has submitted the revised figures of revenue from sale of power at approved tariff of FY 2015-16; therefore the Commission has considered the same based on revised sales and connected load and number of consumers, and approved Rs. 2432.77 Crores including income from open access i.e. Rs 7.59 Crores based on Rs 0.09/kWh as per Tariff Order dated 01st April 2015. Adjustment of account of FPPCA for FY 2015-16 has also been considered. The Commission has disallowed the treatment of refund of excess FPPCA of FY 2011-12 in FY 2015-16 as the same has already been treated in the preceding chapter.

| | | FY 2015-16 | | | | |
|--------|-------------------------------------|-------------------|------------------------|-------------------|----------|--|
| S. No. | Category / Consumption Slab | ARR Submission | ARR TO dt. 01.04.15 | APR Submission | APR TO | |
| Α | Domestic | - | - | 25.69 | 20.00 | |
| 1 | 0-50 units | - | - | 0.02 | 2.12 | |
| 2 | 51-200 units | - | - | 2.55 | 5.59 | |
| 3 | 201 - 400 units | - | - | 2.58 | 6.83 | |
| 4 | 401 and above | - | - | 20.53 | 5.28 | |
| 5 | Low Income Group (LIG) | - | - | 0.01 | 0.17 | |
| В | Commercial | - | - | 9.17 | 9.32 | |
| 1 | 1- 100 units | - | - | 3.09 | 2.91 | |
| 2 | 101 and above units | - | - | 6.08 | 6.41 | |
| С | Agriculture | - | - | 0.38 | 0.38 | |
| 1 | Up to 10 HP | - | - | 0.23 | 0.24 | |
| 2 | Above 10 HP | - | - | 0.14 | 0.15 | |
| D | LTP Industry | - | - | 70.55 | 74.66 | |
| E | Public Lighting | - | - | 2.89 | 3.00 | |
| F | Public Water Works | - | - | 1.30 | 1.35 | |
| G | HT | - | - | 2,100.88 | 2,108.08 | |
| 1 | Up to 66 kV | - | - | 1,694.32 | 1,677.70 | |
| 2 | Above 66 kV | - | - | 406.55 | 430.38 | |
| 3 | HT Ferro | - | - | 196.74 | 208.39 | |
| I | Hoardings/ Signboards | - | - | - | | |
| J | Temporary | - | - | 0.65 | - | |
| | | - | - | = | - | |
| K | Total | 2,380.52 | 2,415.61 | 2,408.25 | 2,425.19 | |
| L | Open Access Revenue | - | - | - | 7.59 | |
| M | Total Revenue including Open Access | - | - | 2,408.25 | 2,432.77 | |

Table 4-13: Revenue at Approved Retail Tariff for FY 2015-16 including open access (Rs. Crores)

For the purpose of the review of FY 2015-16, the Commission has considered the revenue from sale of retail power for FY 2015-16 at Rs.2432.77 Crores including income from open access sales. The same would be trued up based on audited accounts of FY 2015-16.

4.21. Aggregate Revenue Requirement, Revenue Surplus/Deficit for review of FY 2015-16 and Carrying Cost

Petitioner Submission:

The Petitioner has submitted the gross revenue requirement of Rs. 2541.76 Crores (Gross ARR of Rs 2627.21 Crores – Non-Tariff Income of Rs.43.58 Crores – Refund of Excess FPPCA of Rs 41.86 Crores) excluding revenue from sale of surplus power of Rs 108.72 Crores for FY 2015-16 and has estimated a revenue gap/(surplus) of Rs. 6.31 Crores for the purpose of review of FY 2015-16.

Commission Analysis:

The Commission has considered and approved the review of ARR for FY 2015-16 based on the items of expenditure discussed in the preceding Chapters and the same has been

summarized in the table below (vis-à-vis the Petitioner's claim in the true-up petition for FY 2015-16).

Table 4-14: Aggregate Revenue Requirement and Revenue Surplus/Deficit for true-up of FY 2015-16 (Rs. Crores)

| Sr. No. | Particulars | | FY 2015-16 | | | | |
|---------|---|----------------|------------------------|----------------|----------|--|--|
| | | ARR Submission | ARR TO dt. 01.04.15 | APR Submission | APR TO | | |
| 1 | Cost of fuel | | | | | | |
| 2 | Cost of power purchase for full year | 2,441.34 | 2,272.67 | 2,520.55 | 2.220.97 | | |
| 3 | Provision for RPO Compliance | 2,441.34 | 2,272.07 | 2,320.33 | 54.78 | | |
| 4 | Employee costs | 9.41 | 9.17 | 9.64 | 9.56 | | |
| 5 | Administration and General Expenses | 5.20 | 5.05 | 6.55 | 4.39 | | |
| 6 | Repair and Maintenance Expenses | 8.46 | 5.97 | 5.98 | 5.79 | | |
| 7 | Depreciation | 25.44 | 18.93 | 20.07 | 20.13 | | |
| 8 | Interest and Finance charges | 13.57 | 10.71 | 7.41 | 7.26 | | |
| 9 | Interest and Finance Charges Interest on Working Capital | 20.67 | 20.06 | 24.43 | 21.22 | | |
| 10 | Interest on Working capital Interest on Security Deposit | 4.50 | 4.50 | 4.33 | 3.64 | | |
| 11 | Return on NFA /Equity | 23.90 | 5.17 | 4.84 | 4.59 | | |
| 12 | Provision for Bad Debt | 11.90 | 5.17 | 2.41 | - 1.37 | | |
| 13 | Income Tax | 10.00 | 2.66 | 21.00 | 2.36 | | |
| 14 | Incentive on achievement of norm of T&D loss | - | | | | | |
| 15 | Total Revenue Requirement | 2,574.39 | 2,354.89 | 2,627.21 | 2,354.70 | | |
| 16 | Less: Non Tariff Income | 32.35 | 32.35 | 43.58 | 43.58 | | |
| 17 | Less: Revenue from Surplus Power Sale/UI | 1.41 | - | 108.72 | 3.58 | | |
| 18 | Less: Revenue from Short term sale | - | _ | - | - | | |
| 19 | Net Revenue Requirement | 2,540.63 | 2,322.54 | 2,474.90 | 2,307.53 | | |
| 20 | Revenue from Retail Sales at Existing Tariff | 2,380.52 | 2,415.61 | 2,426.74 | 2,432.77 | | |
| 21 | Net Gap / (Surplus) | 160.11 | (93.07) | 48.17 | (125.24) | | |
| 22 | Recovery on account of PPC variations/(Refund of Excess) | - | - | (41.86) | 18.49 | | |
| 23 | Gap after adjusting PPC variations | 160.11 | (93.07) | 6.31 | (106.75) | | |
| 24 | Gap/(Surplus) for the previous year | - | (232.64) | (152.04) | (310.83) | | |
| 25 | Carrying Cost | - | - | - 1 | (45.85) | | |
| 26 | Past Arrears/Refunds to Consumers | - | - | - | - | | |
| 27 | Total Gap/ (Surplus) | 160.11 | (325.72) | (145.73) | (463.43) | | |

The Commission considers the estimated revenue surplus of 463.43 Crores including carrying cost as reasonable and approves the same for review of FY 2015-16. This estimated revenue surplus is carried over to the next year and has accordingly been considered in the Aggregate Revenue Requirement of FY 2016-17 with carrying cost.

5. Approval of the various ARR components for the MYT Control Period FY 2016-17 to FY 2018-19

5.1. Applicable Provisions of MYT Regulations 2014

The ARR Components for the MYT Control Period FY 2016-17 to FY 2018-19 are to be carried out as per the following provisions of Regulation 6 of JERC (Multi Year Distribution Tariff) Regulations 2014:

Quote

6. ARR Forecast

- 6.1 "The Applicant shall, based on Business Plan as approved by the Commission by order, submit the forecast of Aggregate Revenue Requirement and expected revenue from tariff, for the control period by a petition in accordance with the JERC (Terms and Condition for determination of tariff), Regulations 2009 by 30th November of the year prior to the commencement of the control period and accompanied by such fees payable, as specified in JERC (Conduct of Business) Regulations, 2009.
- 6.2 The forecast of Aggregate Revenue Requirement shall be developed using the assumptions relating to the behavior of individual variables that comprise the Aggregate Revenue Requirement during the control period.
- 6.3 The forecast of expected revenue from tariff and charges shall be developed based on the following:
 - a) Estimates of quantum of electricity to be supplied to consumers and wheeled on behalf of Distribution system users for each financial year within the control period, and;
 - b) Prevailing tariff at the date of making Regulations;"

Unquote

5.2.Approach for Approval of Aggregate Revenue Requirement for MYT Control Period

This chapter has details of the individual elements constituting the Aggregate Revenue Requirement for MYT Control Period for FY 17 to FY 19. The following sections explain in detail the elements for FY 17 to FY 19:

- Determination of Aggregate Revenue Requirement by considering the below approved figures as in the Business Plan Order in Petition No 182/2015 dated 15th December 2015:
 - i. Energy Sales

- ii. Distribution Loss and Energy Requirement
- iii. AT&C Losses
- iv. Power Purchase Sources
- Determination of Aggregate Revenue Requirement by forecasting the following costs, other income & returns:
 - i. Power Purchase Cost
 - ii. Employee Cost
 - iii. Repairs & Maintenance Cost
 - iv. Administrative & General Expenses
 - v. Depreciation
 - vi. Interest on Normative Loan
 - vii. Interest on Working Capital
 - viii. Interest on Security Deposit
 - ix. Provision for Bad Debts
 - x. Return on Equity
 - xi. Non-Tariff Income

The Projections for FY 2016-17 to FY 2018-19 have been derived from the following:

- Computation of total ARR
- Computation of revenue at existing tariffs
- Determination of gap between revenue at existing tariff & costs

5.3. No of Consumers, Connected Load and Energy Sales

Petitioner Submission:

The Petitioner has projected the number of Consumers, Connected Load and Energy Sales as per the Commission's Business Plan Order no. 182/2015 dated 15th December 2015.

Commission Analysis:

The Commission notes that the Petitioner submission in respect to number of consumers, connected load and energy sales is in line with Business Plan Order for the MYT Control Period. The Petitioner has not provided the slab wise details of number of consumers, connected load and energy sales for the MYT Control Period from FY 2016-17 to FY 2018-19. In absence of the same the Commission has further bifurcated the same based on FY 2014-15 actuals. The number of Consumers, Connected Load and Sales as submitted by the Petitioner and approved by the Commission are as follows:

Table 5-1: Number of Consumers for FY 2016-17 to FY 2018-19

| | | FY 2016-17 to FY 2018-19 | | | | | | | |
|--------|-----------------------------|--|--|--|--|--|--|--|--|
| S. No. | Category / Consumption Slab | Petitioner's Projection for FY 2016-17 | Petitioner's Projection for FY 2017-18 | Petitioner's Projection for FY 2018-19 | Approved in Order for FY 2016-17 | Approved in Order for FY 2017-18 | Approved in Order for FY 2018-19 | | |
| A | Domestic | 57,156 | 59,281 | 61,508 | 57,156 | 59,281 | 61,508 | | |
| 1 | 0-50 units | 37,130 | 37,201 | 01,300 | 37,130 | 37,201 | 01,300 | | |
| 2 | 51-200 units | | | | | | | | |
| 3 | 201 - 400 units | 42,867 | 44,959 | 47,153 | 42,867 | 44,959 | 47,153 | | |
| 4 | 401 and above | 1 | | | | | | | |
| 5 | Low Income Group (LIG) | 14,289 | 14,322 | 14,355 | 14,289 | 14,322 | 14,355 | | |
| В | Commercial | 7,253 | 7,390 | 7,530 | 7,253 | 7,390 | 7,530 | | |
| 1 | 1- 100 units | | ŕ | , | , | , | · | | |
| 2 | 101 and above units | 7,253 | 253 7,390 | 7,530 | 7,253 | 7,390 | 7,530 | | |
| С | Agriculture | 1,275 | 1,326 | 1,379 | 1,275 | 1,326 | 1,379 | | |
| 1 | Up to 10 HP | 1,275 | 1,326 | 1,379 | 1,275 | 1,326 | 1,379 | | |
| 2 | Above 10 HP | 1,273 | 1,275 | 1,377 | 1,273 | 1,320 | 1,379 | | |
| D | LTP Industry | 2,146 | 2,222 | 2,301 | 2,146 | 2,222 | 2,301 | | |
| E | Public Lighting | 342 | 359 | 377 | 342 | 359 | 377 | | |
| F | Public Water Works | 338 | 355 | 373 | 338 | 355 | 373 | | |
| G | HT | 944 | 974 | 1,004 | 944 | 974 | 1,004 | | |
| 1 | Up to 66 kV | | | | 908 | 937 | 966 | | |
| 2 | Above 66 kV | 944 | 974 | 1,004 | 2 | 2 | 2 | | |
| 3 | HT Ferro | | | | 34 | 35 | 36 | | |
| I | Hoardings/ Signboards | | | | | | | | |
| J | Temporary | | | | | | | | |
| K | Total | 69.454 | 71,907 | 74,472 | 69,454 | 71,907 | 74,472 | | |

Table 5-2: Connected Load (kVA) for FY 2016-17 to FY 2018-19

| | | FY 2016-17 to FY 2018-19 | | | | | | | |
|--------|-----------------------------|--|--|--|--|---|--|--|--|
| S. No. | Category / Consumption Slab | Petitioner's Projection for FY 2016-17 | Petitioner's Projection for FY 2017-18 | Petitioner's Projection for FY 2018-19 | Approved in Order for FY 2016-17 | Approved in Order for FY 2017- 18 | Approved in Order for FY 2018-19 | | |
| A | Domestic | 129,977 | 142,882 | 157,075 | 129,977 | 142,882 | 157,075 | | |
| 1 | 0-50 units | 127,777 | 112,002 | 137,073 | 127,777 | 112,002 | 137,073 | | |
| 2 | 51-200 units | † | | | | | | | |
| 3 | 201 - 400 units | 129,977 | 142,882 | 157,075 | 129,977 | 142,882 | 157,075 | | |
| 4 | 401 and above | † | | | , | , | | | |
| 5 | Low Income Group (LIG) | 1 | | | | | | | |
| В | Commercial | 39,186 | 41,146 | 43,203 | 39,186 | 41,146 | 43,203 | | |
| 1 | 1- 100 units | 20 106 | 41,146 | 43,203 | 39,186 | 41,146 | 43,203 | | |
| 2 | 101 and above units | 39,186 | 41,140 | 43,203 | 37,100 | 41,140 | | | |
| С | Agriculture | 5,752 | 6,040 | 6,342 | 5,752 | 6,040 | 6,342 | | |
| 1 | Up to 10 HP | 5,752 | 6,040 | 6,342 | 5,752 | 6,040 | 6,342 | | |
| 2 | Above 10 HP | 3,732 | 0,010 | 0,5 12 | 3,732 | 0,010 | 0,5 12 | | |
| D | LTP Industry | 117,251 | 123,113 | 129,269 | 117,251 | 123,113 | 129,269 | | |
| E | Public Lighting | 2,346 | 2,404 | 2,464 | 2,346 | | 2,464 | | |
| F | Public Water Works | 2,182 | 2,292 | 2,406 | 2,182 | 2,292 | 2,406 | | |
| G | НТ | 1,277,896 | 1,360,959 | 1,449,422 | 1,277,896 | 1,360,959 | 1,449,422 | | |
| 1 | Up to 66 kV | | | | 966,677 | 1,029,511 | 1,096,430 | | |
| 2 | Above 66 kV | 1,277,896 | 1,360,959 | 1,449,422 | 215,663 | 229,681 | 244,610 | | |
| 3 | HT Ferro | | | | 95,556 | 101,767 | 108,382 | | |
| I | Hoardings/ Signboards | | | | | | | | |
| J | Temporary | | | | | | | | |
| | _ | | | | | | | | |
| K | Total | 1,574,590 | 1,678,836 | 1,790,181 | 1,574,590 | 1,678,836 | 1,790,181 | | |

| | | FY 2016-17 to FY 2018-19 | | | | | | | |
|------------|-----------------------------|--|--|--|--|--|--|------|------|
| S. No. | Category / Consumption Slab | Petitioner's Projection for FY 2016-17 | Petitioner's Projection for FY 2017-18 | Petitioner's Projection for FY 2018-19 | Approved in Order for FY 2016-17 | Approved in Order for FY 2017-18 | Approved in Order for FY 2018-19 | | |
| A | Domestic | | | | 117.96 | 134.72 | 153.86 | | |
| <u>A</u> 1 | 0-50 units | 1 | | | 20.22 | 23.09 | 26.37 | | |
| 2 | 51-200 units | + | | | 35.46 | 40.50 | 46.26 | | |
| 3 | 201 - 400 units | 117.96 | 134.72 | 153.86 | 35.47 | 40.51 | 46.26 | | |
| 4 | 401 and above | 1 | | | 23.65 | 27.01 | 30.85 | | |
| 5 | Low Income Group (LIG) | + | | | 3.16 | 3.61 | 4.12 | | |
| В | Commercial | | | | 34.49 | 38.95 | 43.98 | | |
| 1 | 1- 100 units | 34.49 | 38.95 | 43.98 | 12.90 | 14.56 | 16.44 | | |
| 2 | 101 and above units | 1 0 | | 10.70 | 21.59 | 24.39 | 27.54 | | |
| C | Agriculture | | | | 5.49 | 6.19 | 6,99 | | |
| 1 | Up to 10 HP | 5.49 | 6.19 | 6.19 | 6.19 | 6.99 | 3.81 | 4.29 | 4.85 |
| 2 | Above 10 HP | 1 | | | 1.68 | 1.90 | 2.14 | | |
| D | LTP Industry | 217.49 | 234.24 | 252.27 | 217.49 | 234.24 | 252.27 | | |
| E | Public Lighting | 12.93 | 16.68 | 21.53 | 12.93 | 16.68 | 21.53 | | |
| F | Public Water Works | 3.57 | 3.74 | 3.93 | 3.56 | 3.74 | 3.93 | | |
| G | НТ | | | | 5420.66 | 5736.24 | 6070.19 | | |
| 1 | Up to 66 kV | 5,420.66 | 5,736.24 | 6,070.19 | 3938.91 | 4168.23 | 4410.89 | | |
| 2 | Above 66 kV | 3,420.00 | 5,/30.24 | 0,070.19 | 1048.10 | 1109.12 | 1173.69 | | |
| 3 | HT Ferro | | | | 433.65 | 458.90 | 485.61 | | |
| I | Hoardings/ Signboards | - | - | - | 0.00 | 0.00 | 0.00 | | |
| J | Temporary | - | - | - | 0.00 | 0.00 | 0.00 | | |
| К | Total | 5,812.59 | 6,170.76 | 6,552.75 | 5,812.58 | 6,170.76 | 6,552.74 | | |

Table 5-3: Sales (MU) for FY 2016-17 to FY 2018-19

5.4.Intra – State Transmission and Distribution Loss

Petitioner Submission:

The Petitioner has projected the Intra-State Transmission and Distribution Loss as per the Commission's Business Plan Order no. 182/2015 dated 15th December 2015 for DNHPDCL.

Commission Analysis:

The Commission in its last Tariff Order dated 1st April 2015 had approved loss of 4.70% for FY 2015-16. The loss level as approved for FY 2014-15 was also 4.70% vide Order dated 05th May 2014.

The Commission has taken note of the difficulties expressed by the Petitioner in reduction of T&D losses below 4.70% and thereby, considers T&D losses of 4.70% for each year of the Control Period FY 2016-17 to FY 2018-19 as approved in the Business Plan Order no. 182/2015 dated 15^{th} December 2015.

5.5.Inter – State Transmission Loss

Petitioner Submission:

The Petitioner has submitted Inter-State Transmission Loss of 3.38% for the entire control period based on 52 weeks moving average.

Commission Analysis:

The Commission has approved Inter-State Transmission Loss of 3.66% for FY 2015-16 based on recent 52 week moving average of regional losses for the week ending 27th February 2015 and approves the same for the entire control period for FY 2016-17 to FY 2018-19 which would be revised based on actuals during the truing up exercise.

5.6. Energy Requirement

Petitioner Submission:

The Petitioner has considered the overall energy requirement at the generator end for the control period from FY 2016-17 to FY 2018-19 as 6849.85 MU, 7277.76 MU and 7277.76 MU respectively excluding open access purchase.

Commission Analysis:

The Commission has calculated the energy requirement for the control period from FY 2016-17 to FY 2018-19 based on the approved inter-state and intra-state transmission and distribution losses and the approved energy sales as discussed in the foregoing paragraphs. The Commission has considered 5% increase in open access transactions on FY 2015-16 for the MYT control period. The gross energy requirement approved for the control period from FY 2016-17 to FY 2018-19 is shown in the Table below, along with the energy requirement submitted by the Petitioner:

FY 2016-17 to FY 2018-19 Petitioner's Approved in Petitioner's Approved in Petitioner's Approved in S. No. **Particulars** Projection for Order for FY Projection for Order for FY Projection for Order for FY FY 2018-19 FY 2016-17 2016-17 FY 2017-18 2017-18 2018-19 ENERGY REQUIREMENT 5,812.59 5,812.58 6,170.76 6,170.76 6,552.75 6,552.74 Energy sales within the State/UT 1,239.33 1,301.30 2 Open Access Sales 1,180.32 3 (5.77)(5.77)(5.77)Less: Energy Savings 5,812.59 6,987.13 6,170.76 7,404.32 6,552.75 7,848.27 Total Sales within the State/UT Distribution losses 4.70% 4.70% 4.70% 4.70% 4.70% 4.70% i) MU 365.17 323.17 387.06 286.66 344.59 304.33 Energy required at State Periphery for Sale to Retail 6,099.25 7,331.72 6,475.09 7,769.49 6,875.92 8,235.33 Consumers 155.61 7 Add: Sales to common pool consumers/ UI 519.60 153.18 556.43 519.60 556.43 155.61 Α Sales outside state/UT : UI В 153.18 Sales a) To electricity traders b) Through PX 153.18 8 Total Energy Requirement for State 6.618.85 7,484,90 7.031.53 7.769.49 7.031.53 8,235,33 9 Transmission losses 3.37% 3.66% 3.38% 3.66% 3.38% 3.66% i) 231.00 237.90 246.23 246.39 246.23 261.65 6,849.85 7,722.80 7,277.76 8,015.88 8,496.98 ENERGY REQUIRED AT GENERATOR END 7,277.76 II 10 6,849.85 7,722.80 7,277.76 8,015.88 7,277.76 8,496.98 **Gross Availability** 303.39 298.00 319.39 298.00 319.39 298.00 Power Purchase from Renewable Sources i ii NPCIL 357.67 367.98 357.67 367.98 357.67 367.98 Unscheduled Interchange iii 6,188.79 5,834.05 6,600.70 6,033.18 6,600.70 6,321.13 iv Power Purchase from other sources 1.222.77 1,283.91 1,348.10 Open Access Purchase 32.82 161.78 PXIL (Buy) to match the energy requirement

Table 5-4: Energy Requirement (MU) for FY 2016-17 to FY 2018-19

Accordingly, the Commission approves the energy requirement of 6500.03 MU (7722.80 MU – 1222.97 MU), 6731.97 MU (8015.88MU – 1283.91 MU) & 7148.88 MU (8496.98 MU – 1348.10 MU) excluding open access purchase at generator end for the MYT Control Period from FY 2016-17 to FY 2018-19 respectively.

5.7. Power Purchase Quantum & Cost for FY 2016-17 to FY 2018-19

Petitioner Submission:

Power Purchase Quantum as projected by the Petitioner:

The Petitioner has submitted that Dadra & Nagar Haveli has no generating stations of its own and relies on the firm and infirm allocation of power from Central Generating Stations

like Korba, Vindhyachal, Kahalgaon, Kawas, Sipat, Tarapur, Kakrapar etc. to meet its energy requirement.

The Petitioner for the purpose of estimation of the power availability during the Control Period from FY 2016-17 to FY 2018-19 has considered the following sources of power:

- NTPC Western Region Generating Stations
- NTPC Eastern Region Generating Stations
- NSPCL (NTPC-SAIL Power Company Ltd)
- Nuclear Power Corporation of India Limited
- Ratnagiri Gas Power Plant (RGPPL)
- Private Sector Power Generating Companies
- Renewable energy sources Solar and Non-Solar
- Other market sources

The Petitioner has allocation from Western as well as Eastern region from coal, gas and nuclear power stations. However, for meeting the supply-demand gap during the peak hours, the Petitioner has relied on over- drawal from the Grid (UI). For projecting of energy availability for the MYT control period, firm and infirm allocation from various generating stations has been considered. The power availability for the MYT Control Period has been estimated based on the revised allocation issued by the Western Region Power Committee (WRPC) vide no's. WRPC/Comml-I/6/Alloc/2015/8945 dated 27.10.2015.

It is expected that DNHPDCL will not be getting any power from Ratnagiri (RGPPL) during the MYT Control Period and therefore no power purchase from the plant has been considered. The Government of India, Ministry of Power had allocated 2% (38 MW) power to DNHPDCL on a long term basis from RGPPL and DNHPDCL has executed PPA with RGPPL and Transmission Service Agreement (TSA) with MSETCL for transmission of above allocated power of RGPPL. The state of Maharashtra has 95% share allocation from RGPPL and they are not scheduling power due to non-availability of natural gas to this project. Due to non-availability of technical minimum schedule to run the plant, presently there is no generation from the plant. Therefore, for the MYT Control Period, the Petitioner has not considered any power purchase from RGPPL. However, as per the terms of the PPA signed with RGPPL, DNHPDCL will have to pay the capacity charges for the allocated capacity share from the plant. Therefore the fixed charges have been considered for the MYT Control Period from RGPPL.

During the control period, it is expected that capacity from the following plants will also be allocated to DNHPDCL. The details of the plants and the capacity to be allocated to DNHPDCL are given in the Table below:

| Particulars | Plant Capacity MW | DNHPDCL Allocation MW | Avg. DNHPDCL Allocation (%) |
|----------------|----------------------|-----------------------------|-----------------------------------|
| NTPC Stations | | | |
| LARA | 4,000 | 5.29 | 0.13% |
| Gadarwara | 2640 | 25 | 0.95% |
| BARH | 1320 | 5.50 | 0.42% |
| Dhuwaran | 1980 | 25 | 1.26% |
| Kharagaon | 1320 | 25 | 1.89% |
| Subtotal | 11260 | 85.79 | |
| NSPCL Rourkela | 250 | 50 | 20.00% |
| Grand Total | 11510 | 135.79 | |

Table 5-5: New Power Plants considered by the Petitioner for FY 2016-17 to FY 2018-19

Additionally, the DNHPDCL is procuring power from EMCO Energy Limited (GMR) power plant in Maharashtra. DNHPDCL will receive 200 MW power from EMCO during the MYT Control Period. For projection of power purchase from EMCO, DNHPDCL has projected 90% PLF and 9% auxiliary consumption for the Control Period.

The power purchase quantum from the NTPC stations for the MYT Control Period has been calculated based on the installed capacity of each plant and by applying the average of previous two years PLF to calculate the plant-wise gross generation. For NSPCL, an average PLF of 90% has been considered. For gas based generating stations i.e. Kawas (KGPP) and Gandhar (GGPP) weighted average PLF of the last two years has been taken into account. Auxiliary consumption of 9% and 3% has been considered for coal and gas based generating stations, respectively.

The Petitioner will procure 170 MU from non-solar power procurement under case – I bidding during the FY 2016-17, FY 2017-18 and FY 2018-19 to fulfill its non-solar renewable power obligation. Further, the Petitioner will procure 2780 non solar renewable energy certificates during the FY 2017-18 and 13480 non solar renewable energy certificates during the FY 2018-19 to meet its non-solar RPO during the MYT Control Period. To meet the solar obligation for the control period FY 2016-17 to FY 2018-19, the department is in the process of installing solar plants of capacity 3.37 MW. The per MW unit generation from the solar plants will be approx. 1.60 MU. Further, the DNHPDCL will procure 8 MU solar power from JNNSM 5 MW solar plant and will procure 120 MU from solar power procurement under case – I bidding during the FY 2016-17, FY 2017-18 and FY 2018-19. The department is also in the process of installing solar power plants of capacity 10 MW which will generate 16 MU @ 1.6 MU per MW from FY 2018-19 onwards.

Therefore, for the Control Period the DNHPDCL has considered purchase of solar renewable energy of 133.39 MU during FY 2016-17 and 149.39 MU during FY 2017-18 and FY 2018-19 to meet its solar RPO target through this route.

For computing the power availability at the periphery, 3.56% external transmission losses have been applied on the gross power purchase for the MYT Control Period. The total gross power purchase requirement as projected by the Petitioner is shown below:

Table 5-6: Power Purchase (MU) considered by the Petitioner for FY 2016-17 to FY 2018-19

| Source | FY 2016-17 | FY 2017-18 | FY 2018-19 |
|------------------------|------------------|------------------|------------------|
| NTPC Stations | (Projected) | (Projected) | (Projected) |
| KSTPS | 375.23 | 375.23 | 375.23 |
| KSTPS 3 | | | |
| VSTPP-I | 159.66 | 159.66 | 159.66 |
| | 310.94 | 310.94 236.52 | 310.94 236.52 |
| VSTPP-II VSTPP- III | 236.52 250.59 | 250.59 | 250.59 |
| | | | |
| VSTPP- IV | 330.91 | 330.91 | 330.91 |
| KGPP | 417.88 | 417.88 | 417.88 |
| GGPP | 332.81 | 332.81 | 332.81 |
| Sipat-I | 537.40 | 537.40 | 537.40 |
| Sipat-II | 189.59 | 189.59 | 189.59 |
| Mauda | 199.94 | 199.94 | 199.94 |
| VSTPS-V | 178.24 | 178.24 | 178.24 |
| LARA | 0.00 | 35.84 | 35.84 |
| Gadarwara | 0.00 | 169.40 | 169.40 |
| BARH | 0.00 | 37.27 | 37.27 |
| Dhuwaran | 0.00 | 169.40 | 169.40 |
| Kharagaon | 0.00 | 0.00 | |
| FSTPS | 0.00 | 0.00 | 0.00 |
| KhSTPS I | 0.00 | 0.00 | 0.00 |
| RSTPS | 0.00 | 0.00 | 0.00 |
| TSTPS | 0.00 | 0.00 | 0.00 |
| KHSTPP-II | 19.52 | 19.52 | 19.52 |
| Subtotal - NTPC | 3539.23 | 3951.13 | 3951.13 |
| NSPCL - Bhilai | 758.93 | 758.93 | 758.93 |
| NSPCL - Rourkela | 361.13 | 361.13 | 361.13 |
| | | | |
| NPCIL | | | |
| KAPS | 93.27 | 93.27 | 93.27 |
| TAPS | 264.40 | 264.40 | 264.40 |
| Subtotal | 357.67 | 357.67 | 357.67 |

| Source | FY 2016-17 (Projected) | FY 2017-18 (Projected) | FY 2018-19 (Projected) |
|-------------------------------------|---------------------------|---------------------------|---------------------------|
| Others | (F10)ecteu) | (Frojecteu) | (Frojecteu) |
| others | | | |
| RGPPL | 0.00 | 0.00 | 0.00 |
| EMCO Energy Ltd. (GMR | 1529.50 | 1529.50 | 1529.50 |
| Group) | | | |
| Subtotal | 1529.50 | 1529.50 | 1529.50 |
| Power purchase from | | | |
| Other Sources | | | |
| Indian E. | | | |
| Exchange/Bilateral | | | |
| UI | 0.00 | 0.00 | 0.00 |
| Solar | 133.39 | 149.39 | 149.39 |
| Non Solar | 170.00 | 170.00 | 170.00 |
| RPO provisioning | | | |
| Subtotal | 303.39 | 319.39 | 319.39 |
| Misc. Arrears | | | |
| Total Power Purchase | 6849.85 | 7277.76 | 7277.76 |
| External Losses | 231.00 | 246.23 | 246.23 |
| Availability at ED-DNH Periphery | 6618.85 | 7031.52 | 7031.52 |

Power Purchase Cost as projected by the Petitioner:

The cost of purchase from the central generating stations for the MYT Control Period is estimated based on the following assumptions:

- The Government of India, Ministry of Power has allocated 2% (38 MW) power to DNHPDCL on a long term basis from RGPPL. The DNHPDCL has executed PPA with RGPPL and Transmission Service Agreement (TSA) with MSETCL for transmission of above allocated power of RGPPL. The state of Maharashtra has 95% share allocation from RGPPL and they are not scheduling power due to non-availability of natural gas to this project. Due to non-availability of technical minimum schedule to run the plant, presently there is no generation from the plant. Therefore, for the period April 2016 to March 2019, DNHPDCL has not considered any power purchase from RGPPL. However, as per the terms of the PPA signed with RGPPL, DNHPDCL will have to pay the capacity charges for the allocated capacity share from the plant. Therefore the fixed charges have been considered.
- Fixed cost for the MYT Control Period has been projected considering a 5% escalation over the estimated fixed cost for various stations for FY 15-16.
- Variable cost for each NTPC generating station for the Control Period has been projected considering a 5% escalation over the estimated variable cost for various stations for FY 15-16.

- DNHPDCL has projected other charges (tax, incentives, etc) for the Control Period at a similar level as estimated for full year of FY 15-16.
- For nuclear plants i.e. KAPP and TAPP single part tariff increase in the actual average variable cost per unit has been considered for projecting the power purchase cost for the Control Period.
- For NTPC-SAIL Bhilai unit 1 & 2, an escalation of 5% has been taken to project the fixed cost for the Control Period and for projecting the variable cost the increase in the actual average variable cost per unit has been taken into consideration.
- For power purchase from renewable energy sources for the Control Period, DNHPDCL has outsourced the maintenance cost of the solar plants to BHEL. For the purchase through Case I bidding, the Commission's approved tariff for non-solar power in the Tariff Order for FY 2015-16 has been taken into account for projecting the cost during the Control Period.
- Transmission charges payable to PGCIL are based on the total capacity allocation in the transmission network. DNHPDCL has a mix of firm and infirm capacity allocation from various Central Generating Stations which is revised by the Ministry of Power at regular intervals. Therefore considering the changing capacity allocation DNHPDCL has estimated the transmission charges. For the MYT Control Period the transmission charges payable to the ED-DNH (Transmission Division) have also been considered by DNHPDCL.
- For projecting the PGCIL transmission charges for the Control Period, an escalation of 8% over the estimated FY 15-16 transmission charges has been considered in view of the increase in transmission charges. Further, DNHPDCL has taken into account the additional capacity share in the new stations while estimating the Inter-State transmission charges for the ensuing year.

Table 5-7: Power Purchase Cost (Rs Crores) considered by the Petitioner for FY 2016-17 to FY 2018-

| Source | FY 2016-17 | FY 2017-18 | FY 2018-19 |
|---------------|-------------|-------------|-------------|
| | (Projected) | (Projected) | (Projected) |
| NTPC Stations | | | |
| KSTPS | 64.90 | 65.99 | 69.29 |
| KSTPS 3 | 50.15 | 52.43 | 54.83 |
| VSTPP-I | 86.14 | 89.88 | 93.80 |
| VSTPP-II | 65.15 | 67.90 | 70.80 |
| VSTPP- III | 80.44 | 83.98 | 87.70 |
| VSTPP- IV | 113.88 | 118.97 | 124.32 |
| KGPP | 190.47 | 199.61 | 209.21 |
| GGPP | 144.46 | 151.47 | 158.82 |
| Sipat-I | 194.69 | 203.56 | 212.87 |
| Sipat-II | 69.98 | 72.94 | 76.05 |
| Mauda | 146.95 | 154.01 | 161.42 |

| Source | FY 2016-17 | FY 2017-18 | FY 2018-19 |
|-----------------------------------|-------------|-------------|-------------|
| | (Projected) | (Projected) | (Projected) |
| VSTPS-V | 54.90 | 53.47 | 71.30 |
| LARA | 0.00 | 11.72 | 8.39 |
| Gadarwara | 0.00 | 61.49 | 39.13 |
| BARH | 0.00 | 14.35 | 14.35 |
| Dhuwaran | 0.00 | 65.22 | 65.22 |
| Kharagaon | 0.00 | 0.00 | 0.00 |
| FSTPS | 0.00 | 0.00 | 0.00 |
| KhSTPS I | 0.00 | 0.00 | 0.00 |
| RSTPS | 0.00 | 0.00 | 0.00 |
| TSTPS | 0.00 | 0.00 | 0.00 |
| KHSTPP-II | 6.80 | 7.11 | 7.25 |
| Subtotal - NTPC | 1268.91 | 1474.10 | 1524.74 |
| NSPCL - Bhilai | 289.86 | 297.24 | 334.45 |
| NSPCL - Rourkela | 135.84 | 139.35 | 157.06 |
| | | | |
| NPCIL | | | |
| KAPS | 21.00 | 20.80 | 20.61 |
| TAPS | 72.81 | 72.25 | 71.69 |
| Subtotal | 93.82 | 93.05 | 92.29 |
| Others | | | |
| RGPPL | 14.06 | 14.76 | 15.50 |
| Tata Power - Haldia | 0.00 | 0.00 | 0.00 |
| EMCO Energy Ltd. (GMR Group) | 674.55 | 685.31 | 708.47 |
| Subtotal | 688.61 | 700.07 | 723.96 |
| Power purchase from Other Sources | | | |
| Indian E. Exchange/Bilateral | 0.00 | 0.00 | 0.00 |
| UI | 0.00 | 0.00 | 0.00 |
| Solar | 70.40 | 70.40 | 70.40 |
| Non Solar | 68.00 | 68.42 | 70.02 |
| RPO provisioning | | | |
| Subtotal | 138.40 | 138.82 | 140.42 |
| Misc. Arrears | | | |
| Total Power Purchase | 2615.43 | 2842.64 | 2972.93 |
| PGCIL CHARGES | 167.65 | 176.03 | 184.83 |
| POSOCO | 0.92 | 0.97 | 1.02 |
| WRPC | 0.00 | 0.00 | 0.00 |
| Reactive charges | 1.59 | 1.67 | 1.75 |
| MSTCL | 3.86 | 4.05 | 4.26 |
| Others | 29.54 | 31.02 | 32.57 |

| Source | FY 2016-17 | FY 2017-18 | FY 2018-19 |
|---|-------------|-------------|-------------|
| | (Projected) | (Projected) | (Projected) |
| Total Power Purchase Cost (including Transmission Cost) | 2818.99 | 3056.37 | 3197.35 |

Further, the Petitioner in its reply to the data gaps has revised the quantum of both physical solar and non-solar power along with REC's to be procured during the MYT Control Period from FY 2016-17 to FY 2018-19 as shown below:

Table 5-8: Revised RPO (MU and Cost) considered by the Petitioner for FY 2016-17 to FY 2018-19

| | FY 2016-17 | | | FY 2017-18 | | | FY 2018-19 | | |
|---------------|---------------|--------------------|---------------------|---------------|--------------------|---------------------|---------------|--------------------|------------------------|
| Particulars | Units (MU) | Rate (Rs. Unit) | Cost (Rs. Crore) | Units (MU) | Rate (Rs. Unit) | Cost (Rs. Crore) | Units (MU) | Rate (Rs. Unit) | Cost (Rs. Crore) |
| Solar | 128.00 | 5.50 | 70.40 | 128.00 | 5.50 | 70.40 | 128.00 | 5.50 | 70.40 |
| Non Solar | 170.00 | 4.00 | 68.00 | 170.00 | 4.00 | 68.00 | 170.00 | 4.00 | 68.00 |
| Non Solar REC | - | - | - | 2.78 | 1.50 | 0.42 | 13.48 | 1.50 | 2.02 |
| Total | 298.00 | | 138.40 | 300.78 | | 138.82 | 311.48 | | 140.42 |

Commission Analysis:

Power Purchase Quantum and Cost for FY 2016-17 to FY 2018-19

- 1. Central Generating Stations NTPC Ltd.
 - The Petitioner has firm allocation in the Central Sector Generating Stations of NTPC from the following stations
 - Korba Super Thermal Power Station I, II and III.
 - Vindhyachal Super Thermal Power Station I, II, III, IV & V.
 - Kawas Gas Power Station
 - Gandhar Gas Power Station
 - Sipat Super Thermal Power Station- I &II
 - Ratnagiri Gas and Power
 - Kahalgaon Super Thermal Power Station II (Eastern Region)
 - Mauda Thermal Power Station

Apart from that, the Petitioner also has PPA of 200 MW with the EMCO-GMR. 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, except Kahalgaon STPS-II, as per the notification of the Western Region Power Committee (WRPC/Comml-l/6Alloc/2015/8945 Dated October 27, 2015 & WRPC/Comml-l/6Alloc/2015/1608 dated December 30, 2015). The allocation for Kahalgaon STPS-II is considered as per the notification of the Eastern Region power Committee. (http://www.erpc.gov.in/uploads/meeting/1437652669merged_document_71.pdf)

- **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 and Plant Availability Factor for the past 5 FYs if applicable i.e. FY 2011-12 to FY 2015-16 till January. 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 calculated after considering the applicable auxiliary consumption as per the CERC (Terms and Conditions of Tariff) Regulations, 2014. The energy availability from EMCO-GMR station has been considered at 200 MW as per the Petitioner's submission.
- **Energy Available to the Petitioner:** The effective share from the stations is applied on the energy sent out to arrive at the energy available for the Petitioner from the respective stations.

The CERC has not issued the Tariff Orders for after FY 2014-15 for the central generating stations even though the Tariff Regulations for the years after FY 2013-14 have been finalized. In the absence of such information this Commission has considered the following assumptions to arrive at the power purchase cost for FY 2016-17 to FY 2018-19 from the NTPC stations:

- **Fixed Charges:** 5% escalation has been considered in the fixed charges for FY 2016-17 over the approved fixed charges of FY 2013-14 Year on Year basis.
- **Variable Charges:** The Commission has considered the average variable cost for the period April 2015 to September 2015 submitted by the Petitioner (verified from the bills) for consideration of the per unit variable charge for the FY 2016-17 to FY 2018-19 and variable charges for the new stations have been computed with the charges for similar stations and as per the submission made by the Petitioner.

Accordingly, the Commission approves the availability from NTPC stations based on the merit order dispatch principles.

- **2. Central Generating Stations** Nuclear Power Corporation of India Limited
 - The Petitioner has firm allocation in the Central Sector Generating Stations of NPCIL from the following stations
 - Kakrapara Atomic Power Station (KAPS)
 - Tarapur Atomic Power Station (TAPS)

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 Western Region Power Committee vide (WRPC/Comml-l/6Alloc/2015/8945 Dated October 27, 2015.

- **Gross Energy Availability:** The Commission has estimated the gross energy availability from the existing NPCL stations based on the installed capacity and the average Plant Load Factor for the past years as recorded by CEA in its monthly generation reports. The net energy sent out is considered after reducing the recent available levels of auxiliary consumption.
- **Energy Available to the Petitioner:** The effective share from the stations is applied on the energy sent out to arrive at the energy available for the Petitioner from the respective stations.

The Commission has considered the following assumptions to arrive at the single part tariff for the NPCIL stations during FY 2014-15:

- Variable Charges: The Commission has considered the average variable cost for the period April 2015 to September 2015 submitted by the Petitioner (verified from the bills) for consideration of the per unit variable charges for the FY 2016-17 to FY 2018-19.
- **Merit order Dispatch:** The Commission has considered the nuclear plants as must run and has not subjected them for merit order dispatch.

The Petitioner has firm allocation from the following station of NSPCL

3. NSPCL – Bhilai

The Commission has considered the following assumptions to arrive at the Power purchase cost for the FY 2016-17 to FY 2018-19 from the NSPCL Bhilai:

- **Fixed Charges:** 5% escalation has been considered in the fixed charges for FY 2016-17 over the approved fixed charges of FY 2013-14 Year on Year basis as the Tariff Orders for FY 2016-17 onwards are yet to be issued by CERC.
- **Variable Charges:** The Commission has considered the average variable cost for the period April 2015 to September 2015 submitted by the Petitioner (verified from the bills) for NSPCL Bhilai.
- **Merit Order Dispatch:** The NSPCL Bhilai stations have been subjected to merit order dispatch and accordingly the power purchase quantum and variable cost has been approved. However the fixed charges are approved for full allocation.

4. RGPPL

Although the Petitioner has not projected any energy purchase from RGPPL for the MYT control period, the Commission based on recent development and re-operationalization of RGPPL, has considered the availability based on allocation approved by the Western Region Power Committee (WRPC/Comml-l/6Alloc/2015/1608 dated December 30, 2015). The Commission has considered the following assumptions to arrive at the power purchase cost for the FY 2016-17 to FY 2018-19 from RGPPL:

- **Fixed Charges:** 5% escalation has been considered in the fixed charges for FY 2016-17 over the approved fixed charges of FY 2013-14 Year on Year basis as the Tariff Orders for FY 2016-17 onwards are yet to be issued by CERC.
- **Variable Charges:** The Commission has estimated the variable rate of Rs 5.50/kWh as per maximum rate in e-auction.
- **Merit Order Dispatch:** Further, the RGPPL station has been subjected to merit order dispatch and accordingly the power purchase quantum and variable cost has been approved. However the fixed charges are approved for full allocation.

The Commission has considered the Petitioner's revised submission in respect to physical power purchase from solar plants i.e.128 MU and non-solar i.e 170 MU in each FY for the MYT control period from FY 2016-17 to FY 2018-19 along with 2.78 Units and 13.48 Units of non-solar REC for FY 2017-18 & FY 2018-19 respectively. The Commission has considered purchase from solar plants @ Rs 5/kwh for the entire control period from FY 2016-17 to FY 2018-19. For non-solar the Commission has considered a rate of Rs 4/kWh as projected by the Petitioner for wind power. The Commission has considered the solar plants and non-solar plants as must run and has not subjected them to merit order dispatch.

Apart from these stations, the Commission has approved power purchase sources from other upcoming NTPC/Other stations. The details of share and tentative date are shown below:

Table 5-9: New Power Plants Approved by the Commission for FY 2016-17 to FY 2018-19

| Particulars | Plant Capacity MW | DNHPDCL Allocation MW | Avg. DNHPDCL Allocation (%) | Tentative Schedule |
|----------------|----------------------|-----------------------------|-----------------------------------|-----------------------|
| NTPC Stations | | | | |
| LARA | 4,000 | 5.29 | 0.13% | 01st April 2017 |
| Gadarwara | 2640 | 25.00 | 0.95% | 01st April 2017 |
| BARH | 1320 | 5.50 | 0.42% | 01st April 2018 |
| Dhuwaran | 1980 | 25.00 | 1.26% | 01st April 2018 |
| Kharagaon | 1320 | 25.00 | 1.89% | 01st April 2018 |
| Subtotal | 11260 | 85.79 | | |
| NSPCL Rourkela | 250 | 50 | 20.00% | 01st April 2016 |
| Grand Total | 11510 | 135.79 | | |

The Commission has considered the following assumptions to arrive at the Power purchase cost for the FY 2016-17 to FY 2018-19 from the new stations:

- **Fixed Charges:** 5% escalation has been considered in the fixed charges Year on Year basis for similar kind of plants after the date of CoD as the plants are yet to be Commissioned and cost for 2016-17 onwards is yet to be issued by CERC which would be revised based on actuals during the truing up exercise.
- **Variable Charges:** The Commission has considered the average variable cost of similar plants for the period April 2015 to September 2015 submitted by the Petitioner (verified from the bills) for consideration of the per unit variable charges for the FY 2016-17 to FY 2018-19.
- **Merit Order Dispatch:** Further, the new stations have been subjected to merit order dispatch and accordingly the power purchase quantum and variable cost has been approved. However the fixed charges are approved for full allocation.

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 03.11.2015 applicable from October 2015 to December 2015 for approving the Transmission charges for the FY 2016-17 to FY 2018-19.

The Commission has also approved other charges (WRLDC and MSTCL) as approved for FY 2015-16 and these would be revised based on actuals during the truing up exercise.

For determining the power purchase cost, merit order dispatch principles have been applied. The must-run stations have been assumed at the top of the merit order and the variable cost incurred for meeting the energy requirement within the state has been calculated from the plants at the top of the merit order. Due to merit order dispatch, a surplus energy of 153.18 MU in FY 2016-17 and a shortfall of 32.82 MU & 161.78 MU in FY 2018-19 has been envisaged. The same would be sold/purchased at the rate of Rs 3/kWh.

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

Table 5-10: Power Purchased Quantum (MU) and Cost (Rs Crores) Approved by the Commission for FY 2016-17

| | Power P | urchase - Quantu FY 2 | ım (MUs) & Co 016-17 | st (Rs Crores) | | |
|----------|-------------------------|--------------------------|-------------------------|----------------|----------|----------|
| | Particulars | | C | | | |
| Sr. No. | | No. Particulars | Energy MUs | Fixed | Variable | Total |
| A | NTPC | 3,177.15 | 531.16 | 519.39 | 1,050.55 | 330.66 |
| 1 | KSTPP 1&2 | 377.56 | 24.13 | 39.37 | 63.50 | 168.20 |
| 2 | KSTPP 3 | 164.16 | 29.71 | 16.94 | 46.65 | 284.14 |
| 3 | VSTPP 1 | 306.95 | 24.23 | 47.09 | 71.32 | 232.35 |
| 4 | VSTPP 2 | 233.49 | 18.91 | 35.10 | 54.01 | 231.31 |
| 5 | VSTPP 3 | 247.37 | 34.18 | 36.08 | 70.26 | 284.04 |
| 6 | VSTPP 4 | 326.67 | 55.98 | 48.31 | 104.29 | 319.26 |
| 7 | VSTPP 5 | 168.31 | 25.64 | 20.87 | 46.51 | 276.31 |
| 8 | KAWAS GPP | 263.48 | 59.49 | 82.52 | 142.00 | 538.95 |
| 9 | Gandhar GPP | 192.41 | 54.23 | 58.77 | 113.00 | 587.30 |
| 10 | SIPAT 1 | 598.28 | 102.90 | 79.61 | 182.51 | 305.06 |
| 11 | SIPAT 2 | 215.68 | 36.72 | 29.08 | 65.80 | 305.08 |
| 12 | KHSTPS 2 | 18.12 | 3.02 | 4.41 | 7.43 | 410.36 |
| 13 | MAUDA | 64.66 | 62.01 | 21.25 | 83.26 | 1,287.61 |
| | Lyanay | - | 222 = 2 | 212 72 | 110.1= | 404.0= |
| <u>B</u> | NSPCL PRIMA (ALLOCATED) | 1,013.37 | 220.59 | 219.58 | 440.17 | 434.37 |
| 1 | BHILAI (ALLOCATED) | 674.57 | 149.24 | 146.17 | 295.41 | 437.92 |
| 2 | ROURKELA (ALLOCATED) | 338.79 | 71.35 | 73.41 | 144.76 | 427.29 |
| С | NPCIL | 367.98 | - | 100.86 | 100.86 | 274.08 |
| 1 | KAPPS | 87.41 | - | 20.76 | 20.76 | 237.49 |
| 2 | TAPPS 3&4 | 280.57 | | 80.10 | 80.10 | 285.48 |
| | 17H 1 3 3&4 | 200.57 | _ | | | 203.40 |
| D | OTHERS | 1,643.53 | 102.32 | 303.78 | 406.10 | 247.09 |
| 1 | RGPPL | 66.73 | 32.67 | 36.70 | 69.37 | 1,039.57 |
| 3 | EMCO (BILATERAL) | 1,576.80 | 69.65 | 267.07 | 336.73 | 213.55 |
| - | | , | | | | |
| Е | RPO | 298.00 | - | 132.00 | 132.00 | - |
| 1 | Solar | 128.00 | - | 64.00 | 64.00 | 500.00 |
| 2 | Non-Solar | 170.00 | - | 68.00 | 68.00 | 400.00 |
| 3 | Solar REC | - | - | - | - | - |
| 4 | Non Solar REC | - | - | - | - | - |
| | | | | | | |
| F | PXIL/IEX | - | - | - | - | #DIV/0! |
| | | - | - | - | - | - |
| G | Other Charges | - | - | - | 263.83 | - |
| 1 | PGCIL CHARGES | - | - | - | 263.65 | - |
| 2 | POSOCO | | | | 0.85 | |
| 3 | MSTCL | | | | 0.58 | |
| 4 | Reactive charges | | | | 0.35 | |
| 5 | Less: Rebate | | | | (1.60) | |
| | | - | - | - | - | - |
| н | TOTAL | 6,500.03 | 854.07 | 1,275.61 | 2,393.52 | 368.23 |

Table 5-11: Power Purchased Quantum (MU) and Cost (Rs Crores) Approved by the Commission for FY 2017-18

| | Power P | urchase - Quantı FY 2 | ım (MUs) & Co 2017-18 | st (Rs Crores) | | | |
|----------|----------------------|--------------------------|--------------------------|------------------|----------------|-------------------------|--|
| | | | | Cost (Rs Crores) | | | |
| Sr. No. | Particulars | Energy MUs | Fixed | Variable | Total | Per Unit (Paisa/kWh) | |
| A | NTPC | 3,376.28 | 588.95 | 545.46 | 1,134.41 | 335.99 | |
| 1 | KSTPP 1&2 | 377.56 | 25.34 | 39.37 | 64.71 | 171.39 | |
| 2 | KSTPP 3 | 164.16 | 31.19 | 16.94 | 48.13 | 293.19 | |
| 3 | VSTPP 1 | 306.95 | 25.45 | 47.09 | 72.53 | 236.30 | |
| 4 | VSTPP 2 | 233.49 | 19.86 | 35.10 | 54.95 | 235.36 | |
| 5 | VSTPP 3 | 247.37 | 35.89 | 36.08 | 71.97 | 290.95 | |
| 6 | VSTPP 4 | 326.67 | 58.78 | 48.31 | 107.09 | 327.83 | |
| 7 | VSTPP 5 | 168.31 | 26.92 | 20.87 | 47.79 | 283.92 | |
| 8 | KAWAS GPP | 263.48 | 62.46 | 82.52 | 144.98 | 550.24 | |
| 9 | Gandhar GPP | 192.41 | 56.95 | 58.77 | 115.71 | 601.39 | |
| 10 | SIPAT 1 | 598.28 | 108.05 | 79.61 | 187.66 | 313.66 | |
| 11 12 | SIPAT 2 | 215.68 36.04 | 38.55 5.80 | 29.08 4.86 | 67.64 10.66 | 313.59 295.79 | |
| 13 | LARA GADARWARA | 170.33 | 26.09 | 22.97 | 49.05 | 288.00 | |
| 14 | KHSTPS 2 | 10.87 | 2.52 | 2.65 | 5.17 | 475.53 | |
| 15 | MAUDA | 64.66 | 65.11 | 21.25 | 86.36 | 1,335.56 | |
| 13 | I-IIIODII | 01.00 | 03.11 | 21.23 | 00.50 | 1,333.30 | |
| В | NSPCL | 1,013.37 | 231.62 | 219.58 | 451.20 | 445.25 | |
| 1 | BHILAI (ALLOCATED) | 674.57 | 156.70 | 146.17 | 302.87 | 448.99 | |
| 2 | ROURKELA (ALLOCATED) | 338.79 | 74.92 | 73.41 | 148.33 | 437.82 | |
| | , | - | - | - | - | - | |
| С | NPCIL | 367.98 | - | 100.86 | 100.86 | 274.08 | |
| 1 | KAPPS | 87.41 | - | 20.76 | 20.76 | 237.49 | |
| 2 | TAPPS 3&4 | 280.57 | - | 80.10 | 80.10 | 285.48 | |
| | | - | - | - | - | - | |
| D | OTHERS | 1,643.53 | 103.96 | 303.78 | 407.74 | 248.08 | |
| 1 | RGPPL | 66.73 | 34.30 | 36.70 | 71.01 | 1,064.04 | |
| 2 | EMCO (BILATERAL) | 1,576.80 | 69.65 | 267.07 | 336.73 | 213.55 | |
| Е | RPO | 298.00 | - | 132.42 | 132.42 | - | |
| 1 | Solar | 128.00 | - | 64.00 | 64.00 | 500.00 | |
| 2 | Non-Solar | 170.00 | - | 68.00 | 68.00 | 400.00 | |
| 3 | Solar REC | - | - | - | - | - | |
| 4 | Non Solar REC | - | - | 0.42 | 0.42 | - | |
| F | PXIL/IEX | 32.82 | _ | 9.85 | 9.85 | 300.00 | |
| | | - | - | - | - | - | |
| G | Other Charges | - | - | - | 271.64 | - | |
| 1 | PGCIL CHARGES | - | - | - | 271.46 | - | |
| 2 | POSOCO | | | | 0.85 | | |
| 3 | MSTCL | | | | 0.58 | | |
| 4 | Reactive charges | | | | 0.35 | | |
| 5 | Less: Rebate | | | | (1.60) | | |
| | | - | - | - | - | - | |
| Н | TOTAL | 6,731.97 | 924.53 | 1,311.94 | 2,508.11 | 372.57 | |

Table 5-12: Power Purchased Quantum (MU) and Cost (Rs Crores) Approved by the Commission for FY 2018-19

| | | FY 2 | 018-19 | st (Rs Crores) | | |
|---------------|----------------------------|------------------|----------------|-----------------|-----------------|------------------------|
| | | | | ost (Rs Crores) | | |
| Sr. No. | Particulars | Energy MUs | Fixed | Variable | Total | Per Unit (Paisa/kWh |
| A | NTPC | 3,664.23 | 682.65 | 584.28 | 1,266.93 | 345.76 |
| 1 | KSTPP 1&2 | 377.56 | 26.61 | 39.37 | 65.98 | 174.7 |
| 2 | KSTPP 3 | 164.16 | 32.75 | 16.94 | 49.69 | 302.6 |
| 3 | VSTPP 1 | 306.95 | 26.72 | 47.09 | 73.81 | 240.4 |
| 4 | VSTPP 2 VSTPP 3 | 233.49 | 20.85 37.68 | 35.10 | 55.95 | 239.6 |
| <u>5</u> | VSTPP 4 | 247.37 326.67 | 61.72 | 36.08 48.31 | 73.77 110.03 | 298.2 336.8 |
| 7 | VSTPP 5 | 168.31 | 28.26 | 20.87 | 49.13 | 291.9 |
| 8 | KAWAS GPP | 263.48 | 65.58 | 82.52 | 148.10 | 562.0 |
| 9 | Gandhar GPP | 192.41 | 59.79 | 58.77 | 118.56 | 616.1 |
| 10 | SIPAT 1 | 598.28 | 113.45 | 79.61 | 193.06 | 322.6 |
| 11 | SIPAT 2 | 215.68 | 40.48 | 29.08 | 69.56 | 322.5 |
| 12 | LARA | 36.04 | 6.09 | 4.86 | 10.95 | 303.8 |
| 13 | GADARWARA | 170.33 | 27.39 | 22.97 | 50.36 | 295.6 |
| 14 | BARH | 37.47 | 6.03 | 5.05 | 11.08 | 295.6 |
| 15 | DHUVARAN | 80.15 | 30.83 | 10.81 | 41.64 | 519.5 |
| 16 | KHARAGAON | 170.33 | 27.39 | 22.97 | 50.36 | 295.6 |
| 17 18 | KHSTPS 2 MAUDA | 10.87 64.66 | 2.65 68.37 | 2.65 21.25 | 5.29 89.62 | 487.1 1,385.9 |
| 10 | MAUDA | 04.00 | 00.37 | 21.25 | 09.02 | 1,303.9 |
| В | NSPCL | 1,013.37 | 243.20 | 219.58 | 462.78 | 456.6 |
| 1 | BHILAI (ALLOCATED) | 674.57 | 164.54 | 146.17 | 310.71 | 460.6 |
| 2 | ROURKELA (ALLOCATED) | 338.79 | 78.66 | 73.41 | 152.07 | 448.8 |
| | | - | - | - | - | - |
| С | NPCIL | 367.98 | - | 100.86 | 100.86 | 274.0 |
| 1 | KAPPS | 87.41 | - | 20.76 | 20.76 | 237.4 |
| 2 | TAPPS 3&4 | 280.57 | - | 80.10 | 80.10 | 285.4 |
| D | OTHERS | 1,643.53 | 105.67 | 303.78 | 409.45 | 249.1 |
| 1 | RGPPL | 66.73 | 36.02 | 36.70 | 72.72 | 1,089.7 |
| 2 | EMCO (BILATERAL) | 1,576.80 | 69.65 | 267.07 | 336.73 | 213.5 |
| | | | | | | |
| E | RPO | 298.00 | - | 134.02 | 134.02 | - |
| 1 | Solar | 128.00 | - | 64.00 | 64.00 | 500.0 |
| 2 | Non-Solar | 170.00 | - | 68.00 | 68.00 | 400.0 |
| <u>3</u> 4 | Solar REC Non Solar REC | - | - | 2.02 | 2.02 | |
| - 4 | Non Solar REC | | | 2.02 | 2.02 | |
| F | PXIL/IEX | 161.78 | - | 48.53 | 48.53 | 300.0 |
| | | - | - | - | - | - |
| G | Other Charges | - | - | - | 285.95 | - |
| 1 | PGCIL CHARGES | - | - | - | 285.76 | - |
| 2 | POSOCO | | | | 0.85 | |
| 3 | MSTCL | | | | 0.58 | |
| 4 | Reactive charges | | | | 0.35 | |
| | | | | | | |
| 5 | Less: Rebate | + + | | | (1.60) | |
| Н | TOTAL | 7,148.88 | 1,031.52 | 1,391.06 | 2,708.53 | 378.8 |

The Commission hereby approves the total power purchase requirement of 6500.03 MU, 6731.97 MU and 7148.88 MU at total power purchase cost (including transmission and other charges) of Rs 2393.52 Crores, Rs 2508.11 Crores and Rs 2708.53 Crores respectively for the MYT Control Period from FY 2016-17 to FY 2018-19.

5.8. Renewable Purchase Obligation

Petitioner Submission:

The Petitioner will procure 170 MU every FY from non-solar power procurement under case - I bidding during FY 2016-17, FY 2017-18 and FY 2018-19 to fulfill its non-solar renewable power obligation. Further, the Petitioner will procure 2780 non solar renewable energy certificates during FY 2017-18 and 13480 non solar renewable energy certificates during FY 2018-19 to meet its non-solar RPO during the MYT Control Period. To meet the solar obligation for the Control Period FY 2016-17 to FY 2018-19, the department is in the process of installing solar plants of capacity 3.37 MW. The per MW unit generation from the solar plants will be approx. 1.60 MU. Further, the Petitioner will procure 8 MU solar power from JNNSM 5 MW solar plant and will procure 120 MU from solar power procurement under case - I bidding during the Control Period. The department is also in the process of installing solar power plants of capacity 10 MW which will generate 16 MU @ 1.6 MU per MW from FY 2018-19 onwards. Therefore, for the Control Period the Petitioner has considered purchase of solar renewable energy of 133.39 MU during FY 2016-17 and 149.39 MU during FY 2017-18 and FY 2018-19 to meet its solar RPO target through this route. Further, the Petitioner in its reply to the data gaps has revised the quantum of both physical solar and non-solar power along with REC's to be procured during the MYT Control Period from FY 2016-17 to FY 2018-19 as shown below:

Table 5-13: Revised RPO (MU and Cost) considered by the Petitioner for FY 2016-17 to FY 2018-19

| | | FY 2016-17 | | | FY 2017-18 FY 20 | | | Y 2018-19 | |
|---------------|---------------|--------------------|---------------------|---------------|--------------------|---------------------|---------------|--------------------|------------------------|
| Particulars | Units (MU) | Rate (Rs. Unit) | Cost (Rs. Crore) | Units (MU) | Rate (Rs. Unit) | Cost (Rs. Crore) | Units (MU) | Rate (Rs. Unit) | Cost (Rs. Crore) |
| Solar | 128.00 | 5.50 | 70.40 | 128.00 | 5.50 | 70.40 | 128.00 | 5.50 | 70.40 |
| Non Solar | 170.00 | 4.00 | 68.00 | 170.00 | 4.00 | 68.00 | 170.00 | 4.00 | 68.00 |
| Non Solar REC | - | - | - | 2.78 | 1.50 | 0.42 | 13.48 | 1.50 | 2.02 |
| Total | 298.00 | | 138.40 | 300.78 | | 138.82 | 311.48 | | 140.42 |

Commission Analysis:

As per JERC (Procurement of Renewable Energy) Regulations 2010 clause 1 sub clause (1) **Quote**

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.

Unquote

Further, the Commission has notified the amendment to the JERC (Procurement of Renewable Energy) Regulations, 2010 on 19th February 2014. As per the amendment issued, the Petitioner has to purchase a certain percentage of total energy purchase from renewable sources both solar & non-solar for FY 2016-17 to FY 2018-19. The Commission has considered the Petitioner's revised submission in respect to physical power purchase from solar plants i.e.128 MU and non-solar i.e. 170 MU in each FY for the MYT Control Period along with 2.78 Units and 13.48 Units of non-solar REC for FY 2017-18 & FY 2018-19 respectively, which is estimated to exceed the compliance for Renewable Purchase for the MYT Control Period. The required cost of the physical power from solar and non-solar has already been covered under power purchase cost in the foregoing paragraphs.

Table 5-14: Approved Power purchase quantum and Cost from Renewable Energy Sources

| Sr. No | Particulars | FY 2016-17 | FY 2017-18 | FY 2018-19 |
|--------|---|------------|------------|------------|
| 1 | Sales Within UT (in MUs) | 5,812.58 | 6,170.76 | 6,552.74 |
| 2 | RPO Obligation (in %) | 3.95% | 4.30% | 4.65% |
| | - Solar | 1.15% | 1.50% | 1.85% |
| | -Non Solar | 2.80% | 2.80% | 2.80% |
| 3 | RPO Obligation (in MUs) | 229.60 | 265.34 | 304.70 |
| | - Solar | 66.84 | 92.56 | 121.23 |
| | -Non Solar | 162.75 | 172.78 | 183.48 |
| 3 | Floor Price of REC Certificates /MWH | - | - | 1 |
| | - Solar | 3,500.00 | 3,500.00 | 3,500.00 |
| | -Non Solar | 1,500.00 | 1,500.00 | 1,500.00 |
| 4 | RPO Complaince - Physcial Power | 298.00 | 298.00 | 298.00 |
| | - Solar | 128.00 | 128.00 | 128.00 |
| | -Non Solar | 170.00 | 170.00 | 170.00 |
| 5 | RPO Complaince - REC | - | 2.78 | 13.48 |
| | - Solar | - | - | - |
| | -Non Solar | - | 2.78 | 13.48 |
| 6 | Total RPO Compliance | 298.00 | 300.78 | 311.48 |
| | - Solar | 128.00 | 128.00 | 128.00 |
| | -Non Solar | 170.00 | 172.78 | 183.48 |
| 7 | Total Provision for RPO Compliance (In Rs Crores) | - | - | - |
| | - Solar | - | - | - |
| | -Non Solar | - | - | - |

5.9. Operation and Maintenance Expenses

Petitioner Submission:

The Petitioner has submitted that the Operation and Maintenance expenses comprise of the following heads:

- Employees Expenses which include the salaries, dearness allowance, dearness pay, other allowances and retirement benefits paid to the staff;
- Repair and Maintenance (R&M) Expenses, which include all expenditure incurred on the maintenance and upkeep of transmission and distribution assets; and
- Administrative and General Expenses, which include all expenditure incurred in operating a business such as telephone charges, regulatory and consultancy fees such as energy auditing and chartered accountant fees, conveyance and travel expenses, water charges etc.

Summary of the past five years operation and maintenance expense is given in the Table below:

| Year | O&M Expense |
|----------|-------------|
| | Actual |
| FY 10-11 | 6.56 |
| FY 11-12 | 11.83 |
| FY 12-13 | 15.27 |
| FY 13-14 | 17.97 |
| FY 14-15 | 20.80 |

Table 5-15: Operation & Maintenance Expense of previous years (Rs. Crores)

The Petitioner has projected total 0&M expense for FY 2016-17 to FY 2018-19 as Rs.23.66 Crores, Rs.25.25 Crores and Rs.26.94 Crores respectively.

Commission Analysis:

The Commission has considered the submission made by the Petitioner in this regard and has approved the 0&M expenses as per norms approved in the Business Plan Order in Petition No 182/2015 dated 15th December 2015 for the MYT Control Period FY 2016-17 to FY 2018-19.

Employee Expenses: As per the Provision 21 (b) of the Multi Year Distribution Tariff Regulations 2014, norms 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 considers the norm of 1.95 employees per 1000 consumers as reasonable for the Control Period FY 2016-17 to FY 2018-19 and Rs. 665,833 per employee suitably escalated by the Wholesale Price Index (WPI) for the preceding three years, as per Regulation 21.1 of the JERC (Multi Year Distribution Tariff) Regulations 2014 to arrive at the employee expenses for the Control Period. The employee expenses as per norms as approved in the Business Plan Order are shown below:

Employee Expenses as per Approved Norms (Rs Crores) Sr. No FY 17 FY 18 FY 19 **Particulars** 0.08 0.08 Employee Expenses Per Employee 0.07 0.07 0.07 0.09 No of Employee Per '000 Consumers No of Consumers '000 69 72 74 135 140 145 No. of Employees as per norms No of Employee submitted by the Petitioner 120 121 123 No. of Employees finally considered by the Commisson 135 140 145 10.47 Employee Expenses 11.40 12.41

Table 5-16: Employee Expense as per Norms for FY 2016-17 to FY 2018-19 (Rs. Crores)

The employee expenses as projected by the Petitioner and approved by the Commission are as follows:

FY 2016-17 to FY 2018-19 Petitioner's Petitioner's Approved in Petitioner's Approved in Approved in S. No. **Particulars** Projection for Order for FY Projection for Order for FY Projection for Order for FY FY 2016-17 2016-17 FY 2017-18 2017-18 FY 2018-19 2018-19 **Total Employee Expenses** 10.21 10.47 10.83 11.40 11.48

Table 5-17: Employee Expense Approved for FY 2016-17 to FY 2018-19 (Rs. Crores)

The Commission thus approves employee expenses of Rs. 10.47 Crores, Rs 11.40 Crores and Rs 12.41 Crores for the MYT control period from FY 2016-17 to FY 2018-19 and 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 (Multi Year Distribution Tariff) Regulations 2014.

A&G Expenses: As per Provision 21 (b) of the JERC (Multi Year Distribution Tariff Regulations) 2014, norms for A&G Expenses shall be defined in terms of combination of A&G expense per personnel and A&G expense per 1000 consumers. The Commission reiterates that as per the Regulations, provision for one-time expenses is there and the 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, base A&G expense per employee of Rs. 313,750.00 has been considered to be reasonable for the Control Period. Similarly, based on average, base A&G expense per 1000 consumers Rs. 609,613.95 is considered to be reasonable for the Control Period. The Commission has considered the weightage of these two factors in the overall A&G computation as 50:50. The A&G expenses for the Control Period would be determined in accordance with Regulation 21.3 of the Multi Year Distribution

Tariff Regulations 2014. The A&G expenses as per norms as approved in the Business plan Order are shown below:

A&G Expenses as per Approved Norms (Rs Crores) Sr. No Particulars FY 17 FY 18 FY 19 FY 14 FY 15 Approved Average A&G Expenses Per Employee 0.03 0.03 0.03 0.04 0.04 0.04 0.06 0.07 0.07 Approved Average A&G Expenses Per '000 Consume 0.06 0.07 0.08 3 No of Employee 135 140 145 No of Consumers '000 69 72 74 A&G Expenses Per Employee - 50% 2.47 2.69 2.92 A&G Expenses Per '000 Consumers - 50% A&G Expenses 4.93 5.36 5.84

Table 5-18: A&G Expense as per Norms for FY 2016-17 to FY 2018-19 (Rs. Crores)

The A&G expenses as projected by the Petitioner and approved by the Commission are as follows:

Table 5-19: A&G Expense Approved for FY 2016-17 to FY 2018-19 (Rs. Crores)

| | | | FY 2016-17 to FY 2018-19 | | | | | |
|--------|--------------------|--|--|--|--|--|--|--|
| S. No. | Particulars | Petitioner's Projection for FY 2016-17 | Approved in Order for FY 2016-17 | Petitioner's Projection for FY 2017-18 | Approved in Order for FY 2017-18 | Petitioner's Projection for FY 2018-19 | Approved in Order for FY 2018-19 | |
| | | | | | | | | |
| 1 | Total A&G Expenses | 6.95 | 4.93 | 7.36 | 5.36 | 7.80 | 5.84 | |

The Commission thus approves A&G expenses of Rs. 4.93 Crores, Rs 5.36 Crores and Rs 5.84 Crores for the MYT Control Period and 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 (Multi Year Distribution Tariff) Regulations 2014.

R&M Expenses: As per Regulation 21 (b) and 21.2 of the JERC (Multi Year Distribution Tariff) Regulations 2014, norms 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 1.70% was considered by the Commission during approval of the Business Plan Order dated 15th December 2015 has been considered while arriving at the R&M expenses for the Control Period. The R&M expenses as per norms as approved in the Business Plan Order are shown below:

R&M Expenses as per Approved Norms (Rs Crores) Sr. No **Particulars** FY 18 FY 19 **FY 17** 324.85 419.21 538.23 Opening GFA K Factor Approved by the Commission 1.70% Inflation index (60:40=CPI:WPI) 7.33% 9.82 4 **R&M Expenses** 5.93 7.65

Table 5-20: R&M Expense as per Norms for FY 2016-17 to FY 2018-19 (Rs. Crores)

The R&M expenses as projected by the Petitioner and approved by the Commission are as follows:

Table 5-21: R&M Expenses Approved for FY 2016-17 to FY 2018-19 (Rs. Crores)

| | | FY 2016-17 to FY 2018-19 | | | | | |
|--------|--------------------|--|--|--|--|--|--|
| S. No. | Particulars | Petitioner's Projection for FY 2016-17 | Approved in Order for FY 2016-17 | Petitioner's Projection for FY 2017-18 | Approved in Order for FY 2017-18 | Petitioner's Projection for FY 2018-19 | Approved in Order for FY 2018-19 |
| | | | | | | | |
| 1 | Total R&M expenses | 6.50 | 5.93 | 7.05 | 7.65 | 7.66 | 9.82 |

The Commission thus approves R&M expenses of Rs. 5.93 Crores, Rs 7.65 Crores and Rs 9.82 Crores for the MYT Control Period and 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 JERC (Multi Year Distribution Tariff) Regulations 2014

O&M Expenses: The overall summary of O&M expenditure estimated by the Petitioner visà-vis approved by the Commission for FY 2016-17 to FY 2018-19 is given below:

Table 5-22: 0&M Expenses Approved for FY 2016-17 to FY 2018-19 (Rs. Crores)

| | | FY 2016-17 to FY 2018-19 | | | | | | |
|--------|---------------|--|--|--|--|--|--|--|
| S. No. | Particulars | Petitioner's Projection for FY 2016-17 | Approved in Order for FY 2016-17 | Petitioner's Projection for FY 2017-18 | Approved in Order for FY 2017-18 | Petitioner's Projection for FY 2018-19 | Approved in Order for FY 2018-19 | |
| 1 | Employee Cost | 10.21 | 10.47 | 10.83 | 11.40 | 11.48 | 12.41 | |
| 2 | R&M | 6.50 | 5.93 | 7.05 | 7.65 | 7.66 | 9.82 | |
| 3 | A&G | 6.95 | 4.93 | 7.36 | 5.36 | 7.80 | 5.84 | |
| 4 | Total | 23.66 | 21.33 | 25.24 | 24.41 | 26.94 | 28.06 | |

The Commission thus approves an O&M expense of Rs. 21.33 Crores, Rs 24.41 Crores and Rs 28.06 Crores for the MYT control period from FY 2016-17 to FY 2018-19.

5.10. Capital Expenditure and Capitalization

Petitioner Submission:

The Petitioner has projected a total capital investment of Rs 181.60 Crores, Rs 134.30 Crores and 84.31 Crores for the MYT Control Period from FY 2016-17 to FY 2018-19 along

with a capitalization of Rs 119.36 Crores, 153.22 Crores and Rs 104.31 Crores respectively. The Petitioner also submitted that the Commission had approved a value of Rs. 10.00 crore for the scheme "Underground cabling system with new 66/11 KV GIS substation in SMC area" but the actual value sanctioned against the scheme by the CEA is Rs. 99.21 Crore. A copy of the letter received from the CEA regarding the approval was enclosed along with the petition as Annexure III.

The capital expenditure proposed to be incurred by the Petitioner in the solar plants has not been approved by the Commission in the Business Plan Order for the MYT Control Period. It has been mandated to generate own electricity to meet its RPO obligation in respect to the licensee. Even in other states like Tamil Nadu the TANGEDCO is generating its own electricity to meet its RPO. The capitalization of new schemes has been considered at 60% of the planned capital expenditure in the same year while the balance 40% has been capitalized in subsequent year.

Commission Analysis:

The Commission observes that the capital expenditure and the capitalization submitted by the Petitioner for FY 2015-16 is required to maintain the reliable supply for the consumers of UT of Dadra and Nagar Haveli. In respect to disallowance of capital cost for solar plant, the Commission had stated in the Business Plan order dated 15th December 2015 that:

"The Commission is not approving any generation related capex as part of the Business Plan. The Commission notes that the tariff for solar generation plants is to be determined as per the JERC Solar Regulations and amendments thereof. The Petitioner will recover tariff as per the JERC Solar Regulations for the capex incurred for such scheme."

In respect to "Underground cabling system with new 66/11 KV GIS substation in SMC area" the Commission allows scheme as per CEA approval but the cost would be passed on to consumers at the time of true up.

The Commission accordingly approves the capital expenditure and capitalization as approved in the Business Plan Order dated 15th December 2015 as below:

Table 5-23: Capital Expenditure and Capitalization Approved for FY 2016-17 to FY 2018-19 (Rs. Crores)

| Particulars | FY 2016-17 | | FY 20 | 17-18 | FY 2018-19 | | |
|----------------|------------|------------------|--------------------|--------|--------------|----------|--|
| | Projected | Approved | Projected Approved | | Projected | Approved | |
| Capex | 181.60 | 136.60 | 134.30 | 107.30 | 84.31 | 67.10 | |
| Capitalization | 119.36 | 119.36 94.36 153 | | 119.02 | 104.31 83.18 | | |

5.11. Gross Fixed Assets and Depreciation

Petitioner Submission:

The Petitioner in MYT Petition for FY 2016-17 to FY 2018-19 has projected Rs 23.64 Crores, Rs 30.32 Crores and Rs 37.12 Crores as depreciation. Based on the actual capitalization of the FY 2014-15 and revised estimate for FY 2015-16, assets amounting to Rs. 119.36 Crores, Rs 153.22 Crores and Rs 104.31 Crores have been envisaged by the Petitioner to be added in the GFA during the control period.

Depreciation is charged on the basis of straight-line method on the Gross Fixed Assets in use at the beginning of the year and addition in assets during the financial year. The depreciation is based on the original cost of the Gross Fixed Assets.

Commission Analysis:

Regulation 23 of JERC (Multi Year Distribution Tariff) Regulations 2014 specifies that depreciation for the assets shall be calculated annually at the rates specified by CERC from time to time. Accordingly, the Commission hs applied the following depreciation rates as specified by the Hon'ble CERC in the Tariff Regulations, 2014.

| Asset Category | Depreciation Rate % |
|----------------------|---------------------|
| Plant & Machinery | 5.28% |
| Buildings | 3.34% |
| Vehicles | 9.50% |
| Furniture & Fixtures | 6.33% |
| Computers & Others | 15.00% |
| Land | 0.00% |

Table 5-24: Depreciation rate specified by Hon'ble CERC

Addition in assets has been fully considered in Plant & Machinery and the same would be trued up based on actuals and audited accounts for the respective FYs. Gross Fixed Assets and Depreciation for the MYT Control period are as follows:

| | | | | FY 2016-17 t | o FY 2018-19 | | |
|--------|-------------------------------------|--|--|--|--|--|--|
| S. No. | Particulars | Petitioner's Projection for FY 2016-17 | Approved in Order for FY 2016-17 | Petitioner's Projection for FY 2017-18 | Approved in Order for FY 2017-18 | Petitioner's Projection for FY 2018-19 | Approved in Order for FY 2018-19 |
| | | | | | | | |
| 1 | Opening Gross Fixed Assets | 405.36 | 324.85 | 524.72 | 419.21 | 677.94 | 538.23 |
| 2 | Addition During the FY | 119.36 | 94.36 | 153.22 | 119.02 | 104.31 | 83.18 |
| 3 | Adjustment/Retirement During the FY | - | • | - | - | - | - |
| 4 | Closing Gross Fixed Assets | 524.72 | 419.21 | 677.94 | 538.23 | 782.25 | 621.41 |
| 5 | Average Gross Fixed Assets | 465.04 | 372.03 | 601.33 | 478.72 | 730.10 | 579.82 |
| 6 | Rate of Depreciation (%) | 4.50% | 6.19% | 4.47% | 5.99% | 4.75% | 5.86% |
| 7 | Depreciation for the FY | 23.64 | 23.03 | 30.32 | 28.67 | 37.12 | 34.01 |

Table 5-25: GFA and Depreciation as Approved for FY 2016-17 to FY 2018-19 (Rs Crores)

The Commission thus approves a depreciation of Rs. 23.03 Crores, Rs 28.67 Crores and Rs 34.01 Crores for the MYT control period from FY 2016-17 to FY 2018-19.

5.12. Interest on Loan

Petitioner Submission:

Assets capitalized during the MYT Control Period have been considered based on normative debt-equity ratio of 70:30 as per the JERC (Multi Year Distribution Tariff) Regulations, 2014. Interest rate of 14.45% has been considered for computation of interest cost for long-term loans which is similar to the prevailing SBI Prime Lending Rate. The Petitioner in MYT Petition for FY 2016-17 to FY 2018-19 has projected Rs 12.22 Crores, Rs 22.20 Crores and Rs 30.42 Crores as Interest on loan.

Commission Analysis:

As per Regulation 24 of IERC (Multi Year Distribution Tariff) 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. The normative loan outstanding as on 1st April of the Control Period shall be computed by deducting the cumulative repayment as approved by the Commission till 31st March of current FY. Further, the Commission has considered the actual capitalization of assets 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. Repayment has been considered to be equal to depreciation allowed during the FY. Further, the Commission has considered the weighted average interest rate (SBI PLR) as for FY 2015-16 i.e. at the start of the FY 2016-17. (https://www.sbi.co.in/portal/web/interest-rates/benchmark-prime-lending - rate historical - data). The calculation for the interest on the normative loan is given below:

| | | FY 2016-17 to FY 2018-19 | | | | | | | |
|--------|---|--|--|--|--|--|--|--|--|
| S. No. | Particulars | Petitioner's Projection for FY 2016-17 | Approved in Order for FY 2016-17 | Petitioner's Projection for FY 2017-18 | Approved in Order for FY 2017-18 | Petitioner's Projection for FY 2018-19 | Approved in Order for FY 2018-19 | | |
| | | | | | | | | | |
| 1 | Opening Normative Loan | 53.89 | 53.88 | 113.80 | 96.90 | 190.73 | 151.54 | | |
| 2 | Add: Normative Loan during the year | 83.55 | 66.05 | 107.25 | 83.31 | 73.01 | 58.23 | | |
| 3 | Less: Normative Repayment Equal to Depreciation | 23.64 | 23.03 | 30.32 | 28.67 | 37.12 | 34.01 | | |
| 4 | Closing Normative Loan | 113.80 | 96.90 | 190.73 | 151.54 | 226.62 | 175.76 | | |
| 5 | Average Normative Loan | 83.84 | 75.39 | 152.26 | 124.22 | 208.67 | 163.65 | | |
| 6 | Rate of Interest (@SBAR rate) | 14.58% | 14.05% | 14.58% | 14.05% | 14.58% | 14.05% | | |
| 7 | Interest on Normative Loan including bank charges | 12.22 | 10.59 | 22.21 | 17.45 | 30.43 | 22.99 | | |

Table 5-26: Interest on Normative Loan as Approved for FY 2016-17 to FY 2018-19 (Rs Crores)

The Commission thus approves an Interest on Loan of Rs.10.59 Crores, Rs.17.45 Crores and Rs.22.99 Crores for the MYT control period from FY 2016-17 to FY 2018-19.

5.13. Interest on Working Capital

Petitioner Submission:

The Petitioner has computed the Interest on Working Capital for the Control Period based on normative basis as per the JERC (Multi Year Distribution Tariff) Regulations, 2014.

The working capital requirement for the Control Period has been computed considering the following parameters:

- Receivables of two months of billing
- Less power purchase cost of one month
- Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit
- Inventory for two months based on annual requirement for the previous year

A rate of interest of 14.45% has been considered on the working capital requirement, being the SBI Prime Lending Rate as on 1st April of the year. This is in line with the JERC (Multi Year Distribution Tariff) Regulations, 2014 which states that "The rate of interest on working capital shall be equal to the base rate for the State Bank of India on the 1st April of the relevant financial year."

Commission Analysis:

As per Regulation 25 of JERC (Multi Year Distribution Tariff) Regulations 2014, the working capital requirement is to be computed considering the following:

- Receivables of two months of billing
- Less power purchase cost of one month
- Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit
- Inventory for two months based on annual requirement for previous year

The Interest rate on working capital has been considered as 9.30% (SBI base rate as on 05.10.2015) as per Regulations. This is taken as the base rate at the start of the relevant FY because no further rate has been announced. (https://www.sbi.co.in/portal/web/interest-rates/base-rate-historical-data) The calculation for the interest on the normative loan is given below:

Table 5-27: Interest on Working Capital as Approved for FY 2016-17 to FY 2018-19 (Rs Crores)

| | | FY 2016-17 to FY 2018-19 | | | | | | | | |
|--------|--|--|--|--|--|--|--|--|--|--|
| S. No. | Particulars | Petitioner's Projection for FY 2016-17 | Approved in Order for FY 2016-17 | Petitioner's Projection for FY 2017-18 | Approved in Order for FY 2017-18 | Petitioner's Projection for FY 2018-19 | Approved in Order for FY 2018-19 | | | |
| 1 | Receivables of 2 Months Billing | 430.07 | 428.65 | 455.98 | 454.64 | 483.51 | 482.28 | | | |
| 2 | Power Purchase Cost 1 Month | 234.92 | 199.46 | 254.70 | 209.01 | 266.45 | 225.71 | | | |
| 3 | Consumer Security Deposit Excl. BG/FDR | 42.86 | 42.86 | 42.86 | 42.86 | 42.86 | 42.86 | | | |
| 4 | Inventory Based on Annual Requirement for Previous FY for 2 months | 0.28 | 0.28 | 0.28 | 0.28 | 0.28 | 0.28 | | | |
| 5 | Total Working after deduction of Security Deposit from Working Capital Requirement | 152.57 | 186.61 | 158.70 | 203.05 | 174.48 | 213.99 | | | |
| 6 | SBI Base Rate (%) | 14.45% | 9.30% | 14.45% | 9.30% | 14.45% | 9.30% | | | |
| 7 | Interest on Working Capital | 22.05 | 17.35 | 22.93 | 18.88 | 25.21 | 19.90 | | | |

The Commission thus approves an Interest on Working Capital of Rs.17.35 Crores, Rs.18.88 Crores and Rs.19.90 Crores for the MYT control period from FY 2016-17 to FY 2018-19.

5.14. Interest on Security Deposit

Petitioner Submission:

The Petitioner has made a provision to pay Rs. 4.33 Crore as interest on consumer security deposits during the MYT Control Period.

Commission Analysis:

The Commission has considered the closing balance of security deposit of FY 2015-16 as determined in the previous chapter as the opening balance of security deposit in FY 2016-17. No addition in security deposit has been envisaged by the Commission. The Commission has considered the RBI bank Rate at the start of FY i.e. 7.75% for calculation of interest

https://rbidocs.rbi.org.in/rdocs/Wss/PDFs/5T969D4AB53F5746C58E68C9E53AC70953. PDF) - (Feb 26, 2016) and the detailed calculation is shown below:

FY 2016-17 to FY 2018-19 Petitioner's Approved in Petitioner's Approved in Petitioner's Approved in S. No. **Particulars** Projection for Order for FY Projection for Order for FY Projection for Order for FY FY 2016-17 2016-17 FY 2017-18 2017-18 FY 2018-19 2018-19 4.33 3.32 4.33 3.32 4.33 Interest on Security Deposit 3.32

Table 5-28: Interest on Security Deposit as Approved for FY 2016-17 to FY 2018-19 (Rs Crores)

The Commission thus approves an Interest on Security Deposit of Rs.3.32 Crores for each FY of the MYT Control Period.

5.15. Return on Equity

Petitioner Submission:

The Petitioner has projected that as per the JERC (Multi Year Distribution Tariff) Regulations, 2014, it is entitled for a Return on Equity (RoE). Return on equity has been computed on the actual paid up equity. The rate of return has been taken as 16% as per the MYT Regulations.

Commission Analysis:

As per Regulation 27 of JERC (Multi Year Distribution Tariff) Regulations 2014, Return on Equity shall be computed on 30% of capital base or actual equity whichever is lower. 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 Commission has considered the equity as per the audited accounts for FY 2014-15 and has added the equity to the tune of 30% of assets capitalized during the FY. The calculation for the Return on Equity is given below:

Table 5-29: Return on Equity as Approved for FY 2016-17 to FY 2018-19 (Rs. Crores)

| | Particulars | FY 2016-17 to FY 2018-19 | | | | | | | |
|--------|---|--------------------------|--------------|--------------|--------------|--------------|--------------|--|--|
| S. No. | | Petitioner's | Approved in | Petitioner's | Approved in | Petitioner's | Approved in | | |
| | | Projection | Order for FY | Projection | Order for FY | Projection | Order for FY | | |
| | | for FY 2016- | 2016-17 | for FY 2017- | 2017-18 | for FY 2018- | 2018-19 | | |
| | | | | | | | | | |
| 1 | Opening Equity | 80.00 | 80.00 | 80.00 | 112.99 | 80.00 | 148.69 | | |
| 2 | Addition in Equity on Account of New Capitalization | - | 32.99 | - | 35.71 | - | 24.95 | | |
| 3 | Post Tax Equity | 65.00 | 112.99 | 65.00 | 148.69 | 65.00 | 173.65 | | |
| 4 | Return on Equity @ 16% | 10.40 | 18.08 | 10.40 | 23.79 | 10.40 | 27.78 | | |

The Commission thus approves Return on Equity of Rs. 18.08 Crores, Rs 23.79 Crores and Rs 27.78 Crores for the MYT control period from FY 2016-17 to FY 2018-19 respectively.

5.16. Provision for bad and doubtful debts

Petitioner Submission:

The Petitioner has claimed Rs 0.10% of the receivables against provision for bad and doubtful debts for the MYT Control period from FY 2016-17 to FY 2018-19

Commission Analysis:

As per Regulation 32 of JERC (Multi Year Distribution Tariff) Regulations 2014

Quote

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.

Unquote

JERC (Multi Year Distribution Tariff) Regulations 2014 allows a provision for bad and doubtful debts up to 1% of receivables in the revenue requirement on the basis of audited accounts only. As FY 2016-17 to 2018-19 is not actual and is based on projections, no amount is considered for Provision for bad and doubtful debts for the MYT control period from FY 2016-17 to FY 2018-19.

5.17. Income Tax

Petitioner Submission:

The Petitioner has claimed Rs 15.00 Crores each FY against the Income Tax in the MYT Petition for FY 2016-17 to FY 2018-19

Commission Analysis:

The Commission has allowed return on capital base to the Petitioner and hence the tax shall be limited to tax on return on capital base or actual whichever is lower:

FY 2016-17 to FY 2018-19 Petitioner's Approved in Petitioner's Petitioner's Approved in Approved in S. No. Particulars Projection for Order for FY Projection for Order for FY Projection for Order for FY FY 2016-17 2016-17 FY 2017-18 2017-18 FY 2018-19 2018-19 Return on Capital base 0.00 18.08 0.00 23.79 0.00 0.00% 0.00% 33.99% 33.99% 0.00% 33.99% Rate of Income Tax (%) 27.39 0.00 42.09 Gross Up Return on Capital base Income Tax 15.00 15.00

Table 5-30: Income tax as Approved for FY 2016-17 to FY 2018-19 (Rs Crores)

The Commission thus approves an Income tax expense of Rs. 9.31 Crores, Rs 12.25 Crores and Rs 14.31 Crores in each FY of the MYT control period from FY 2016-17 to

FY 2018-19 and the treatment of the same during the true-up would be in accordance with the provisions of Regulation 28 of the JERC (Multi Year Distribution Tariff) Regulations 2014

5.18. Non-Tariff Income

Petitioner Submission:

The Petitioner has claimed Rs 45.76 Crores, Rs 48.05 Crores and Rs 50.45 Crores against non-tariff income in MYT Petition for FY 2016-17 to FY 2018-19

Commission Analysis:

The Commission has escalated the revised approved non –tariff income for FY 2015-16 by 5% to arrive at the Non-Tariff Income for FY 2016-17 and beyond as per the Petitioner's submission as shown below:

Table 5-31: Non- Tariff Income as Approved for FY 2016-17 to FY 2018-19 (Rs Crores)

| | Particulars | FY 2016-17 to FY 2018-19 | | | | | | |
|--------|-------------|--|--|--|-------|-------|--|--|
| S. No. | | Petitioner's Projection for FY 2016-17 | Approved in Order for FY 2016-17 | Petitioner's Projection for FY 2017-18 | * * | | Approved in Order for FY 2018-19 | |
| | | | | | | | | |
| 1 | Total | 45.76 | 45.76 | 48.05 | 48.05 | 50.45 | 50.45 | |

The Commission considers non-tariff income of Rs 45.76 Crores, Rs 48.05 Crores and Rs 50.45 Crores as reasonable and approves the same for the MYT Control Period.

5.19. Revenue from Sale of Surplus Power

Petitioner Submission:

During the MYT Control period from FY 2016-17 to FY 2018-19, the Petitioner has estimated revenue from sale of surplus power at Rs 161.34 Crores, Rs 172.78 Crores and Rs 48.32 Crores respectively.

Commission Analysis:

The Commission, as discussed earlier, has applied merit order dispatch principles in estimating the power procurement requirement of the utility and has estimated a surplus power of 153.18 MU to be sold at Rs 3/kWh in FY 2016-17. The same would result in an additional revenue of Rs 45.95 Crores in FY 2016-17. There is no surplus power in remaining two FYs of the Control Period.

5.20. Revenue from Existing Retail Tariff for FY 2016-17 to FY 2017-18

Petitioner Submission:

During the MYT Control period from FY 2016-17 to FY 2018-19, the Petitioner has estimated a revenue from existing retail tariff for FY 2016-17 to FY 2018-19 as Rs 2580. 44 Crores, Rs 2735.86 Crores and Rs 2901.09 Crores respectively.

Commission Analysis:

The Commission has estimated an open access income based on open access charge (Rs/kWh) as determined for applicable category in the later part of this tariff order for FY 2016-17. The Commission based on existing retail tariff for FY 2015-16 and approved sales, number of consumers and connected load as discussed in the foregoing paragraphs of the chapter has calculated the revenue as follows:

Table 5-32: Revenue from Existing Retail Tariff including OA Income for FY 2016-17 to FY 2018-19 (Rs Crores)

| | Category / Consumption Slab | FY 2016-17 to FY 2018-19 | | | | | | | |
|--------|-------------------------------------|--|--|--|--|--|--|--|--|
| S. No. | | Petitioner's Projection for FY 2016-17 | Approved in Order for FY 2016-17 | Petitioner's Projection for FY 2017-18 | Approved in Order for FY 2017-18 | Petitioner's Projection for FY 2018-19 | Approved in Order for FY 2018-19 | | |
| A | Domestic | 28.43 | 22.82 | 32.47 | 26.03 | 37.09 | 29.71 | | |
| 1 | 0-50 units | 0.02 | 2.43 | 0.03 | 2.77 | 0.03 | 3.16 | | |
| 2 | 51-200 units | 2.82 | 6.38 | 3.22 | 7.29 | 3.68 | 8.33 | | |
| 3 | 201 - 400 units | 2.85 | 7.80 | 3.26 | 8,91 | 3.72 | 10.18 | | |
| 4 | 401 and above | 22.72 | 6.03 | 25.95 | 6.89 | 29.64 | 7.87 | | |
| 5 | Low Income Group (LIG) | 0.01 | 0.17 | 0.01 | 0.17 | 0.01 | 0.17 | | |
| В | Commercial | 10.46 | 10.52 | 11.80 | 11.88 | 13.34 | 13.42 | | |
| 1 | 1- 100 units | 3.52 | 3.29 | 3.97 | 3.71 | 4.49 | 4.19 | | |
| 2 | 101 and above units | 6.93 | 7.23 | 7.83 | 8.17 | 8.84 | 9.22 | | |
| С | Agriculture | 0.43 | 0.43 | 0.49 | 0.49 | 0.56 | 0.55 | | |
| 1 | Up to 10 HP | 0.27 | 0.27 | 0.30 | 0.30 | 0.34 | 0.34 | | |
| 2 | Above 10 HP | 0.17 | 0.17 | 0.19 | 0.19 | 0.21 | 0.21 | | |
| D | LTP Industry | 75.06 | 80.28 | 80.84 | 86.32 | 87.06 | 92.81 | | |
| Е | Public Lighting | 3.88 | 3.88 | 5.00 | 5.00 | 6.46 | 6.46 | | |
| F | Public Water Works | 1.37 | 1.41 | 1.44 | 1.49 | 1.51 | 1.56 | | |
| G | НТ | 2,250.32 | 2,231.74 | 2,382.19 | 2,362.67 | 2,522.70 | 2,501.29 | | |
| 1 | Up to 66 kV | 1,843.75 | 1,776.14 | 1,975.63 | 1,880.37 | 2,116.13 | 1,990.72 | | |
| 2 | Above 66 kV | 406.56 | 455.60 | 406.56 | 482.30 | 406.57 | 510.56 | | |
| 3 | HT Ferro | 209.41 | 220.80 | 220.71 | 233.94 | 231.65 | 247.87 | | |
| I | Hoardings/ Signboards | - | - | - | | - | - | | |
| J | Temporary | 0.65 | - | 0.65 | - | 0.65 | - | | |
| | | - | • | - | | - | - | | |
| K | Total | 2,580.44 | 2,571.88 | 2,735.86 | 2,727.83 | 2,901.09 | 2,893.67 | | |
| L | Open Access Revenue | - | 10.62 | - | 11.15 | - | 11.71 | | |
| M | Total Revenue including Open Access | 2,580.44 | 2,582.51 | 2,735.86 | 2,738.98 | 2,901.09 | 2,905.38 | | |

The Commission considers Revenue from Existing Retail Tariff (including open access income) of Rs 2582.51 Crores, Rs 2738.98 Crores and Rs 2905.38 Crores as reasonable and approves the same for the MYT Control Period.

5.21. Aggregate Revenue Requirement for MYT Control Period from FY 2016-17 to FY 2018-19

Petitioner Submission:

The Petitioner has submitted the net revenue requirement of Rs. 2725.77 Crores, Rs 2968.71 Crores and 3250.91 Crores for the MYT Control Period from FY 2016-17 to FY 2018-19 respectively. Further, it has estimated a standalone revenue gap/(surplus) of Rs. 145.32 Crores, Rs 232.84 Crores and Rs 349.83 Crores for the purpose of MYT Control Period from FY 2016-17 to FY 2018-19 respectively.

Commission Analysis:

The Commission has considered and approved the Aggregate Revenue Requirement for the FY 2016-17 to FY 2018-19 based on the items of expenditure discussed in the preceding paragraphs in this chapter and the same has been summarized in the Table below vis-à-vis the Petitioner's claim as follows:

Table 5-33: Aggregate Revenue Requirement for FY 2016-17 to FY 2018-19 (Rs Crores)

| | Particulars | FY 2016-17 to FY 2018-19 | | | | | | | |
|--------|--|--|--|--|--|--|--|--|--|
| S. No. | | Petitioner's Projection for FY 2016-17 | Approved in Order for FY 2016-17 | Petitioner's Projection for FY 2017-18 | Approved in Order for FY 2017-18 | Petitioner's Projection for FY 2018-19 | Approved in Order for FY 2018-19 | | |
| | | | | | | | | | |
| 1 | Cost of fuel | - | - | - | - | | - | | |
| 2 | Cost of power purchase for full year | 2,818.99 | 2,393.52 | 3,056.37 | 2,508.11 | 3,197.35 | 2,708.53 | | |
| 3 | Provision for RPO Compliance | | - | - | 0.00 | - | - | | |
| 4 | Employee costs | 10.21 | 10.47 | 10.83 | 11.40 | 11.48 | 12.41 | | |
| 5 | Administration and General Expenses | 6.95 | 4.93 | 7.36 | 5.36 | 7.80 | 5.84 | | |
| 6 | Repair and Maintenance Expenses | 6.50 | 5.93 | 7.05 | 7.65 | 7.66 | 9.82 | | |
| 7 | Depreciation | 23.64 | 23.03 | 30.32 | 28.67 | 37.12 | 34.01 | | |
| 8 | Interest and Finance charges | 12.22 | 10.59 | 22.21 | 17.45 | 30.43 | 22.99 | | |
| 9 | Interest on Working Capital | 22.05 | 17.35 | 22.93 | 18.88 | 25.21 | 19.90 | | |
| 10 | Interest on Security Deposit | 4.33 | 3.32 | 4.33 | 3.32 | 4.33 | 3.32 | | |
| 11 | Return on NFA /Equity | 10.40 | 18.08 | 10.40 | 23.79 | 10.40 | 27.78 | | |
| 12 | Provision for Bad Debt | 2.58 | - | 2.74 | • | 2.90 | - | | |
| 13 | Income Tax | 15.00 | 9.31 | 15.00 | 12.25 | 15.00 | 14.31 | | |
| 14 | Incentive on achievement of norm of T&D loss | - | - | | • | ٠ | - | | |
| 15 | Total Revenue Requirement | 2,932.87 | 2,496.53 | 3,189.54 | 2,636.88 | 3,349.68 | 2,858.90 | | |
| 16 | Less: Non Tariff Income | 45.76 | 45.76 | 48.05 | 48.05 | 50.45 | 50.45 | | |
| 17 | Less: Revenue from Surplus Power Sale/UI | 161.34 | - | 172.78 | - | 48.32 | - | | |
| 18 | Less: Revenue from Short term sale | • | 45.95 | - | - | - | - | | |
| 19 | Net Revenue Requirement | 2,725.77 | 2,404.82 | 2,968.71 | 2,588.83 | 3,250.91 | 2,808.45 | | |
| 20 | Revenue from Retail Sales at Existing Tariff | 2,580.44 | 2,582.51 | 2,735.86 | 2,738.98 | 2,901.09 | 2,905.38 | | |
| 21 | Net Gap / (Surplus) | 145.32 | (177.69) | 232.84 | (150.15) | 349.83 | (96.94) | | |

The Commission has considered net revenue requirement of Rs 2404.82 Crores, Rs 2588.83 Crores and Rs 2808.45 Crores for the MYT Control Period. Further, the Commission considered the estimated the standalone revenue gap/(surplus) of Rs. (177.69) Crores, Rs. (150.15) Crores and Rs (96.94) Crores as reasonable and approves the same for the MYT Control Period from FY 2016-17 to FY 2018-19 respectively.

5.22. Coverage of Revenue Gap/ (Surplus) till FY 2016-17

Petitioner Submission:

The Petitioner has submitted that considering the past revenue gap/ (surplus) of Rs (145.73) Crores till FY 2015-16 and standalone revenue gap /(surplus) of FY 2016-17 of Rs 145.32 Crores, the net revenue gap /(surplus) comes to Rs (0.40) Crores.

Commission Analysis:

The Commission has calculated the cumulative revenue surplus till FY 2015-16 in the previous chapter which comes to Rs 463.43 Crores. The estimated standalone revenue surplus for FY 2016-17 has been determined at Rs 177.69 Crores. As a result total revenue surplus including past revenue surplus and carrying cost totals to Rs 684.22 Crores till FY 2016-17.

6. Tariff Philosophy & Category Wise Tariffs for FY 2016-17

6.1.Preamble

The Commission in determining the aggregate revenue requirement and retail supply tariff for the financial year 2016-17 has been guided by the provisions of the Electricity Act, 2003, the Tariff Policy, Regulations on Terms and Conditions of Tariff issued by the Hon'ble Central Electricity Regulatory Commission (CERC) and Regulations on Terms and Conditions of Tariff notified by the JERC under Section 61 of the Act which lays down the broad principles, which shall guide the determination of retail tariff.

6.2. Revenue Gap/Surplus for FY 2016-17

Petitioner's submission

The Petitioner has projected a revenue gap/ (surplus) of Rs. 145.32 Crores for FY 2016-17 and considering the previous year revenue gap/ (surplus) of Rs (145.73) Crores, the cumulative revenue gap/ (surplus) of Rs. (0.40) Crores at the end of FY 2016-17 has been projected at the existing tariff. In view of the estimated revenue gap/ (surplus) of Rs. (0.40) Crores at the end of FY 2016-17, it has not proposed any increase in the power tariff for FY 2016-17 except in HT General 11 kV and 66 kV wherein it has proposed to keep only a single category for HT(A) General for supply at 11 kV/66 kV/220 kV and the tariff would be Rs 4.20/kWh (Energy Charge) and Rs 105/kVA/Month (Fixed Charge). Further, the Petitioner in its reply to public objections has revised the tariff for HT (A) category as (Energy Charges – Rs 3.85/kWh & Fixed Charge – Rs 500/kVA/Month).

Commission's Analysis

The Commission in this tariff order for FY 2016-17, has estimated the revenue surplus of Rs. 684.22 Crores at the end of FY 2016-17, based on the APR of FY 2015-16 with carrying cost of one year @ 9.30% in to FY 2016-17 (ARR).

6.3. Tariff for FY 2016-17

Petitioner's submission

The Petitioner has submitted that as there is an estimated revenue gap/ (surplus) of Rs.(0.40) Crores at the end of FY 2016-17, the Petitioner has not proposed any increase in the power tariff for FY 2016-17 except in HT General 11 kV and 66 kV wherein it has proposed to keep only a single category for HT(A) General for supply at 11 kV/66 kV/220 kV and the tariff would be Rs.4.20/kWh (Energy Charge) and Rs.105/kVA/Month (Fixed

Charge). It has requested the Commission to approve the same retail tariff proposed for FY 2016-17. Further, the Petitioner in its reply to public objections has revised the tariff for HT (A) category as (Energy Charges – Rs 3.85/kWh & Fixed Charge – Rs 500/kVA/Month).

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

Table 6-1: Existing and Proposed Tariff for FY 2016-17 proposed by the Petitioner

| | Existing FY 15-16 | | Propo | osed FY 16-17 |
|--|-------------------------------|--------------------------------|-------------------------------|--------------------------------|
| Tariff Structure | Energy Charges (Rs/Kwh) | Fixed Charges | Energy Charges (Rs/Kwh) | Fixed Charges |
| LT-D/Domestic | | | , , , , | |
| 1 st 50 Units | 1.20 | | 1.20 | |
| 51 to 200 Units | 1.80 | | 1.80 | |
| 201 to 400 Units | 2.20 | | 2.20 | |
| Beyond 401 Units | 2.55 | | 2.55 | |
| LIGH | | Rs. 10/connection/ month | | Rs. 10/connection/ month |
| LT-C/Commercial | | | | |
| 1st 100 Units | 2.55 | | 2.55 | |
| Beyond 100 Units | 3.35 | | 3.35 | |
| LT- Ag/ Agriculture | | | | |
| Upto 10 HP | 0.70 | | 0.70 | |
| Beyond 10 HP | 1.00 | | 1.00 | |
| LTP Motive Power | | | | |
| Upto 20 HP | 3.45 | Nil | 3.45 | Nil |
| For loads above 20 HP | 3.45 | Rs. 25/HP/month | 3.45 | Rs. 25/HP/month |
| LT Public Water Works | | | | |
| Upto 20 HP | 3.70 | | 3.70 | |
| For loads above 20 HP | 3.70 | Rs. 25/HP/month | 3.70 | Rs. 25/HP/month |
| LT-PL/Public Lighting | | | | |
| Public Lighting | 3.00 | | 3.00 | |
| HT | | | | |
| HT (A) I - General (11 kV or 66 kV) | | | | |
| For all units | 4.20 | Rs. 105/kVA/month | 3.85 | Rs. 500/kVA/month* |
| HT (A) II - General (above 66 kV) | | | | |
| For all units | 4.10 | Rs. 100/kVA/month | | |
| HT(B)Ferro | | | | |
| For all units | 4.10 | Rs. 375/kVA/month | 4.10 | Rs. 375/kVA/month |

| | Existing FY 15-16 | | Proposed FY 16-17 | |
|--------------------------|-------------------|---------------|-------------------|---------------|
| | Energy | Fixed Charges | Energy | Fixed Charges |
| Tariff Structure | Charges | | Charges | |
| | (Rs/Kwh) | | (Rs/Kwh) | |
| Hoardings/Advertisements | 7.00 | Rs. | 7.00 | Rs. |
| | | 100/kVA/month | | 100/kVA/month |

^{*} It is proposed to keep only a single category for HT (A) General for supply at 11 kV/66 kV/220 kV.

The Petitioner has requested the Commission to approve the fuel purchase adjustment formula including the "K" factor for FY 2016-17 as well, which can take care of any variation in the ARR over and above the approved level by the Commission for FY 2016-17.

Commission's analysis

The Commission has determined the retail tariff for FY 2016-17 in view of the guiding principles as stated in the Electricity Act, 2003 and Tariff Policy, 2016, the suggestions/objections of the stakeholders in this regard and the Petitioner's submission as discussed above.

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.

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

Quote

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:

- MYT Control Period (FY 2016-17 to FY 2018-19)
- 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 $\pm 20\%$ 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.

Unquote

| Directions g | given by the | Hon'ble APTE | EL in the J | udgment 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 three 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."

Unquote

In view of the cumulative revenue gap/ (surplus) of Rs. (684.22) Crores at the end of FY 2016-17, the Commission decides to reduce the energy charge of HT (A) –I and HT (A)- II by Rs 0.80 per kWh and HT (B) category by 0.70 per kWh. Further, looking into difficulties faced by the power intensive industries, the Commission also decides to reduce the Demand charges of HT (B) category from RS 375 per kVA per month to Rs 275 per kVA per month.

Some of the stakeholders also represented that there should not be an adverse impact on the non-open access consumers because of open access facility extended to few consumers. While replying to the suggestions of the stakeholder on this issue, the Petitioner has proposed to increase the demand charges of HT consumers at Rs 500 per kVA per month and to reduce the energy charge by 35 paisa per kWh. The Commission agrees that in order to reduce impact on non-open access consumers because of open access approvals to few consumers by the Petitioner, it is

reasonable to increase the Demand Charges. Accordingly, the Commission decides to increase the Demand Charge of HT (A) – I and HT (A) – II categories to the level of Rs 275 per kVA per month. However, due to reduction in energy charges for these categories, there will not be any hike in total electricity bill of the normal HT consumers.

Table 6-2: Commission's Approved Tariff for FY 2016-17

| | | Approved Tariff for FY 2016-17 | | | | |
|---------|--|--------------------------------|----------------------------|----------------------------------|--|--|
| Si. No. | Category / Consumption Slab | Energy Charges (Rs/kWh) | Fixed Charges | Average Tariff** (Rs/Unit) | "K" factor for FPPCA formula for FY 2016-17 | |
| 1. | LT-D/Domestic | | | | | |
| | 1st 50 Units | 1.20 | | 1.20 | 0.29 | |
| | 51 to 200 Units | 1.80 | | 1.80 | 0.44 | |
| | 201 to 400 Units | 2.20 | | 2.20 | 0.54 | |
| | Beyond 401 units | 2.55 | | 2.55 | 0.62 | |
| | Low Income Group | | Rs.10/Connection/ month | | | |
| 2 | LT-C/Commercial | | | | | |
| | 1st 100 Units | 2.55 | | 2.55 | 0.62 | |
| | Beyond 100 Units | 3.35 | | 3.35 | 0.82 | |
| 3 | LT- Ag/ Agriculture | | | | | |
| | Up to 10 HP per unit | 0.70 | | 0.70 | | |
| | Beyond 10 HP per unit | 1.00 | | 1.00 | | |
| 4 | LTP Industrial | | | | | |
| | For the category | 3.45 | Rs.25.00 / HP / month | 3.69 | 0.90 | |
| 5 | LT-PL/Public Lighting | | | | | |
| | Public Lighting | 3.00 | | 3.00 | 0.73 | |
| 6 | LT-Public Water Works | | | | | |
| | For the category | 3.70 | Rs.25.00 / HP / month | 3.97 | 0.97 | |
| 7 | HT | | | | | |
| A | HTC General Industrial / Motive Power 11KV or 66KV having CMD above 100KVA | | | | | |
| | Up to 66 kV - HT (A) I | 3.40 | Rs.275 / KVA / Month | 4.21 | 1.03 | |
| | Above 66 kV – HT (A) II | 3.30 | Rs.275 / KVA / Month | 3.98 | 0.97 | |
| В | HT Industrial (Ferro Metallurgical / Steel Melting / Steel Rerolling Power Intensive) | | | | | |

| | | Approved Tariff for FY 2016-17 | | | | |
|---------|--------------------------------|--------------------------------|----------------------|----------------------------------|--|--|
| Si. No. | Category / Consumption Slab | Energy Charges (Rs/kWh) | Fixed Charges | Average Tariff** (Rs/Unit) | "K" factor for FPPCA formula for FY 2016-17 | |
| | For all units HT (B) | 3.40 | Rs.275 / KVA / Month | 4.13 | 1.01 | |
| 8 | Hoardings / Sign Boards | | | | | |
| | For all units | 7.00 | Rs.100 / KVA / Month | | | |

^{**} 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.

6.4. Average Cost of Supply

The Commission has worked out the Average Cost of Supply (ACoS) as Rs.4.32/kWh as per true-up of ARR of FY 2014-15 and Rs. 4.14/kWh for FY 2016-17. The Average Cost of Supply (ACoS) as approved in the Tariff Order dated 01st April 2015 for FY 2015-16 was Rs.4.15/kWh.

Table 6-3: ARR Vs. ACoS for FY 2016-17

| S. No. | Category / Consumption Slab | Average Revenue Realization for FY 2015-16 (Existing Tariff) ** | Average Revenue Realization as a percentage of ACOS for FY 2015-16 (Existing Tariff) | Average Revenue Realization for FY 2016- 17 (Approved Tariff) ** | Average Revenue Realization as a percentage of ACOS for FY 2016-17 (Approved Tariff) |
|--------|--------------------------------|--|--|---|--|
| 1 | LT-D/Domestic | 1.94 | 45.95% | 1.93 | 46.75% |
| | 1st 50 Units | 1.20 | 28.48% | 1.20 | 29.00% |
| | 51 to 200 Units | 1.80 | 42.72% | 1.80 | 43.51% |
| | 201 to 400 Units | 2.20 | 52.21% | 2.20 | 53.18% |
| | Beyond 401 units | 2.55 | 60.52% | 2.55 | 61.63% |
| | Low Income Group | 0.62 | 14.68% | 0.54 | 13.12% |
| 2 | LT-C/Commercial | 3.05 | 72.41% | 3.05 | 73.74% |
| | 1st 100 Units | 2.55 | 60.52% | 2.55 | 61.63% |
| | Beyond 100 Units | 3.35 | 79.51% | 3.35 | 80.97% |
| 3 | LT-Ag / Agriculture | 0.79 | 18.79% | 0.79 | 19.14% |
| | Up to 10 HP per unit | 0.70 | 16.61% | 0.70 | 16.92% |
| | Beyond 10 HP per unit | 1.00 | 23.73% | 1.00 | 24.17% |
| 4 | LTP Industrial | | | | |
| | For the category | 3.70 | 87.75% | 3.69 | 89.21% |
| 5 | LT-PL / Public Lighting | | | | |

| S. No. | Category / Consumption Slab | Average Revenue Realization for FY 2015-16 (Existing Tariff) ** | Average Revenue Realization as a percentage of ACOS for FY 2015-16 (Existing Tariff) | Average Revenue Realization for FY 2016- 17 (Approved Tariff) ** | Average Revenue Realization as a percentage of ACOS for FY 2016-17 (Approved Tariff) |
|--------|---|--|--|---|--|
| | Public Lighting | 3.00 | 71.20% | 3.00 | 72.51% |
| 6 | LT-Public Water Works | | | | |
| | For the category | 3.97 | 94.32% | 3.97 | 96.05% |
| 7 | НТ | | | | |
| A | HTC General Industrial / Motive Power 11KV or 66KV having CMD above 100KVA | 4.47 | 106.16% | 4.16 | 100.58% |
| | Up to 66 kV – HT (A) I | 4.51 | 106.97% | 4.21 | 101.76% |
| | Above 66 kV - HT (A) II | 4.35 | 103.13% | 3.98 | 96.18% |
| В | HT Industrial (Ferro Metallurgical / Steel Melting / Steel Rerolling Power Intensive) | | | | |
| | For all units HT (B) | 5.09 | 120.69% | 4.13 | 99.76% |
| 8 | Hoardings / Sign Boards | | | | |
| | For all units | | | | |

^{**} Average Revenue Realization is defined as the revenue for the category divided by the sales for the category i.e. it is inclusive of both the fixed charges and the variable charges.

6.5. Revenue from Approved Retail Tariff for FY 2016-17

The Commission has estimated open access income based on open access charge as approved by the Commission in this Tariff Order. The Commission based on approved retail tariff for FY 2016-17 and approved sales, number of consumers and connected load as discussed in the previous chapter has calculated the revenue as follows:

Table 6-4: Revenue from Approved Retail Tariff for FY 2016-17 to FY 2018-19 (Rs Crores)

| S. No. | Category / Consumption Slab | Revised Revenue for FY 2016- 17 |
|--------|-------------------------------------|--|
| | Domestic | 22.82 |
| 1 | 0-50 units | 2.43 |
| 2 | 51-200 units | 6.38 |
| 3 | 201 - 400 units | 7.80 |
| 4 | 401 and above | 6.03 |
| 5 | Low Income Group (LIG) | 0.17 |
| В | Commercial | 10.52 |
| 1 | 1- 100 units | 3.29 |
| 2 | 101 and above units | 7.23 |
| С | Agriculture | 0.43 |
| 1 | Up to 10 HP | 0.27 |
| 2 | Above 10 HP | 0.17 |
| D | LTP Industry | 80.28 |
| E | Public Lighting | 3.88 |
| F | Public Water Works | 1.41 |
| G | HT | 2,075.27 |
| 1 | Up to 66 kV | 1,658.23 |
| 2 | Above 66 kV | 417.04 |
| 3 | HT Ferro | 178.98 |
| I | Hoardings/ Signboards | - |
| J | Temporary | - |
| | | - |
| K | Total | 2,373.59 |
| L | Open Access Revenue | 13.98 |
| M | Total Revenue including Open Access | 2,387.57 |

The Commission considers revenue from revised retail tariff (including open access income) of Rs 2387.57 Crores as reasonable and approves the same for the FY 2016-17.

6.6. Revised Revenue Gap/ (Surplus) till FY 2016-17

The Commission in the foregoing paragraphs has estimated Rs 2582.51 Crores as revenue from existing retail tariff including open access income. Further, the Commission has revised the tariff which leads to a revenue from revised retail tariff including open access income of Rs 2387.57 Crores. As a result, revenue from retail tariff including open access income has reduced by Rs 194.93 Crores. The Commission hereby approves revised revenue gap/ (surplus) of Rs (489.29) Crores (Rs 684.22 Crores – 194.93 Crores) due to reduction in revenue from revised tariff for FY 2016-17.

7. Tariff Schedule

7.1. Tariff Schedule

| C No | CATECODY | FIXED CHARGES PER CONNECTED | ENERGY CHARGES |
|--------|--|---|----------------|
| S. No. | CATEGORY | LOAD OR PART THEREOF PER MONTH | (Rs./kWh) |
| 1. | DOMESTIC | | |
| i | 0-50 units | | 1.20 |
| ii | 51-200 units | 1 | 1.80 |
| iii | 201-400 units | | 2.20 |
| iv | 401 and above | 1 | 2.55 |
| v | Low Income Group (Up to 2x40 W bulbs only) | Power supply to low income group connections will be charged at Rs.10 per service connection per month. For any unauthorized increase in the load beyond 2*40 watts, penal charges at the rate of Rs.20 per month per point will be levied and the installation will be liable for disconnection. | |
| 2. | COMMERCIAL | | |
| i | 1-100 units | | 2.55 |
| ii | 101 units and above | | 3.35 |
| | | | |
| 3. | LT INDUSTRIAL | | |
| i | LTP Motive Power (for all units) | Up to 20 HP - NIL | 3.45 |
| ii | LT Public Water Works (For all units) | For loads above 20 HP - Rs.25.00/- per HP or part thereof | 3.70 |

Power Factor Charges

Any motive power connection above 3 HP running without proper capacitors installed so as to maintain Power Factor 0.90 as per the Commission's Regulation 11/2010 shall be charged extra 2.5 % of units consumed as additional power factor charges. Payment of the power factor charge won't exempt the consumer from his responsibility to maintain the power factor. In case of abnormal power factor decrease, the department will give the consumer 15 days' time to install appropriate capacitors and maintain the standard power factor. If the consumer is not able to rectify the problem within the notice time, the connection will be liable for disconnection. ED-DD reserves the right to install a suitable capacitor at its own cost and recover the cost thereof as arrears of energy charges. In case the monthly average power factor is less than 0.70 lagging, the installation is liable for disconnection after due notice.

| 4. | нт/ент |
|----|--------|

| i | High Tension Consumer HT (A) – I (For all units) | Up to Contract Demand - Rs.275/kVA/month or part thereof In Excess of Contract Demand - Rs.550/kVA/month or part thereof | 3.40 |
|----|---|--|------|
| ii | High Tension Consumer HT (A) – II (For all units) | Up to Contract Demand - Rs.275/kVA/month or part thereof In Excess of Contract Demand - Rs.550/kVA/month or part thereof | 3.30 |

1. Penalty Charges: Twice the applicable charges.

- a) Penalty charges will be levied on those units which are drawn beyond the contract demand. These units will be worked out on pro-rata basis co-relating the total consumption of the month with billing demand.
- b) If Industries are overdrawing power by more than 20% of the Contract Demand, their electricity connection will be disconnected immediately.

2. Power Factor Charges

- (a) The monthly average power factor of the supply shall be maintained by the consumer not less than 0.90 (lagging). If the monthly average power factor of a consumer falls below 90% (0.9 lagging), such consumer shall pay a surcharge in addition to his normal tariff @ 1% on billed demand and energy charges for each fall of 0.01 in power factor up to 0.7 (lagging).
- (b) In case the monthly average power factor of the consumer is more than 95% (0.95 lagging), a power factor incentive @ 1.00% on demand and energy charges shall be given for each increase of 0.01 in power factor above 0.95 (lagging).
- (c) If the average power factor falls below 0.70 (lagging) consecutively for 3 months, the licensee reserves the right to disconnect the consumer's service connection without prejudice for the levy of the surcharge.
- (d) The power factor shall be rounded off to two decimal places. For example, 0.944 shall be treated as 0.94 and 0.946 shall be treated as 0.95

3. Billing Demand

Billing demand will be the highest among the following:

- (a) 100 kVA
- (b) 75% of the Contract demand
- (c) Actual Demand Established

| | ;;; | HT Industrial HT (B) (Ferro Metallurgical / Steel Melting / | Up to Contract Demand - Rs.275/kVA/month or part thereof 3.4 | 10 |
|---|-----|--|---|----|
| , | iii | Steel Rerolling / Power Intensive) (For all units) | In Excess of Contract Demand – Rs.550/kVA/month or part thereof | .0 |

1. Penalty Charges: Twice the applicable charges.

- a) Penalty charges will be levied on those units which are drawn beyond the contract demand. These units will be worked out on pro-rata basis co-relating the total consumption of the month with billing demand.
- b) If Industries are overdrawing power by more than 20% of the Contract Demand, their electricity connection will be disconnected immediately.

2. Power Factor Charges

- (a) The monthly average power factor of the supply shall be maintained by the consumer not less than 0.90 (lagging). If the monthly average power factor of a consumer falls below 90% (0.9 lagging), such consumer shall pay a surcharge in addition to his normal tariff @ 1% on billed demand and energy charges for each fall of 0.01 in power factor up to 0.7 (lagging).
- (b) In case the monthly average power factor of the consumer is more than 95% (0.95 lagging), a power factor

incentive @ 1.00% on demand and energy charges shall be given for each increase of 0.01 in power factor above 0.95 (lagging).

- (c) If the average power factor falls below 0.70 (lagging) consecutively for 3 months, the licensee reserves the right to disconnect the consumer's service connection without prejudice for the levy of the surcharge.
- (d) The power factor shall be rounded off to two decimal places. For example, 0.944 shall be treated as 0.94 and 0.946 shall be treated as 0.95

| 5. | AGRICULTURE AND POULTRY | | |
|----|---|--|------|
| i | For sanctioned load up to 10 HP | - | 0.70 |
| ii | Beyond 10 HP and up to 99 HP sanctioned load | - | 1.00 |
| | | | |
| 6. | PUBLIC LIGHTING | | |
| i | For all units | - | 3.00 |
| | | | |
| 7. | HOARDINGS/SIGNBOARDS | | |
| i | Hoarding/Signboards | Rs.100 per kVA per Month or part thereof | 7.00 |
| | | | L |
| 8. | Temporary Supply | | |
| | Tariff for Temporary Connection shall be Fixed/ Demand charges (if any) plus energy charges (for relevant slab, if any) under corresponding permanent supply category plus 50% of both. | | |
| | For multi activity pursuit, applicable tariff for temporary connection shall be with reference to that non-domestic category for permanent supply. The Temporary Tariff are applicable for temporary period of supply up to 1 (one) month, which can lextended for another period of supply up to a maximum period of 2 years. | | |
| | | | |

7.2. Schedule of Other Charges:

7.2.1. Meter Rent

| S. No. | Meter Type | Tariff (in Rs.) / Month or part there of |
|--------|----------------------------|--|
| 1. | Single Phase | Rs.10 per month or part thereof |
| 2. | Three Phase | Rs.25 per month or part thereof |
| 3. | LT Meter with MD indicator | Rs.200 per month or part thereof |
| 4. | Tri- vector Meter | Rs.500 per month or part thereof |

Note: The type of meters to be installed in consumer premises will be decided by the department. Generally the consumers having connected load above 50 HP will be provided with L.T.M.D meters.

7.2.2. Reconnection Charges

| S. No. | Connection Type | Tariff (in Rs.) |
|--------|-----------------|-----------------|
| 1. | Single Phase LT | Rs.50 |
| 2. | Three Phase LT | Rs.100 |
| 3. | HT | Rs.1000 |

7.2.3. Service Connection Charges

| S. No. | Connection | Tariff (in Rs.) |
|--------|---------------------|-----------------------------|
| 1. | Single Phase LT | Rs.250 |
| 2. | Three Phase LT | Rs.1000 |
| 3. | HT (First 500 KVA) | Rs.10000 |
| 4. | HT (Beyond 500 KVA) | Rs.1000 per 100 KVA or part |
| | | thereof |

7.2.4. Extra Length Charges

| S. No. | Connection | Tariff / Meter (in Rs.) |
|--------|--------------|-------------------------|
| 1. | Single Phase | Rs.25/meter |
| 2. | Three Phase | Rs.50/meter |

Extra length chargeable will be beyond the permissible 30 meters free length from existing network for new connections for all categories except agriculture. Free length in respect of new agriculture consumer is 300 meters.

7.2.5. Cost of HT Connection

Entire Cost of setting up HT connection would be borne by the consumer and the agreement period would be two years for the category. 15% supervision charges shall be recovered by DNHPDCL.

7.2.6. Testing Fee for various Metering Equipment

| S. No. | Types of Metering Equipment | Fee Per Unit (in Rs.) |
|--------|--|-----------------------|
| 1. | Single Phase | 100 |
| 2. | Three Phase | 300 |
| 3. | Three Phase Tri-vector Meter (0.5 Class) Industrial LT | 500 |
| | Consumer | |
| 4. | Three Phase Tri-vector Meter (0.5 Class) 11 kV HT | 500 |

| | Consumer | |
|--|---------------------------------------|------|
| 5. Three Phase Tri-vector Meter (0.2 Class) 66KV EHT | | 1000 |
| | Consumers | |
| 6. | Combined CTPT Unit for 11 KV Consumer | 500 |
| 7. | 66 KV C T / PT Unit | 500 |
| 8. | Three Phase CT Block | 300 |
| 9. | CT Coil | 100 |

7.2.7. Fees (Non-refundable) for submission of Test Report of wiring Completion

| S. No. | Types of Connection | Fee Per Test Report (in Rs.) | |
|--------|--|------------------------------|--|
| 1. | Single Phase Lighting / Domestic | 10 | |
| 2. | Three Phase Lighting / Domestic | 25 | |
| 3. | Single Phase Lighting / Non Domestic | 50 | |
| 4. | Three Phase Lighting / Non Domestic 100 | | |
| 5. | Three Phase LT Industries 250 | | |
| 6. | Single Phase / Three phase Agriculture / | 50 | |
| | Streetlight / Public Lighting & others | | |
| 7. | HT Industries upto 500 KVA | 1000 | |
| 8. | HT Industries upto 2500 KVA | 5000 | |
| 9. | HT Industries above 2500 KVA | 10000 | |

7.3.Applicability

| Category | Applicability | Point of Supply/Notes |
|------------------|--|--|
| 1. Domestic | This schedule shall apply to private houses, hostels, hospitals run on Non-commercial lines, Charitable, Educational and Religious Institutions for Light, Fans, Radios, Domestic Heating and other household appliances including water pumps up to 2 HP. | |
| | | |
| 2. Commercial | This schedule shall apply for Shops, Offices, Restaurants, Bus Stations, Photo Studios, Laundries, Cinema Theatres, Industrial Lighting, clubs and other Commercial installations. | This includes all categories which are not covered by other tariff categories including Domestic Category, Low Income Group, Industrial LT, HT/EHT Category (A&B), Agriculture and Poultry, Public Lighting. |
| | | |
| 3. LT Industrial | This schedule shall apply to all Low Tension Industrial Motive Power Connections including water works/pumps with sanctioned load up to 99 HP. | |
| | | |

| | Category | Applicability | Point of Supply/Notes |
|----|---|---|-----------------------|
| 4. | HT (A) - I | This schedule shall apply to all Industrial/Motive power consumers drawing through 11 kV and 66 kV systems having contract demand of 100 kVA and above. | |
| 5. | HT (A) - II | This schedule shall apply to all Industrial/Motive power consumers drawing above 66 kV systems having contract demand of 100 kVA and above. | |
| 6. | HT (B) - (Ferro Metallurgical / Steel Melting / Steel Rerolling / Power Intensive) | | |
| 7. | Agriculture | This schedule shall apply to Agriculture or poultry loads up to 99 HP sanctioned load will be considered in this category. | |
| 8. | Public Lighting | | |
| 9. | Hoardings / Signboards | This schedule shall apply to electricity for lighting external advertisements, external hoardings and displays at departments stores, malls, multiplexes, theatres, clubs, hotels, bus shelters, Railway Stations shall be separately metered and charged at the tariff applicable for "Advertisements and Hoardings" category, except such displays which are for the purpose of indicating / displaying the name and other details of the shop, commercial premises itself. Such use of electricity shall be covered under the prevailing tariff for such shops or commercial premises. The connection for "Advertisements and Hoardings" category would be covered under the permanent supply of connection. | |

| Category | Applicability | Point of Supply/Notes |
|-------------------------|---|-----------------------|
| 10. Temporary Supply | The Temporary Tariff are applicable for temporary period of supply up to 1 (one) month, which can be extended for another period of supply up to a maximum period of 2 years. | |

7.4.General Terms and Conditions

- 1. The tariffs are exclusive of electricity duty, taxes and other charges levied by the Government or other competent authority from time to time which are payable by the consumers in addition to the charges levied as per the tariffs.
- 2. Unless otherwise agreed to, these tariffs for power supply are applicable for supply at one point only.
- 3. Supply to consumers having contracted load between 100 KVA to 4000 KVA (including licensee common feeders and express feeders/dedicated feeders) shall generally be at 11 KV and for more than 4000 KVA up to 25000 KVA at 66 KV. The consumer who requires load more than 25000 KVA load, the supply voltage shall be at 220 KV level.
- 4. 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.
- 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. If the consumer fails to pay the energy bill presented to him by the due date, the Department shall have the right to disconnect the supply after giving 15 days' notice as per provision of the Act & Supply Code Regulation.
- 7. Fixed charges, wherever applicable, will be charged on pro-rata basis from the date of release of connection. Fixed charges, wherever applicable, will be double as and when bi-monthly billing is carried out. Similarly, slabs of energy consumption will also be considered accordingly in case of bi-monthly billing.

8. The billing in case of HT/EHT shall be on the maximum demand recorded during the month or 75% of contracted demand, whichever is higher. If in any month, the recorded maximum demand of the consumer exceeds its contracted demand, that portion of the demand in excess of the contracted demand shall be billed at double the normal rate. Similarly, energy consumption corresponding to excess demand shall also be billed at double the normal rate. The definition of the maximum demand would be in accordance with the provisions of the Supply Code Regulation. If such over-drawal is more than 20% of the contract demand then the connections shall be disconnected immediately.

Explanation: Assuming the contract demand as 100 KVA, maximum demand at 120 KVA and total energy consumption as 12000 kWh, then the consumption corresponding to the contract demand will be 10000 kWh (12000*100/120) and consumption corresponding to the excess demand will be 2000 kWh. This excess demand of 20 KVA and excess consumption of 2000 kWh will be billed at twice the respective normal rate. Such connections drawing more than 120 kVA, shall be disconnected immediately.

- 9. Unless specifically stated to the contrary, the figures of energy charges relates to paisa per unit (kWh) charge for energy consumed during 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. Amount less than 50 paisa shall be ignored and amount of 50 paisa or more shall be rounded off to next rupee. In case of permanent disconnection, delayed payment surcharge shall be charged only up to the month of permanent disconnection.
- 11. **Advance Payment Rebate:** If payment is made in advance well before commencement of consumption period for which bill is prepared, a rebate @ 1% per month shall be given on the amount (excluding security deposit) which remains with the licensee at the end of the month. Such rebate, after adjusting any amount payable to the licensee, shall be credited to the account of the consumer.
- 12. **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.
- 13. The adjustment on account of Fuel and Power Purchase Cost variation shall be calculated in accordance with FPPCA formula separately notified by the Commission under the Regulation. Such charges shall be recovered/refunded in accordance with the terms and conditions specified in the FPPCA formula.

The values of the 'K' factor applicable for the different consumer categories for use in the FPPCA formula shall be as specified in this Tariff Order for FY 2016-17.

8. Open Access Charges for FY 2016-17

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

Petitioner Submission:

The Petitioner has submitted the allocation of ARR into wheeling and retail supply of electricity as approved in the ARR of FY 2015-16 in the Tariff Order 01st April 2015.

Commission Analysis:

The Commission feels that there has to be proper bifurcation of all expenses pertaining to the Petitioner between functions of wheeling business (wire business) and retail supply business. The Commission has considered it prudent to consider the allocation matrix for bifurcation of wheeling and retail ARR as proposed by the Petitioner and approved by the Commission in the Tariff Order for FY 2015-16 dated 01st April 2015. The allocation between wheeling and retail supply business for FY 2015-16 as per the ARR approved in this Order is provided in the Table below:

Table 8-1: Allocation of ARR between Wheeling and Retail Supply as approved by the Commission (Rs Crores)

| Sr. No. | Particulars | Allocation (%) | | FY 2016-17 | | |
|---------|--|----------------|--------|------------|----------|----------|
| 51. NO. | Particulars | Wheeling | Supply | Wheeling | Supply | Total |
| 1 | Cost of power purchase for full year | 0% | 100% | - | 2,393.52 | 2,393.52 |
| 2 | Provision for RPO Compliance | 0% | 100% | - | - | - |
| 3 | Employee costs | 70% | 30% | 7.33 | 3.14 | 10.47 |
| 4 | Administration and General Expenses | 90% | 10% | 4.43 | 0.49 | 4.93 |
| 5 | Repair and Maintenance Expenses | 50% | 50% | 2.96 | 2.96 | 5.93 |
| 6 | Depreciation | 90% | 10% | 20.73 | 2.30 | 23.03 |
| 7 | 7 Interest and Finance charges | | 10% | 9.53 | 1.06 | 10.59 |
| 8 | Interest on Security Deposit & Interest on Working Capital | 22% | 78% | 4.55 | 16.13 | 20.68 |
| 9 | Return on NFA /Equity | 90% | 10% | 16.27 | 1.81 | 18.08 |
| 10 | Income Tax | 90% | 10% | 8.38 | 0.93 | 9.31 |
| 11 | Total Revenue Requirement | | | 74.19 | 2,422.34 | 2,496.53 |
| 12 | Less: Non Tariff Income | 0% | 100% | - | 45.76 | 45.76 |
| 13 | Less: Revenue from Surplus Power Sale/UI/Exchange | 0% | 100% | - | 45.95 | 45.95 |
| 14 | Net Revenue Requirement | | | 74.19 | 2,330.63 | 2,404.82 |

8.2. Voltage Wise Wheeling Charges

Petitioner Submission:

The Petitioner has considered the voltage wise losses for FY 2016-17 as considered by the Commission in its Tariff Order for FY 2015-16 dated 01st April 2015 and has arrived at a wheeling charge of Rs 0.13/kWh for FY 2016-17.

Commission Analysis:

The Commission opines that in the absence of the details of bifurcation of assets and expenses, it has decided to continue the determination of wheeling charges for HT/EHT and LT level. Accordingly, the total approved wheeling ARR is bifurcated between HT/EHT level and LT level based on the sales and losses. The Commission has considered the losses at the HT and EHT level at 2.86% for FY 2016-17 as per the Energy Audit Report for FY 2014-15.

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

| Sr. No | Particulars | UoM | Amount |
|--------|---|-----|----------|
| 1 | Sales at 11 kV and above (HT/EHT Level) | MU | 5,420.66 |
| 2 | Losses in % for HT/EHT Network | % | 2.86% |
| 3 | Input required for sales at 11 kV & above | MU | 5,580.26 |
| 4 | Projected total input | MU | 6,262.13 |
| 5 | Projection of HT/EHT network usage | % | 89.11% |
| 6 | Balance proportion of LT network usage | % | 10.89% |

Table 8-2: Determination of input energy for network usage percentage

Accordingly the wheeling cost has been considered in the ratio of 89.11: 10.89 and the wheeling charge so arrived has been shown in the table below:

| Sr. No | Particulars | UoM | Formulae | Amount |
|--------|---|-----------|------------|----------|
| 1 | Wheeling Cost | Rs Crores | A | 74.19 |
| 2 | Wheeling Cost for HT/EHT network | Rs Crores | B=A*89.11% | 66.11 |
| 3 | Input required for sales at 11 kV & above | MU | С | 5,580.26 |
| 4 | Wheeling charges for HT/EHT network usage | Rs/kWh | D=B/C*10 | 0.12 |
| 5 | Wheeling cost for LT network | Rs Crores | E=A*10.89% | 8.08 |
| 6 | Input required for sales at LT level | MU | F | 662.37 |
| 7 | Wheeling charges for LT network usage | Rs/kWh | G=E/F*10 | 0.12 |

Table 8-3: Wheeling Charge Approved for FY 2016-17

Accordingly, the Commission hereby approves wheeling charge for HT/EHT category as Rs 0.12/kWh and for LT category as Rs 0.12/kWh for FY 2016-17.

8.3. Cross-Subsidy Surcharge

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 Obligation;

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

D is the aggregate of transmission, distribution and wheeling charge 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 Computation of cross subsidy surcharge for EHT/HT consumers getting supply above 11 KV voltage level is given below.

The cross subsidy surcharge shall be taken as 'NIL' if negative. The calculation of cross-subsidy surcharge is given below:

Particular

Sale (MUs)

Revenue from approved tariff (Rs Crores)

T 5,420.66 2,254.25 4.16

Table 8-4: Calculation of "T" Approved for FY 2016-17

| Particulars | Quantum (MU) | Rs Crores | Rs/kWh |
|--|--------------|-----------|--------|
| Power purchase at generator end excluding open access purchase | 6,500.03 | 2,393.52 | 3.68 |
| Less: Interstate Losses | 237.90 | | |
| Total power purchase for the Distribution licensee - C | 6,262.13 | 2,393.52 | 3.82 |

Table 8-6: Cross-Subsidy Surcharge Approved for FY 2016-17

| Cross Subsidy Surcharge | UoM | HT & EHT Industry |
|-------------------------|-------------|----------------------|
| T | Rs. per kwh | 4.16 |
| С | Rs. per kwh | 3.82 |
| D | Rs. per kwh | 0.12 |
| L | % | 2.86% |
| R | Rs. per kwh | 0 |
| Surcharge | Rs. per kwh | 0.22 |

Accordingly, the Commission hereby approves cross subsidy surcharge of Rs 0.22/kWh for FY 2016-17.

8.4. Additional Surcharge

Petitioner Submission:

As per the JERC (Open Access in Transmission and Distribution) Regulations, 2009, "A consumer availing open access and receiving supply of electricity from a person other than the distribution licensee of his area of supply shall pay to the distribution licensee an additional surcharge, in addition to wheeling charges and cross-subsidy surcharge, to meet the fixed cost of such distribution licensee arising out of his obligation to supply as provided under sub-section (4) of section 42 of the Act".

If the consumer opts for open access, the fixed charges shall be Rs.400/kVA/month for the contracted demand used for Open Access. The Petitioner has proposed additional surcharge at Rs.1.48/- per unit from the open access consumers for the energy purchased by them through open access.

Commission Analysis:

The Commission is of the view that the Petitioner has failed to demonstrate that there is an unavoidable obligation on the licensee towards its existing power purchase agreements which have been stranded and continue to be stranded on account of open access transactions corresponding to which the licensee is bearing the fixed cost of the contracts.

The Commission requires the information mentioned below for determination of addition surcharge to be levied on open access consumers:

- Total contracted capacity in MW
- Hourly availability declared by the suppliers in MW
- Hourly schedules given by the Petitioner in MW
- Hourly schedule of open access transactions by the open access consumers in MW
- Total fixed charges paid by the Petitioner;
- Total transmission charges paid by the Petitioner
- Total energy scheduled by the Petitioner in MU
- \bullet Total energy consumed by the open access consumers from their respective licensees in MU
- Total energy scheduled by open access for third parties
- Total demand charges paid by the HT/EHT consumers and total sale of energy to the HT/EHT consumers
- Total demand charges paid by the open access consumers having contracted demand with the licenses;

The Petitioner is directed to file separate petition for the determination of "Additional Surcharge" along with the aforesaid details.

9. Directives

9.1. Liable for action under Section 142 of the Electricity Act 2003 and various provisions of applicable Regulations in case of further non-compliance of Directives is listed below:

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 have not been fully complied with by the Petitioner.

The Commission is of view that substantial time has already been given to the utility for compliance of these directions. Thus, the Commission hereby directs the utility to comply with the directions given below in the timeframe failing which the Commission will be forced to take appropriate action under various provisions of the Electricity Act 2003 and Regulations framed by JERC.

9.1.1. Data on the consumption and load profile of Advertisement Hoardings, Sign boards, Signage's etc.

The Petitioner is directed to separately capture the data regarding consumption and the load profile of the users of advertisement hoardings, signboards, signage's etc. and propose tariff for this category separately in the next tariff Petition, so that the differential tariff for this category could be set as they draw power during the peak hours.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|---|---|--|
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2013-14 | department does not maintain any record separately for the consumption and load profile of the users of advertisement, hoardings, signboards, signage's etc. The initiative has been taken to segregate such type of consumers and evaluate | advertisement, hoardings, signboards, signage's etc. The Petitioner was directed to separately capture the data regarding consumption and the load profile of these users so that differential tariff for this category could be set. As the directive has not been adhered to, the Commission re-directs the Petitioner to separately capture the |
| | the data regarding | data regarding consumption and the |

the consumption and load load profile of of users profile of such users so advertisement hoardings, signboards, that the same can be signage's etc. in its licensee area and accommodated with submit the same to the Commission by differential tariff for this July 31' 2013, failing which category to draw power Commission would be forced to take serious action. during the peak hours. The DNHPDCL would like **Compliance/Action** As Petitioner has failed to submit any detailed justification for failure to taken mentioned in to submit to the Hon'ble ARR and tariff Commission that the ensure compliance of directions issued Petition for FY department is in the by the Commission in previous tariff 2014-15 process of segregating order, the Commission now directs the the data related to the Petitioner to submit the information up consumption and load to 31st March 2014 before 30th June profile of the users of 2014 failing which the Commission will advertisement. be constrained to take appropriate hoardings, signboards, action under various provisions of signage's etc. Previously, Electricity Act 2003. the said data was not maintained bv the department as there was no separate consumer category for this type of users. However, in compliance the to directive of the Commission, **DNHPDCL** has initiated the process to segregate the data for the same and will submit the the same Commission shortly. Compliance/Action The DNHPDCL would like difficulty The in recording taken mentioned in consumption of advertising, hoardings submit to the ARR and tariff Commission that the UT and sign boards is not understood. Petition for Dadra and Nagar Haveli The consumption may be negligible, but FY could be recorded and submitted to the 2015-16 does not have the kind of load profile which Commission for taking a decision on

| | pertains to Advertisement Hoardings, Sign boards, Signage's etc. Only a few Sign Boards and Hoardings exist in the territory. | for 3 months i.e., April to June, 2015 and submitted to the Commission by |
|------------------|---|---|
| Present Petition | The DNHPDCL would like to submit to the Hon'ble Commission that the department will be providing separate connections by identifying such loads and details of such connections along with the consumption shall be submitted to the Hon'ble Commission within the next six months. | details by 30 th September 2016 failing which the Commission will be constrained to take appropriate action under various provisions of Electricity Act 2003 and Regulations framed by |

9.1.2. Continuous & Non-Continuous Industries

A scheme is to be framed by the Petitioner to meet industry demand for uninterrupted supply & commercial mechanism.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|---|--|--|
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2013-14 | framing a scheme to meet industry demand for | Action taken is noted. The Petitioner is hereby directed to submit the status report of the progress made in this direction by September 30, 2013. |

| | the Commission for its approval. | |
|---|--|--|
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2014-15 | | As the Petitioner has failed to submit any specific deadline for submission of status report, the Commission feels that there is serious non-compliance of direction issued by the Commission in previous tariff order considering the fact that the industries constitute more than 90% of total share of DNHPDCL. The Commission now directs the Petitioner to submit the scheme before 30th June 2014 failing which the Commission will be constrained to take appropriate action under various provisions of Electricity Act 2003. |
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2015-16 | | Since DNHPDCL has reported that it has received draft report, it is directed to finalize and submit the report by 30th June, 2015 positively. |
| Present Petition | The DNHPDCL would like to submit that the report shall be submitted to the Hon'ble Commission shortly. | The Petitioner is directed to submit the details by 30 th September 2016 failing which the Commission will be constrained to take appropriate action under various provisions of Electricity Act 2003 and Regulations framed by JERC. |

9.1.3. Assets verification

The third party physical verification is required to be done by a competent firm of Chartered Accountants. The assets not employable for delivery of service to the consumer as useful assets should be written off.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|---|--|---|
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2013-14 | ED-DNH would like to submit that third party physical verification of its assets is being done by a competent firm of Chartered Accountants. The Fixed Asset Register is being enclosed along with this Petition as Annexure II. | Action taken is noted and the Commission appreciates the effort made by the Petitioner in this regard. It was observed that the Fixed Asset Register submitted did not have any mention of the actual physical verification of the assets by the Chartered Accountant. The same was pointed out to the Petitioner during the technical validation session dated 17th January 2013, but the Petitioner did not respond to the same. The Petitioner was required to indicate the value list of assets being used for rendering the services or alternatively indicate as to what %age of Gross block be considered on ad hoc basis & the basis thereof. |
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2014-15 | Hon'ble Commission that | Action taken is noted and Commission appreciates the effort made by the Petitioner in this regard. Ongoing through the submission of the Petitioner, it was observed that the Fixed Asset Register submitted did not have any mention of the actual physical verification of the assets by the Chartered Accountant. The same was pointed out to the Petitioner during the technical validation session dated 20th December 2013, but the Petitioner did |

| | Commission. | not respond to the same. The Petitioner was required to indicate the value list of assets being used for rendering the services or alternatively indicate as to what %age of Gross block be considered on ad hoc basis & the basis thereof. However, in absence of concrete reply on the same, the Commission now directs the Petitioner to indicate the value list of assets being used for rendering the services or alternatively indicate as to what %age of Gross block be considered on ad hoc basis & the basis thereof before 31st July 2014 failing which the Commission will be constrained to take appropriate action under various provisions of Electricity |
|---|---|--|
| | | Act 2003. |
| Compliance/Action taken mentioned in ARR and tariff Petition for FY 2015-16 | | The DHNPDCL is directed to report the present status of asset verification and the date when the verification will be completed by 30th June, 2015. |
| Present Petition | The DNHPDCL would like to submit that it has appointed an independent auditor for asset verification and will submit the asset verification to the Hon'ble Commission as soon as the asset verification is completed. | The Petitioner is directed to submit the details by 30 th September 2016 failing which the Commission will be constrained to take appropriate action under various provisions of Electricity Act 2003 and Regulations framed by JERC. |

9.1.4. Roadmap for reduction in cross-subsidy

The Petitioner is directed to propose a road map for determining in the tariff rate which progressively reduces the gap between per unit tariff and the average cost of supply over a period of 5 years in two phases i.e. first 3 years from FY 2012-13, FY 2013-14 and FY 2014-15 a review thereafter and further reduction during FY 2015-16 and FY 2016-17.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|---|--|---|
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2013-14 | The ED-DNH will submit the roadmap to the Commission shortly. | Action taken is noted. The Petitioner is directed to file the roadmap latest by 31st July, 2013. |
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2014-15 | The DNHPDCL would like to submit to the Commission that it is preparing the roadmap for reduction in cross subsidy and will submit the same to the Commission shortly. | As the Petitioner has failed to submit any specific deadline for submission of roadmap, and as 2 years have already passed without any concrete action in this context, the Commission feels that there is serious non-compliance of direction issued by the Commission in previous tariff order. The Commission now directs the Petitioner to submit the roadmap before 31st July 2014 failing which the Commission will be constrained to take appropriate action under various provisions of Electricity Act 2003. |
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2015-16 | | The road map for reduction of cross subsidy is yet to be submitted. The road map should be submitted by 30th June, 2015. |

| | Commission shortly. | |
|------------------|---|--|
| Present Petition | like to submit that the department will submit roadmap to the Hon'ble | The Petitioner is directed to submit the details by 30 th September 2016 failing which the Commission will be constrained to take appropriate action under various provisions of Electricity Act 2003 and Regulations framed by JERC. |

9.2. Directives continued in this Tariff Order

While examining the compliance note and supporting documents submitted by the Petitioner in the present Petition, it has been observed that the some of the directives issued in previous tariff orders have not been fully complied with by the Petitioner.

The Commission, considering the constraints/submissions of the Petitioner, is of the view that some of the directions needs further action by the Petitioner. Thus, the Commission has decided to continue with the following directives:

9.2.1. Renewable Purchase Obligation

The Petitioner is directed to stagger the purchase over the year to avoid bunching of purchase at high cost towards the end of the year.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|---|--|---|
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2013-14 | that Ministry of Power is in a process to formulate the guidelines for the procurement of Renewable Energy through competitive bidding process. ED-DNH will explore the possibility of purchase the power from | ensure that its RPO obligations as per the JERC procurement of Renewable Energy Regulations |

guidelines are finalized by MOP.

Moreover ED-DNH has also invited tenders by following e-tendering process to procure Non-Solar Energy to the tune of 150 MU. The lowest bidder was selected for procurement of 61 MU i.e. M/s Betul Non-Convention Energy Pvt. Ltd. for the year 2013-14. The Petition is already filed for the approval of PPA for the procurement of 61 MU before JERC.

ED-DNH has procured 80,000 Non-Solar Certificates amounting to Rs.14.50 Crore to meet the RPO obligation for the year 2012-13 up to October 2012.

ED-DNH is also exploring the possibility to establish Solar Power Plant of its own at Velugam village as sufficient land is available at proposed 66/11 KV Velugam Substataion. The ED-DNH has invited an offer from BHEL, a Government undertaking for establishment of the said Solar Power Plant. The capacity of the proposed power plant will be approximately 5MW.

respect of both solar and non-solar power purchase should be ensured separately by the licensee.

Compliance/Action

The DNHPDCL would like to Action

Action taken is noted. The

taken mentioned in ARR and Tariff Petition for FY 2014-15

Hon'ble submit the to that Commission the department is fully committed to comply with the RPO guidelines issued by the Hon'ble Commission. In this regard DNHPDCL has already submitted a compliance report before the Commission vide letter no. 1-1(536)/ELE/2011/2280 dt. 27th September, 2013. In the said compliance report DNHPDCL has submitted its plan to meet the RPO. Key extracts of the compliance report are presented below:

> Installation of 3 MW grid connected Solar PV plant at Velugam, Silvassa. Bids are the invited from parties (Tender id -124850) and the contract is expected to be awarded by March, 2014. But as the model code of conduct came in to force in the month of March 2014 the contract is now be expected to awarded by May, 2014. The solar plant is expected to generate 4.8 MU annually. DNHPDCL also plans to install more grid connected Solar PV

Commission appreciates the effort made by the Petitioner to bridge the gap between peak demand and supply for the users within its territory. However, as detailed in para 6.9 of this order, the Commission has approved a provision of RPO Compliance of Rs.74,98 Crore for the review of FY 2013-14 along with penalty for non-compliance.

| | projects of kW scale as well as solar roof-top in its territory. • Purchase of 5 MW solar power from JNNSM. DNHPDCL has already shown its willingness to procure 5 MW solar power from JNNSM vide letter no. 1-1 (38) / PDCL —AE (Comml.)/2013/2003 dt. 7th September 2013. Further, the DNHPDCL is already buying approximately | |
|---|--|--|
| | 10,000 RECs on monthly trading session at power exchange. | |
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2015-16 | already filed an affidavit in the Petition No.61/2012 in | The Commission has noted the action taken by DNHPDCL for procurement of Non Solar Renewable Energy through case – I bidding by 2015-16. It shall be ensured that the renewable energy will be available as projected. The DNHPDCL should procure renewable energy and not RE certificates. |
| Present Petition | No Response Submitted | The Petitioner has submitted nothing in this regard. It should be ensured that the renewable energy will be available as projected for MYT period. The Petitioner is directed to submit the compliance report of RPO up to FY 2015-16 by |

| | 30 th Sept 2016. |
|--|-----------------------------|
| | |

9.2.2. Enforcement Cell:

The Petitioner is directed to submit the status of the functioning of enforcement cell and quarterly progress report detailing number of cases, amount involved, amount of revenue fines recovered, (to be shown separately in ARR), sub-judice cases, and reduction in losses as a consequence.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|---|--|---|
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2013-14 | Dadra and Nagar Haveli | Action taken is noted and hereby the Petitioner is directed to submit the status report of the progress made in this direction on a quarterly basis. The report of the quarter ending March 31'2013 should be sent by April 15'2013. |
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2014-15 | The DNHPDCL would like to submit that the quarterly progress report will be submitted to the Hon'ble Commission shortly. | As Petitioner has failed to submit any detailed justification for inordinate delay of submission of report and has also failed to ensure compliance of directions issued by the Commission in previous tariff order, the Commission now directs the Petitioner to submit the quarterly progress report upto 31st March 2014 before 30th June 2014 failing which the Commission will be constrained to take appropriate action under various provisions of Electricity Act 2003. |
| Compliance/Action | The DNHPDCL would | Action taken is noted. As directed |

| taken mentioned in | like to submit to the | |
|-------------------------|---------------------------|--|
| ARR and Tariff | Hon'ble Commission | submitted on the cases detailed by |
| Petition for FY | that the Enforcement i.e. | enforcement cell and revenue |
| 2015-16 | Lab & Vigilance | recovered. |
| | department is looking | |
| | after the work of | |
| | vigilance activity | |
| | throughout the territory | |
| | in respect of all the | |
| | categories of consumers. | |
| | The vigilance check has | |
| | been kept for metering | |
| | arrangement of the | |
| | consumers, their | |
| | consumption as per their | |
| | contractual power | |
| | demand etc. If any | |
| | irregularity is observed, | |
| | the same will be | |
| | informed to the | |
| | Commission. | |
| | | |
| Present Petition | The DNHPDCL has noted | The Petitioner has failed to submit the |
| | the directive of the | quarterly reports as envisaged by the |
| | Hon'ble Commission and | Commission. The Petitioner is again |
| | shall comply accordingly. | directed to submit the quarterly reports |
| | | on the cases detailed by enforcement |
| | | cell and revenue recovered from FY |
| | | 2015-16 to FY 2016-17 (till June) by |
| | | 31 st August 2016. |
| | | |

9.2.3. Energy Audit Expenses

The Petitioner is directed to submit all the documents establishing capability and rate reasonability for awarding the work of energy audit within two weeks of issuance of this Tariff order so as to check the reasonableness of the expenditure. The matter has been discussed in relevant Chapters of this order.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|---|--|---|
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2013-14 | ED-DNH has invited tenders for implementing energy audit and evaluating component wise AT & C losses along with GIS mapping. As soon as the tendering process is complete ED-DNH will submit all the relevant documents to the Hon'ble Commission. | Action taken is noted and hereby the Petitioner is directed to file status report of the progress made in this direction on quarterly basis by September 2013. |
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2014-15 | The DNHPDCL would like to submit to the Hon'ble Commission that the energy audit is under process and the department will submit the report as soon as it is finalized. | As the Petitioner has failed to submit any specific deadline for submission of study report, the Commission feels that the Petitioner has failed to ensure compliance of direction issued by the Commission in previous tariff order. The Commission now directs the Petitioner to submit the energy audit report before 31st July 2014 failing which the Commission will be constrained to take appropriate action under various provisions of Electricity Act 2003. |
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2015-16 | The DNHPDCL would like to submit to the Hon'ble Commission that the work of preparation of energy audit report has been given to consultant M/s Panacean Energy Solutions Mumbai and | DNHPDCL is directed to intimate the present status of the study and the likely date of report submitted by the consultant by 30 th April, 2015. It is also directed to report results and conclusions of the study by 30th September, 2015. |

| | the report will be submitted to the Hon'ble Commission as soon as it is finalized. | |
|------------------|--|--|
| Present Petition | The DNHPDCL would like to submit that the summary of the report on Energy Audit for the FY 2014-15 is being enclosed along with this petition as Annexure VII . | The Petitioner in its annexure to petition had submitted the energy audit report for FY 2014-15 which is not tallying with the submission of the Petitioner in respect to sales, energy availability and losses. The Petitioner is directed to submit the revised energy audit report along with revised figures for FY 2014-15 to validate the same by 30th September 2016. |

9.2.4. Standards of Performance

The Commission has notified the JERC (Standards of Performance) Regulation 2009, wherein the guaranteed and overall standards of performance are prescribed to ensure the quality of supply. The Petitioner is bound to adhere to the Regulations prescribed and impart the stipulated performance standards. The Commission in this regard directs the Petitioner to submit the information regarding the standards of performance achieved for FY 2011-12 within one month from the issue of this order. Further, the licensee should ensure timely submission of the information as per the requirement laid down in the JERC (Standards of Performance) Regulation, 2009

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|-------------------------------|---------------------------|--|
| Compliance/Action | The SOP data up to | The submission of Petitioner is noted. |
| taken mentioned | August, 2012 has been | Timely submission as per the |
| in ARR and Tariff | submitted to the Hon'ble | requirement laid down in the JERC |
| Petition for FY | Commission and from | (Standard of Performance) Regulation, |
| 2013-14 | now onwards the | 2009 should be duly adhered to. The |
| | quarterly data as per the | process of developing the software for |
| | requirement will be | availing the data of each complaint |

submitted to the Hon'ble Commission. The ED-DNH is in the process to develop software for availing the data of each compliant center and office detail on month on month basis.

centre and office detail should be expedited so that data collection can happen in a timely manner.

Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2014-15

The DNHPDCL would like to submit to the Hon'ble Commission that the process of developing the software for availing the data of each compliant centre is being expedited so that data collection can happen in a timely manner.

As the Petitioner has failed to submit an specific deadline for roll out of software for availing data of each complaint and office details. centre the Commission feels that the Petitioner has failed to ensure adequate compliance of directions issued by the Commission in previous tariff order. The Commission now directs the Petitioner to roll out the software before 15th August 2014 failing which the Commission will constrained to take appropriate action under various provisions of Electricity Act 2003. In case there is any issue in adhering this deadline by the Petitioner, the Petitioner should submit, within one month of the issue of this order, the actual date of roll out of the software detailing the reasons for further delay.

Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2015-16

The DNHPDCL would like to submit to the Commission that the DNHPDCL has prepared software in consultation with consultant M/s Panacean Energy Solutions and provided the same at each Complaint Centre to maintain and entry of

Action taken on the implementation of the directive is noted. To ensure quarterly report in accordance with SOP Regulations, 2015

| the | day | to | day |
|---------|---------|-------|-----|
| Compla | ints | as | per |
| require | ments | of | SOP |
| Regulat | ions of | JERC. | |
| | | | |

9.2.5. Capital Expenditure

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

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|---|--|---|
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2013-14 | It is submitted that the status of capital expenditure incurred during the first 2 quarters for the current financial year i.e. April, May, June – 2012 and July, August, September – 2012 has been prepared and is being enclosed along with the Petition as Annexure III | The submission of the Petitioner is noted. The timeline stipulated for the submission as per the direction should be adhered to and quarterly submissions should be made for the remaining quarters of FY 2012-13 and going forward for the coming years. |
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2014-15 | like to submit to the | The submission of the Petitioner is noted. The timeline stipulated for the submission as per the direction should be adhered to and quarterly submissions should be made for the remaining quarters of FY 2013-14 and going forward for the coming years. |

| | Petition for FY 2014-15. Further, the DNHPDCL will submit the quarterly progress report of capital expenditure as directed by the Hon'ble Commission. | |
|---|---|---|
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2015-16 | Hon'ble Commission | Compliance is noted. The quarterly reports on capital expenditure and capitalization shall be reported regularly. |
| Present Petition | No Response Submitted | The quarterly reports on capital expenditure and capitalization shall be reported regularly. |

9.2.6. 100% Metering

Under Section 55(1) of the Electricity Act 2003, no licensee shall supply electricity after expiry of 2 years from the appointed date except through installation of correct meter in accordance with the Regulations to be made in this behalf by the Authority. Accordingly, metering is required to be done in line with the CEA (installation and operation of meters) Regulations 2006 to all consumers. Action plan to install meters for all the unmetered connections may be given by 31st July, 2015.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|----------------------------------|-----------------------|---|
| Present Petition | | The Petitioner is directed to meter all consumers at the earliest but not later than 31st March 2017. |

| the Union Territory shall | |
|---------------------------|--|
| be metered by the end of | |
| FY 2016-17. | |
| | |

9.2.7. Safety Measures undertaken

The DNHPDCL is directed to submit a report on the safety measures initiated by it to prevent fatal/ non-fatal accidents for the departmental persons and general public, by 31st July, 2015.

The Petitioner is also directed to submit quarterly reports on departmental/ non-departmental, fatal/ nonfatal accidents which have occurred and steps taken to prevent recurrence of the same. The first quarterly report should be submitted by 31st July, 2015.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|----------------------------------|---|--|
| Present Petition | The DNHDCL would like to submit to the Hon'ble Commission that the department is implementing a scheme of underground cabling in the Silvassa town. Further, DNHPDCL has also circulated circulars to the local panchayat and newspapers to adopt safety measures to prevent fatal/non-fatal accidents. Advance training is also being provided to staff take safety precautions. | should submit quarterly report by 30 th |

9.3. New Directives issued in this tariff order

The Commission is of view that with the implementation of MYT regime and changing power sector scenario, there is requirement of issuance of new directions to the Petitioner.

9.3.1. Implementation of Smart Grid

The Petitioner is directed to submit a detailed action plan by 30th September 2016 for roll out of smart grid in DNH within this MYT Control Period.

9.3.2. Promotion of Solar Generation

The Petitioner is directed to take-up with the Government for formulation of a comprehensive policy for promotion of solar energy in its licensee area especially among the industrial consumers.

9.3.3. Information for determination of Voltage-wise Wheeling Charges

The Petitioner is directed to provide the details of voltage wise assets and expenses along with the allocation methodology if any for the determination of voltage wise wheeling charges in the next tariff petition.

9.4. Directives dropped in this Tariff Order

While examining the compliance note and supporting documents submitted by the Petitioner in the present Petition, it has been observed that the some of the directives issued in previous Tariff Orders are no longer required.

The Commission is of view that since these directions have been complied with satisfactorily, these directions are no longer required in present context and thus required to be dropped or replaced with new directions.

9.4.1. Segregation of T&D losses and loss reduction trajectory:

The Petitioner is directed to furnish segregation of losses into transmission and distribution losses in the first instant and further segregate distribution losses into technical and commercial losses separately in their next ARR and tariff Petition, along with the status report on energy accounting and T&D losses.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|---|---|--|
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2013-14 | evaluated T&D losses for the financial year 2011- | Petitioner is directed to submit the status report and progress by |

| | categories of consumers by implementing GIS mapping & simulation of all related data. | |
|---|---|---|
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2014-15 | like to submit to the Commission that the | Action taken is noted. As the Petitioner has failed to submit the report by September 2013 as per earlier direction, the Commission now directs the Petitioner to submit the final report before 31stJuly 2014 failing which the Commission will be constrained to take appropriate action under various provisions of Electricity Act 2003 and Regulations framed by JERC. |
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2015-16 | like to submit to the Commission that the | This is going on for the last 2 years. DNHPDCL is still studying the draft report of the consultant. It is not clear when it will be finalized and submitted to the Commission. The DNHPDCL shall submit the report on segregation of T&D loss in to Technical and Commercial losses by 20th September, 2015 positively. |

| Present Petition | The DNHPDCL would Ac | tion taken is noted. |
|-------------------------|----------------------------|----------------------|
| | like to submit to the | |
| | Hon'ble Commission that | |
| | the T&D losses and the | |
| | AT&C losses i.e. technical | |
| | losses and the | |
| | commercial losses are | |
| | being submitted along | |
| | with the Tariff Petition. | |
| | Further, the Hon'ble | |
| | Commission has | |
| | approved the T&D and | |
| | AT&C loss trajectory in | |
| | the Business Plan for the | |
| | MYT Control Period. | |

9.4.2. Load Forecasting Study

The Petitioner is directed to conduct a detailed load forecasting study for short term (2-5 years), medium term (7-10 years) and long term (15-25 years) in order to understand the load requirements in their area at various periods and submit to the Commission along with next ARR and tariff Petition.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|---|-----------------------|--|
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2013-14 | Energy Solutions Pvt. | is directed to submit the status report and progress in this regard by |

| | Commission by the end of January 2013. | |
|---|---|--|
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2014-15 | The DNHPDCL would like to submit to the Hon'ble Commission that M/s Panacean Energy Solutions Pvt. Ltd., Mumbai has been appointed to undertake Load Forecasting Study for short term (2-5 years), medium term (7-10 years) and long term (15-25 years) in order to understand the future load requirements of DNHPDCL. The department will submit the load forecasting before the Hon'ble Commission by May, 2014. | Action taken is noted. As Petitioner has failed to submit any detailed justification for inordinate delay of submission of report as per its own commitments and has also failed to ensure compliance of directions issued by the Commission in previous tariff order, the Commission now directs the Petitioner to submit the final report before 31st July 2014 failing which the Commission will be constrained to take appropriate action under various provisions of Electricity Act 2003 and Regulations framed by JERC. |
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2015-16 | The DNHPDCL would like to submit to the Hon'ble Commission that the department is going to conduct the system study of the network of U.T Dadra and Nagar Haveli and is in the process of engaging PGCIL for the same. The department will submit the report to the Hon'ble Commission as soon as it is finalized. Further, an extract from the 18th Electric Power | The load forecast study for such a small distribution utility should not have taken so much time. DNHPDCL may study the 18th Power Survey Report for guidance but the study being carried out by DNHPDCL shall be an independent study. |

| | Survey of India conducted by CEA is being enclosed along with this Petition as Annexure II wherein the demand forecast of the UT of Dadra and Nagar Haveli has been done till the FY 2021-22. | |
|------------------|--|------------------------|
| Present Petition | The DNHPDCL would like to submit to the Hon'ble Commission that the summary of the report on load forecasting prepared by M/s Panacean Energy Solutions Pvt. Ltd., Mumbai is being submitted along with this petition as Annexure V | Action taken is noted. |

9.4.3. Forecasting Power Requirements

The Licensee is directed to improve the forecasting of the requirement of energy basically for the industry to help plan for Power Purchase at a reasonable cost, rather than spot purchase.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|---|-----------------------|--|
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2013-14 | submit that it has | The status and the progress of the load forecasting study should be submitted to the Commission by September 2013. |

(7-10)medium term years) and long term (15-25)years) improve the forecasting of the requirement of that energy SO procures energy at a reasonable rate. Further looking at the existing pending and power applications the department has invited competitive bids for procurement of 200 MW power on long term following basis, tendering process as per Standard Bidding Guidelines of Ministry of Power under Case - I route. The lowest bidder was finalized and the Petition for the approval of PPA in respect of procurement of 200 MW power on Long Term basis has been filed before Hon'ble Commission.

Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2014-15

like to submit to the Hon'ble Commission M/s that Panacean Energy Solutions Pvt. Ltd., Mumbai has been appointed for this task and the department will submit the report as

The DNHPDCL would As the Petitioner has failed to submit any specific deadline for submission of study report, the Commission feels that the Petitioner has failed to ensure compliance of direction issued by the Commission in the previous order. The Commission now directs the Petitioner to submit the load forecasting studying before 31st July 2014 failing which the

| | soon as it is finalized. | Commission will be constrained to take appropriate action under various provisions of Electricity Act 2003. |
|---|--|---|
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2015-16 | The DNHPDCL would like to submit to the Hon'ble Commission that the department is going to conduct the system study of the network of U.T. Dadar and Nagar Haveli and is in the process of engaging PGCIL for the same. The department will submit the report to the Commission as soon as it is finalized. Further, an extract from the 18th Electric Power Survey of India conducted by CEA is being enclosed along with this Petition as Annexure II wherein the demand forecast of the UT of Dadar and Nagar Haveli has been done till the FY 2021-22. | This is already covered by Directive 2 |
| Present Petition | The DNHPDCL would like to submit to the Hon'ble Commission that the summary of the report on load forecasting prepared by M/s Panacean Energy Solutions Pvt. Ltd., Mumbai is being submitted along with this petition as | Action taken is noted. |

Annexure V

9.4.4. Over drawal / Under drawal beyond the frequency band specified by CERC

As per the CERC (Unscheduled Interchange charges and related matters) Principle Regulations and its amendments thereof applicable for FY 2011-12 and Press Notification issued by Ministry of Power on 23rd July 2009 and after verification of the data submitted by the Petitioner, the Commission is mandated to disallow the additional UI charges of Rs. 5.21 Crores against the UI over-drawal /under drawal beyond 49.5 Hz frequency from April 2011 to March 2012, and they will not be a pass through in the aggregate revenue requirement of the Petitioner for FY 2011-

The penal rate which has been imposed as unscheduled interchange charges should be stated separately and very clearly and those payments which are in the nature of damages should not be shown as purchase of Power because it is on account of poor management of load by ED-DNH. The ED-DNH is directed to forecast their demand more precisely and plan the Power purchase in advance. The burden of additional UI charges would have to be borne by the Petitioner from their own finances and it will not be allowed to pass this on to the consumers. Therefore, the Commission directs the licensee to separately show the date wise/time wise details of all short-term Power purchases including quantum, rate & amount and grid frequency in case of U.I. over drawals/underdrawals.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|---|--|---|
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2013-14 | over drawals /under drawals are being | The Petitioner's Submission is noted; the Commission would like to reiterate that overdrawals / underdrawals beyond the frequency band specified by CERC attract penal charges and would not be allowed as a pass-through in the ARR. This puts undue burden on the grid and should be avoided by the licensee through proper load management and appropriate load forecasting. |
| Compliance/Action taken mentioned | | Submission is noted. The Commission would like to reiterate that over drawal |

| in ARR and Tariff Petition for FY 2014-15 | directive. | / under drawal beyond the frequency band specified by CERC attract penal charges and would not be allowed as a pass-through in the ARR. This puts undue burden on the grid and should be avoided by the licensee through proper load management and appropriate load forecasting. |
|---|--|---|
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2015-16 | like to submit to the Hon'ble Commission | The compliance of the directive is noted. The DNHPDCL shall ensure that it will not draw power from the system when the frequency is lower than the band fixed by the CERC. |

9.4.5. Assessment of open access consumers

The Petitioner is directed to provide an assessment of the number of open access consumers greater than 1 MW to the Commission by September 30' 2012. The Petitioner is to provide the detailed scheme to operationalize open access including setting up of the STU and SLDC (nodal agency) by the power department of the appropriate government.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|-------------------------------|----------------------------|---------------------------------------|
| | | The process of operationalization of |
| taken mentioned in | department has notified | open access in the licensee's area |
| ARR and Tariff | the procedure for | should be expedited and the |
| Petition for FY | according open access for | Commission should be updated about |
| 2013-14 | the long term and short | the progress of the same by September |
| | term open access. The list | 2013. |
| | of consumers 1 MW and | |

above has been evaluated and submitted the Hon'ble Commission. The matter for evaluation of wheeling charges, losses charges and cross subsidiary etc. for Open Access Customers under is progress in consultation with M/s Panacean Energy Solutions Pvt. Ltd, Mumbai. The U.T Dadra & Nagar Haveli already has notified State Transmission Utility has (STU) and established SLDC with a nodal officer i.e. Deputy Engineer (N/Z). The DNHPDCL would like As the Petitioner has failed to submit to submit to the Hon'ble any detailed justification for failure to Commission that the task ensure adequate compliance directions issued by the Commission of preparing the road map in for operationalization of previous tariff order, the open access consumers Commission now directs the Petitioner has been initiated. The to submit the roadmap before 31st July said road map will be 2014 failing which the Commission will submitted to the Hon'ble be constrained to take appropriate Commission shortly. action under various provisions of Electricity Act 2003. The The action taken is noted. As and when

Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2015-16

Compliance/Action

taken mentioned in

for

Tariff

FY

and

ARR

Petition

2014-15

DNHPDCL would like to submit to the Commission that the **DNHPDCL** has notified the procedure for according "Short-Term" and "Long-Term"

The action taken is noted. As and when any consumer opts for open access, the DNHPDCL shall report it to the Commission.

| | procedure. The Hon'ble Commission has also issued tariff for Open Access in the Tariff Order of FY 2014-15. | |
|------------------|---|---------------------|
| Present Petition | The list of consumers who have opted for Open Access is being enclosed along with this petition as Annexure VI . | Action taken noted. |

9.4.6. Public Grievance Meetings

The Commission, as earlier directed, reiterates the Petitioner to convene monthly public grievance meetings with the consumers to sort out issues related to the supply of power/electricity/connections by the Department. These meetings shall be held on monthly basis and monthly report in this regard be submitted to the Commission. The Commission insists that the department should sort out the stakeholder grievances in these meetings.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|----------------------------------|--|------------------------|
| Present Petition | The DNHPDCL has noted the directive of the Hon'ble Commission and shall comply accordingly. | Action taken is noted. |

9.4.7. Security Deposit

The Commission in its previous order had directed DNHPDCL to follow the provisions of Clause 6.10 of JERC (Electricity Supply Code) Regulations, 2010. Wherever existing mode of deposit i.e. bank guarantee, fixed deposit etc. is different from that provided in the Regulation, the same be replaced by those as specified therein. The Petitioner is directed to submit the present status versus Regulations requirement.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|---|-----------------------|---|
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2013-14 | | The submission is noted, adherence to the Regulations should be ensured by the Licensee before September 30' 2013. |
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2014-15 | Hon'ble Commission | The Commission had issued the second amendment to the JERC (Electricity Supply Code) Regulations 2010 on 10th October 2013, which is reiterated as below: Amendment of Regulation 6.10 (2) principal Regulation to be replaced as under: Consumer shall have the option to make advance payment and in such an event security amount shall be proportionately fixed. The procedure for the determination of security deposit, for different categories of consumers, shall be determined by the licensee and approved by the Commission. The deposit shall be |

Hon'ble Commission has allowed security in the form of Bank Guarantee and fixed deposit for LT. HT, EHT, and Micro, Small and Medium Entrepreneurs Consumers (MSME) for the existing and new connections of consumers the to respondent viz. ED-DNH. Accordingly, DNHPDCL has also stopped the conversion of security deposit in the form of Bank Guarantee to Demand Draft or Banker's Cheque.

accepted in the form of cash, cheque, draft or bank guarantee in case of LT Consumer's and in the form of draft, banker's cheque or bank guarantee in case of HT/EHT Consumers. The licensee shall maintain a separate head of accounts of such security deposit. On termination of the agreement, the security deposit will be refunded to the consumer after adjustment of the amount, if any, remaining payable to him.

As detailed above, the Commission has specified various modes of consumer security deposits. However it is evident from submission of the Petitioner that considerable amount of consumer security deposit exist in the form of fixed deposits which is not acknowledged form of the consumer security deposit as per the provision of the JERC (Electricity Supply Code) Regulations 2010. The Commission now directs the Petitioner to keep consumer security deposits in approved forms only and submit the compliance report before 30th June 2014 failing which the Commission will be constrained to take action under various appropriate provisions of Electricity Act 2003.

Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2015-16 The DNHPDCL would like to submit that as per the order of Commission the security deposit are being accepted in the form of Bank Guarantee, etc. and the record of Security Deposit is being

The Compliance is noted.

| maintained regularly. | |
|---------------------------|--|
| The date of validity of | |
| Security Deposit is also | |
| displayed on the | |
| monthly Electricity Bills | |
| issued to the Industrial | |
| Consumers. | |
| | |

9.4.8. Interest on Security Deposit

As per Clause 47(4) of the Electricity Act, 2003 and as specified in Regulation 25 of JERC Tariff Regulations 2009, the distribution licensees shall pay interest on security deposit collected from the consumers, equivalent to the bank rate or more, as may be specified by the Commission. On account of provisions mentioned in the Act and the Regulation, the Commission directs the Petitioner to pay the interest on consumer security deposit for FY 2012-13 at the Bank Rate (i.e. 9.5026% per annum applicable as on 1st April 2012) with effect from 1st April 2012 to the consumers irrespective of the Petitioner's constraints and should explicitly mention the same as the 'Interest on security deposit for FY 2012-13' on the bills of the consumers. Any non-compliance in this regard shall be viewed seriously by the Commission.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|---|--|--|
| Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2013-14 | directed consumers to replace the bank | has observed that the Petitioner has not paid any interest to the consumers on the security deposit held during FY 2011-12. Though the Commission appreciates the effort made by the |

Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2014-15

The DNHPDCL would like to submit to the Hon'ble Commission that as per the order issued by the Hon'ble Commission dated 13.08.2013 the on Petition seeking relaxation of Regulation 6.10 (2) of **IERC** (Electricity Supply Code) Regulations, 2010 to the extent of allowing payment of Security Deposit in the form of Bank Guarantee instead of Demand Draft or Banker's Cheque, the Hon'ble Commission has allowed security in the form of Bank Guarantee and fixed deposit for LT, HT, EHT and Micro, Small and Medium Entrepreneurs Consumers (MSME) for the existing and new connections. Accordingly. the DNHPDCL has also stopped the conversion of security deposit in the form of Bank Guarantee to Demand Draft or Banker's Cheque.

paid as per section 47(4) Electricity Act, 2003.

Action taken is noted. The Commission observed however the has that Petitioner has not paid any interest to the consumers on the security deposit held during FY 2012-13. The Commission would like to emphasize that fixed deposits as mode of consumer security deposit is different from those provided in the provisions of Sub Regulation no. 6.10 of JERC (Electricity Supply Code) Regulations, 2010, the same be replaced by those as specified therein, as per section 47(1) Electricity Act 2003 and pay interest as per section 47(4) Electricity Act, 2003.

| Compliance/Action | The DNHPDCL would Compliance is noted. |
|-------------------|--|
| taken mentioned | like to submit to the |
| in ARR and Tariff | Hon'ble Commission |
| Petition for FY | that generally bank |
| 2015-16 | guarantee and fixed |
| | deposit are taken as a |
| | security deposit as per |
| | the Hon'ble |
| | Commission's Order and |
| | interest on the security |
| | deposit is being paid to |
| | the consumer. |

9.4.9. Filing of separate Petitions for Transmission and Distribution Businesses:

As DNHPDCL now has been entrusted with Transmission Business, the Commission now directs the Electricity Department, Dadra and Nagar Haveli to file a separate Petition for transmission business before 30th November 2014 for FY 2015-16 onwards. As DNHPDCL now has been entrusted with Distribution Business, the Commission now directs the Dadra and Nagar Haveli Power Distribution Corporation Limited to file a separate Petition for distribution business before 30th November 2014 for FY 2015-16 onwards.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|-------------------------------|---|---------------------|
| taken mentioned | like to submit to the Hon'ble Commission | |

9.4.10. Maintaining separate accounts for Transmission and Distribution Businesses:

The Commission directs both ED-DNH and DNHPDCL to maintain separate accounting of its businesses w.e.f. 01st April 2013.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|-----------------------------------|---|----------------------|
| taken mentioned in ARR and Tariff | The DNHPDCL would like to submit to the Hon'ble Commission that it is maintaining separate accounting for its business w.e.f. 01st April, 2013. | Compliance is noted. |

9.4.11. Demand Side Management and Energy Conservation

Demand Side Management and Energy Conservation are very important areas, which should be in focus for DNHPDCL. DNHPDCL has not submitted any scheme in this regard. DNHPDCL is therefore directed to implement such schemes (e.g. LED bulbs, Peak Load Shaving, Demand Response etc.) at the earliest. The Petitioner is further directed to submit the time bound action plan for the above, by 31st May, 2015.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|----------------------------------|---|------------------------|
| Present Petition | The DNHDCL would like to submit to the Hon'ble Commission that it is implementing the Domestic Efficient Lighting Program (DELP) for LED bulbs in the Union territory | Action taken is noted. |
| | of Dadra & Nagar Haveli under Demand Side | |

Management program.

The major points covered under the program are as follows:-

- 1. EESL will provide 2 LED bulbs each to all Petitioners Domestic Consumers in the entire Licensee area.
- 2. LED will be given at an upfront cost of Rs. 10 each. The balance cost towards the actual price of the LED bulb will be recovered from the consumer's electricity bill over of 10 months period subject to maximum of Rs. 10 for each LED bulb every month.
- 3. The total annual savings of energy is around 5.77 million KWh which, at the average power purchase cost of Rs 3.66 per KWh, will lead to annual cost savings of Rs. 2.11 Crores.
- 4. The implementation of DELP in its entire area of operation would result into reduction in power procurement cost of Rs. 6.34 crores over a period of three years.

9.4.12. Strengthening of the Consumer Grievance Redressal System

The Commission directs the Petitioner to find a way to dispose all pending applications as per the provisions under Section 43 of the Electricity Act, and relevant JERC Regulations, other than the cases pending due to lack of documentary evidence of legal heirs after the death of original owner of the premises. The Commission also directs the Petitioner to follow strictly the Standards of Performance notified by the Commission and the status report on all new/shifting connection applications pending for more than 45 days, with the reason for their pendency be submitted to the Commission by 31st July, 2015. The Petitioner is directed to promote and give publicity to the functioning of the Consumer Grievance Redressal Forum (CGRF), so that consumers can approach CGRF for redressal of their grievances.

The Commission also directs the Petitioner to publicize the benefit to consumers, highlighting the steps and necessary documents required for redressal of complaints and to initiate action on the following:

- Complaints against fast meters/defective meters
- Application for shifting of electricity connection
- Application for new Connection
- Complaints regarding no-supply
- Any other complaints

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|----------------------------------|--|-----------------------|
| Present Petition | The DNHDCL would like to submit to the Hon'ble Commission that the CGRF is in place in the UT of Dadra and Nagar Haveli and is taking care of the consumer grievances. | Action taken is noted |

9.4.13. Business Plan for MYT Control Period

As elaborated in para 1.8 of this Tariff Order, the details in the Business Plan submitted by

the utility is insufficient. The supporting data such as, Scheme-wise cost benefit analysis, financing plan, loss reduction trajectory have not been adequately submitted. In view of the same the Commission is constrained to defer the implementation of Multi-Year Tariff and concomitant business plan. The Petitioner is therefore directed to submit the revised Business Plan for the period FY 2016-17 to FY 2018-19, along with requisite detail as provided in JERC (Multi Year Tariff) Regulations, 2014, latest by 31st July, 2015. No further extension will be given as the MYT Petition would be required to be prepared only after approval of the Business plan. The MYT Petition submission deadline remains 30th November.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|----------------------------------|--|------------------------|
| Present Petition | The Business Plan for the MYT Control Period FY 2016-17 to FY 2018-19 has been submitted to the Hon'ble Commission as per the given timelines. | Action taken is noted. |

9.4.14. True up for FY 2014-15

It is noted that the audited accounts for FY 2014-15 have not been submitted along with the MYT Business Plan Petition. It is directed that the finalization of the audited accounts for FY 2014-15 be expedited and the true-up for FY 2014-15 be submitted along with the MYT Petition for the Control Period FY 2016-17 to FY 2018-19.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|----------------------------------|---|------------------------|
| Present Petition | The True-up for the FY 2014-15 is being submitted along with the present petition. The audited accounts for FY 2014-15 are also being | Action taken is noted. |

9.4.15. Approval of capital investment schemes above Rs. 10 Crore

The Petitioner is directed to submit detailed scheme documents for all the ongoing and new schemes above Rs. 10 Crore along with the MYT Petition for approval of the Commission. The scheme document should include approval note of the competent authorities, cost benefit analysis and target dates of commencement and completion of the scheme along with year-wise capitalization schedule. The said scheme documents should be submitted alongside the MYT Petition for the Control Period FY 2016-17 to FY 2018-19 for consideration of the same in the MYT Order.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|----------------------------------|---|------------------------|
| Present Petition | The DNHPDCL has submitted all the documents related to the schemes above Rs. 10 Crore to the Hon'ble Commission along with the Business Plan for the MYT Control Period FY 2016-17 to FY 2018-19. | Action taken is noted. |

9.4.16. Renewable Purchase Obligation (RPO)

The Commission has taken note of the submission of the Petitioner regarding steps being taken to fulfill the RPO obligation and appreciates efforts being made to fulfill the RPO obligation. The Commission expects that the Petitioner would give priority to obtaining the physical solar and non-solar power. Further, actual compliance would be reviewed at the time of true-up of the respective years and all pending RPOs up-to FY 2014-15 (based on actual) must be accounted for while submitting the data for FY 2015-16. Supporting details such as purchase of RECs, bills from solar/non-solar plants for the respective years must be

duly submitted along with the MYT filing.

The Commission, directs, that all pending RPO obligations up-to FY 2015-16 must be fulfilled by 31st March 2016 and no backlog would be allowed to be carried forward to the Control Period FY 2016-17 to FY 2018-19.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|----------------------------------|---|---|
| Present Petition | The DNHPDCL has noted the directive of the Hon'ble Commission and shall comply accordingly. | Action taken is noted. Submit report by 30 th June 2016. |

9.4.17. MYT Petition for FY 2016-17 to FY 2018-19

It is directed that the MYT Petition for the Control Period FY 2016-17 to FY 2018-19 be filed before the Commission within 3 weeks of the issuance of this Business Plan Order. The Retail Tariff Proposal are to be submitted only for the first year of Control Period namely FY 2016-17 whereas ARR calculations are to be submitted for the full Control Period FY 2016-17 to FY 2018-19.

| Reference Order/ Petitions | Petitioner Submission | Commission Analysis |
|----------------------------------|--|------------------------|
| Present Petition | The DNHPDCL has noted the directive of the Hon'ble Commission and shall comply accordingly. | Action taken is noted. |

| Multi Year Tariff Orde |
|------------------------|
| Annexure 1: Pu |
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MYT Control Period (FY 2016-17 to FY 2018-19)

Annexure 1: Public Notices published by the Petitioner

| Multi | Year | Tariff | Order |
|-------|-------|----------|-------|
| Multi | I Cai | I al III | oruci |

MYT Control Period (FY 2016-17 to FY 2018-19)

Annexure 2: Public Notices published by the Commission for intimation of Public Hearing

Annexure 3: List of Objectors/Stakeholders

The following is the list of the stakeholders who have submitted objections/ suggestions:

| Sl. No. | Name of Stakeholder | Representation (in Writing) | Representation (In Person) |
|---------|--|-----------------------------|-------------------------------|
| 1. | Dr. Ratnakar B. Shelke | | |
| 2. | Silvassa Industries & Manufacturing Association (SIMA) | \checkmark | |
| 3. | Khatu Shyam Alloys Private Limited | | |
| 4. | Association of Polyster Continuous Polymerization Industries (APCPI) | $\sqrt{}$ | $\sqrt{}$ |
| 5. | Silvassa Industries Association | | |