

# **Jharkhand State Electricity Regulatory Commission**



**Order on  
True up for FY 2014-15  
and  
Annual Performance Review of FY 2015-16  
and  
Business Plan and ARR for Multi Year Tariff Period from  
FY 2016-17 to FY 2020-21  
and  
Tariff for FY 2016-17  
for  
Tata Steel Limited (TSL)**

**Ranchi**

**28<sup>th</sup> February, 2017**

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### List of Abbreviations

Abbreviation	Description
A&G	Administrative and General
ARR	Aggregate Revenue Requirement
ATE	Appellate Tribunal for Electricity
COD	Date of Commercial Operation
FY	Financial Year
GCV	Gross Calorific Value
GFA	Gross Fixed Assets
GoI	Government of India
JSERC	Jharkhand State Electricity Regulatory Commission
Kcal	Kilocalorie
Kg	Kilogram
kWh	Kilowatt-hour
MAT	Minimum Alternative Tax
ml	Millilitre
MT	Million Tonnes
MUs	Million Units
MW	Megawatt
O&M	Operations and Maintenance
PLF	Plant Load Factor
PPA	Power Purchase Agreement
RJC	Reprocessed Jig Coal
R&M	Repair and Maintenance
RoE	Return on Equity
Rs	Rupees
SBI	State Bank of India
SERC	State Electricity Regulatory Commission
SLM	Straight Line Method
TPCL	Tata Power Company Limited
TSL	Tata Steel Limited

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**Before**

**Jharkhand State Electricity Regulatory Commission,  
Ranchi**

**Case No.: 01 of 2016, 07 of 2016, 09 of 2016**

**In the matter of:**

**Petition for Truing up for FY 2014-15;**

**And**

**Annual Performance Review for FY 2015-16;**

**And**

**Business Plan for MYT Control Period FY 2016-17 to FY 2020-21;**

**And**

**MYT for Control Period FY 2016-17 to FY 2020-21 And Tariff Determination for  
FY 2016-17**

**In the matter:**

Tata Steel Limited, Sakchi Boulevard Road, Northern Town, Bistupur, Jamshedpur - 831 001  
..... Petitioner

**PRESENT**

**Hon'ble Mr Justice Narendra Nath Tiwari - Chairperson**

**Hon'ble Mr R. N Singh - Member (T)**

**Order dated 28<sup>th</sup> February, 2017**

In these Petitions, Tata Steel Limited (hereinafter referred to as TSL) has prayed for Order of True up for FY 2014-15, Annual Performance Review of FY 2015-16, Business Plan for MYT Control Period FY 2016-17 to FY 2020-21, Multi Year Tariff for Control Period FY 2016-17 to FY 2020-21 and Tariff for FY 2016-17

## **A1: INTRODUCTION**

### **Jharkhand State Electricity Regulatory Commission (JSERC)**

- 1.1 The Jharkhand State Electricity Regulatory Commission (herein after referred to as “JSERC” or “the Commission”) was established by the Government of Jharkhand under Section 17 of the Electricity Regulatory Commission Act, 1998 on August 22, 2002. The Commission became operational with effect from April 24, 2003. The Electricity Act, 2003 (hereinafter referred to as “the Act” or “EA, 2003”) came into force with effect from June 10, 2003; and the Commission is now deemed to have been constituted and functioning under the provisions of the Act.
- 1.2 The Government of Jharkhand vide its notification dated August 22, 2002 defined the functions of JSERC as per Section 22 of the Electricity Regulatory Commission Act, 1998 to be the following, namely:-
  - (a) to determine the tariff for electricity, wholesale, bulk, grid or retail, as the case may be, in the manner provided in Section 29;
  - (b) to determine the tariff payable for the use of the transmission facilities in the manner provided in Section 29;
  - (c) to regulate power purchase and procurement process of the transmission utilities and distribution utilities including the price at which the power shall be procured from the generating companies, generating stations or from other sources for transmission, sale, distribution and supply in the State;
  - (d) to promote competition, efficiency and economy in the activities of the electricity industry to achieve the objects and purposes of this Act.
- 1.3 With the Electricity Act, 2003 came into force, the earlier Electricity Regulatory Commission Act of 1998 stands repealed and the functions of SERCs are now defined as per Section 86 of the Act.
- 1.4 In accordance with the Section (1) of the Act, the JSERC discharges the following functions: -
  - (a) determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State;  
  
Provided that where open access has been permitted to a category of consumers under section 42, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;
  - (b) regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;



- (c) facilitate intra-state transmission and wheeling of electricity;
  - (d) issue licences to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State;
  - (e) promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee;
  - (f) adjudicate upon the disputes between the licensees and generating companies; and to refer any dispute for arbitration;
  - (g) levy fee for the purposes of this Act;
  - (h) specify State Grid Code consistent with the Grid Code specified under Clause (h) of subsection (1) of Section 79;
  - (i) specify or enforce standards with respect to quality, continuity and reliability of service by licensees;
  - (j) fix the trading margin in the intra-state trading of electricity, if considered, necessary;
  - (k) discharge such other functions as may be assigned to it under this Act.
- 1.5 The Commission advises the State Government on all or any of the following matters, namely:-
- (a) promotion of competition, efficiency and economy in activities of the electricity industry;
  - (b) promotion of investment in electricity industry;
  - (c) reorganisation and restructuring of electricity industry in the State;
  - (d) matters concerning generation, transmission, distribution and trading of electricity or any other matter referred to the State Commission by that Government.
- 1.6 The State Commission ensures transparency while exercising its powers and discharging its functions.
- 1.7 In discharge of its functions, the State Commission is guided by the National Tariff Policy as brought out by GoI in compliance to Section 3 of the Act. The objectives of the National Tariff Policy are to:
- (a) ensure availability of electricity to consumers at reasonable and competitive rates;
  - (b) ensure financial viability of the sector and attract investments;

- (c) promote transparency, consistency and predictability in regulatory approaches across jurisdictions and minimize perceptions of regulatory risks;
- (d) promote competition, efficiency in operations and improvement in quality of supply.

### **Tata Steel Limited (TSL)**

- 1.8 Tata Steel Limited (hereinafter referred to as ‘TSL’ or the ‘Petitioner’), formerly known as Tata Iron and Steel Company Limited (TISCO), is a company incorporated under the provisions of the Companies Act, 1956. It is distributing electricity in Jamshedpur under the license granted u/s 14 of the Electricity Act 2003.
- 1.9 The Petitioner has been distributing electricity in Jamshedpur township since 1923 through a sanction/license granted under section 28(1) of the erstwhile Indian Electricity Act, 1910. Post enactment of the EA, 2003, the Petitioner filed an application for a distribution license for Jamshedpur township on December 24, 2003 u/s 15 of the Act. In the absence of the final regulations and in view of the provisions of Section 14, proviso one and Section 172(b) of the Act, JSERC vide order dated March 24, 2004 permitted Tata Steel to continue operating under the provisions of the repealed Act till the time regulations regarding the same were notified by the Commission.
- 1.10 After notification of the JSERC (Terms and Conditions for Distribution Tariff) Regulation, 2004, action for issue of license for Jamshedpur town was initiated and subsequently the license was issued to Tata Steel Limited (TSL) on January 12, 2006 w.e.f. March 24, 2004.
- 1.11 The area of the Petitioner is bounded as under:
  - (a) **North:** River Subarnarekha
  - (b) **South:** Tracks of South Eastern Railways
  - (c) **East:** Eastern boundaries of Mouza Jojobera and Nildhand.
  - (d) **West:** River Kharkai

### **Scope of the Present Order**

- 1.12 In accordance with the provisions of the JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2010 (hereinafter referred to as 'Distribution Tariff Regulations, 2010') the Petitioner filed the Petition for truing up of ARR for FY 2014-15 and Review of the ARR for FY 2015-16. The Petitioner in the above-mentioned Petition filed before the Commission has prayed for:
- (a) Approval of the True-up of ARR for FY 2014-15;
  - (b) Approval of the revised estimates of ARR for FY 2015-16;
  - (c) Pass suitable orders to recover the cumulative revenue gap till FY 2015-16 along with carrying cost;
  - (d) Recovery of the approved gap/ (surplus) for FY 2014-15 and FY 2015-16 in the MYT & Tariff proposal filed subsequently.
- 1.13 Further, in accordance with the provisions of the JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2015 (hereinafter referred to as 'Distribution Tariff Regulations, 2015') the Petitioner filed the Petition for approval of Business Plan for the 2<sup>nd</sup> MYT Control Period FY 2016-17 to FY 2020-21 and determination of ARR for Multi Year Tariff Period FY 2016-17 to FY 2020-21 and Tariff for FY 2016-17.
- 1.14 While processing the above petitions, the Commission is guided by the following:
- (a) Provisions of the Electricity Act, 2003;
  - (b) Provisions of the National Electricity Policy, 2005;
  - (c) Provisions of the National Tariff Policy, 2016;
  - (d) Principles laid down in the Distribution Tariff Regulations, 2010
  - (e) Principles laid down in the Distribution Tariff Regulations, 2015
- 1.15 Accordingly, the Commission has scrutinized the Petitions in detail and hereby issues the Tariff Order for True Up for FY 2014-15, Annual Performance Review for FY 2015-16, Business Plan for MYT Control Period FY 2016-17 to FY 2020-21, ARR for Multi Year Tariff Period FY 2016-17 to FY 2020-21 and Tariff for FY 2016-17.

## **A2: PROCEDURAL HISTORY**

### **Background**

- 2.1 The Commission had issued the MYT Order for the Petitioner on 4<sup>th</sup> June, 2014 for True-up for FY 2011-12 and FY 2012-13, determination of ARR for MYT period FY 2013-14 to FY 2015-16 and tariff for FY 2013-14.
- 2.2 The Petitioner filed review petition against the MYT Order dated 4<sup>th</sup> June, 2014 for relief under the provisions of Section 94 (1) (f) of the Electricity Act 2003 and Regulation 36 (1) of the Jharkhand State Electricity Regulatory Commission (Conduct of Business) Regulations, 2011 on 1st July 2014. The Commission decided the matter under the review petition in its Order dated 31<sup>st</sup> March, 2015, which will be considered as part of the MYT Order for Tata Steel Limited dated 4<sup>th</sup> June, 2014.
- 2.3 Subsequently, the Petitioner filed the tariff petition for True-up for FY 2013-14, Annual Performance Review for FY 2014-15 and Revised ARR & Tariff Proposal for FY 2015-16 on November 10, 2014. The Commission issued the Tariff Order for approval of truing up of FY 2013-14, Annual Performance Review for FY 2014-15 and Revised ARR & Tariff Proposal for FY 2015-16 on 31<sup>st</sup> May, 2015.
- 2.4 The Petitioner has now filed the tariff petitions for True-Up for FY 2014-15 and Annual Performance Review for FY 2015-16 on 1<sup>st</sup> January, 2016.
- 2.5 Further, as per the provisions of the 'Distribution Tariff Regulations, 2015', the distribution licensees have to file the Business Plan for wheeling and retail supply business of the licensee for the entire Control Period by the 31<sup>st</sup> of October, 2015. In accordance with the Regulation 5.8 of the Distribution Tariff Regulations 2015, the Business Plan shall be for the entire Control Period and shall inter-alia contain:
  - a) Capital Investment Plan for the entire Control Period commensurate with load growth, distribution loss reduction trajectory and quality improvement measures proposed in the Business Plan;
  - b) Sales/Demand Forecast for each customer category and sub-categories for each year of the Control Period;
  - c) Power Procurement Plan based on the sales forecast and distribution loss trajectory for each year of the Control Period. The power procurement plan should also include energy efficiency and demand side management measures;
  - d) A set of targets proposed for other controllable items such as distribution losses, collection efficiency, working capital requirement, quality of supply targets, etc. The targets shall be consistent with the capital investment plan proposed by the Licensee;
  - e) Business Plan shall also contain the requisite information for the preceding five years.

- 2.6 Subsequently, the distribution licensee has to file the MYT Petition for the Control Period FY 2016-17 to FY 2020-21 by the 30<sup>th</sup> of November, 2015.
- 2.7 The Petitioner filed the Petition for approval of Business Plan for MYT Control Period from FY 2016-17 to FY 2020-21 on 12<sup>th</sup> July, 2016 and the petition for determination of ARR for Multi Year Tariff Period from FY 2016-17 to FY 2020-21 and Tariff Determination for FY 2016-17 on 28<sup>th</sup> July, 2016.

### Information Gaps

- 2.8 During the course of scrutiny of the Petitions, numerous deficiencies were observed in the Petition submitted by the Petitioner. These deficiencies were communicated to the Petitioner vide letter no. JSERC/Case (Tariff) No 1 of 2016/862 dated 2<sup>nd</sup> February 2016, JSERC/Case (Tariff) No 1 of 2016/267 dated 29<sup>th</sup> July 2016, JSERC/Case (Tariff) No 07 & 09 of 2016/339 dated 19<sup>th</sup> August 2016 and JSERC/Case (Tariff) No 01 & 07 & 09 of 2016/608 dated 27<sup>th</sup> December 2016.
- 2.9 The Petitioner submitted its response to the aforesaid letters and provided the requisite additional data/information vide letter no. PBD/96/59-T/2016 dated 16<sup>th</sup> March 2016, PBD/680/59-T/2016 dated 7<sup>th</sup> September 2016, PBD/750/59-T/2016 dated 27<sup>th</sup> September 2016, PBD/64/59-T/2016 dated 23<sup>rd</sup> January 2017 and PBD/124/59-T/2017 dated 13<sup>th</sup> February 2017.

### Inviting Public Response

- 2.10 After the initial scrutiny of Tariff petition filed by the Petitioner, the Commission in order to afford proper opportunity of hearing, the representation of all stakeholders and general public, directed the Petitioner to issue public notice inviting comments/ suggestions and to make available copies of the Petitions to the general public. The public notice, thereafter, was issued by the Petitioner in various newspapers, as mentioned hereunder:

**Table 1: List of newspapers and dates on which the public notice appeared**

Newspaper (Jamshedpur Editions)	Date
Phrabhat Khabar	26 <sup>th</sup> & 27 <sup>th</sup> November 2016
Dainik Bhaskar	26 <sup>th</sup> & 27 <sup>th</sup> November 2016
The Telegraph	26 <sup>th</sup> & 27 <sup>th</sup> November 2016
The Poiner	26 <sup>th</sup> & 27 <sup>th</sup> November 2016

- 2.11 The last date for submitting the comments/ suggestions was 20<sup>th</sup> December, 2016. The Commission subsequently issued advertisement on its website [www.jserc.org](http://www.jserc.org) and in various newspapers for conducting the public hearing on the Petition for Truing up of FY 2014-15, APR for FY 2015-16 along with Business plan and ARR for the Multi Year Tariff Period FY 2016-17 to FY 2020-21 and Tariff determination for FY 2016-17. The newspapers wherein the advertisement for public hearing was issued by the Commission are named hereunder:

**Table 2: List of newspapers and dates in which the public notice by JSERC appeared**

Newspaper (Jamshedpur Editions)	Date
Hindustan	21.1.2017
Prabhat Khabar	21.01.2017
Naya India	21.01.2017
Dainik Bhaskar	22.01.2017
Uditvani	22.01.2017
The Hindustan Times	22.01.2017

- 2.12 The public hearing was held on 29<sup>th</sup> January, 2017, at Main Hall, Tube Makers Club, Namdih Road, Nildih, Jamshedpur. Many persons drawn from different walks of life participated in hearing and gave their comments and suggestions on the Petition filed by the Petitioner. The comments/suggestions of the public as well as the Petitioner's response and comments thereto are detailed hereafter in the section on the Public Consultation Process in this Order.

### A3: SUMMARY OF ARR & TARIFF PETITION

- 3.1 Tata Steel Limited (TSL) is an integrated steel manufacturing company which is also managing the electricity distribution system in its licensed area, through its wholly owned subsidiary- Jamshedpur Utilities and Service Company Limited (JUSCO).
- 3.2 The Petitioner in the present petitions has requested for :
- (a) Truing up of costs and revenue for FY 2014-15 on basis of audited annual accounts for FY 2014-15;
  - (b) Annual Performance Review of ARR for FY 2015-16 based on revised estimates;
  - (c) Approval of Business Plan for the 2<sup>nd</sup> MYT Control Period FY 2016-17 to FY 2020-21
  - (d) Approval of ARR for the 2<sup>nd</sup> MYT Control Period FY 2016-17 to FY 2020-21 and Tariff for FY 2016-17
- 3.3 A summary of the Petitions as submitted by the Petitioner has been summarized in the following sub-sections.

#### Energy Sales, Losses and Energy Balance

- 3.4 The consumer wise category energy sales proposed by the Petitioner have been summarized below:

**Table 3 Category-wise Energy Sales submitted by the Petitioner (MU)**

Energy Sales (MU)	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
	(True Up)	(APR)	(Projected)	(Projected)	(Projected)	(Projected)	(Projected)
Domestic	188.04	222	232.09	244.38	255.99	266.76	276.53
Domestic –DS HT	89.15	108	111.65	115.49	119.33	123.17	127.01
Commercial	59.26	73	73.82	75.08	76.37	77.69	79.02
High Tension -I	27.54	33	35.25	37.22	39.20	41.17	43.14
High Tension –II	128.06	153	156.48	159.61	168.00	171.37	174.79
High Tension -III	1,744.06	1,820	1,864.30	1,920.23	2,014.32	2,074.75	2,136.99
High Tension –IV	137.08	92	120.00	120.00	120.00	120.00	120.00
Utilities / Street Light	94.12	85	90.00	89.00	89.00	88.00	88.00
Sales to other licensee	284.93	362	324.28	306.52	300.44	284.47	284.47
Temporary supply	4.55	1	2.00	2.00	2.00	2.00	2.00
<b>Total</b>	<b>2,757</b>	<b>2,950</b>	<b>3,010</b>	<b>3,070</b>	<b>3,185</b>	<b>3,249</b>	<b>3,332</b>

- 3.5 The distribution losses and energy balance for TSL for FY 2014-15 (Actual), FY 2015-16 (Revised Estimates), and projections for MYT Period from FY 2016-17 to FY 2020-21 have been summarized below in the following table:

**Table 4 Energy Balance submitted by the Petitioner (MU)**

S. No.	Particulars	FY 2014-15 (True Up)	FY 2015-16 (APR)	FY 2016-17 (Projected)	FY 2017-18 (Projected)	FY 2018-19 (Projected)	FY 2019-20 (Projected)	FY 2020-21 (Projected)
1.	Energy Requirement							
	Sales to Other Licensees (MU)	284.93	362.43	324.28	306.52	300.44	284.47	284.47
	Distribution Losses on Sales to other Licensees (%)	-	-					
	Unit Lost on Sales to other Licensee	-	-					
	Energy Req for Sales to other Licensees	284.93	362.43	324.28	306.52	300.44	284.47	284.47
	Sales to Steel Works	137.08	91.75	120.00	120.00	120.00	120.00	120.00
	Distribution Losses on Steel Works (%)	-	-	-	-	-	-	-
	Unit Lost on Sales to Steel	-	-	-	-	-	-	-
	Energy Req for Steel Works	137.08	91.75	120.00	120.00	120.00	120.00	120.00
	Sales to LT Consumers ( Dom + Comm + Steel Light + Temp)	345.97	381.34	397.91	410.47	423.36	434.44	445.55
	Sales to HT Consumers (Other than HT IV) ( DSHT + HT I + HT II + HT III)	1,988.81	2,114.48	2,167.68	2,232.55	2,340.85	2,410.45	2,481.94
	Total Sales to Consumers other than HT IV and JUSCO	<b>2,334.78</b>	<b>2,495.82</b>	<b>2,565.59</b>	<b>2,643.02</b>	<b>2,764.22</b>	<b>2,844.90</b>	<b>2,927.48</b>
	Distribution Losses on Sales to Consumers other than HT IV and JUSCO (%)	4.09%	5.82%	4.66%	4.62%	4.58%	4.54%	4.53%
	Unit Lost on Sales to Consumers other than HT IV	99.54	154.34	125.41	127.90	132.69	135.39	138.83
	Energy Req for Sales to Consumers other than HT IV and JUSCO	<b>2,434.32</b>	<b>2,650.16</b>	<b>2,691.00</b>	<b>2,770.91</b>	<b>2,896.91</b>	<b>2,980.29</b>	<b>3,066.32</b>
	Total Energy Sales (MU)	<b>2,756.79</b>	<b>2,950.00</b>	<b>3,009.87</b>	<b>3,069.54</b>	<b>3,184.66</b>	<b>3,249.37</b>	<b>3,331.96</b>
	Overall Distribution Losses (%)	3.48%	5.00%	4.00%	4.00%	4.00%	4.00%	4.00%



S. No.	Particulars	FY 2014-15 (True Up)	FY 2015-16 (APR)	FY 2016-17 (Project ed)	FY 2017-18 (Project ed)	FY 2018-19 (Project ed)	FY 2019-20 (Project ed)	FY 2020-21 (Project ed)
2.	Overall Distribution Losses (MU)	99.54	154.34	125.41	127.90	132.69	135.39	138.83
	Total Energy Requirement	2,856.33	3,104.34	3135.28	3197.43	3317.35	3384.76	3470.79
	Energy Availability							
	- From Tata Power Company Ltd.	1,538.83	1534.30	1,545.00	1,548.82	1,567.54	1,576.00	1,585.00
	Unit –II	756.54	784.30	760.00	786.54	766.54	785.00	790.00
	Unit –III	782.28	750.00	785.00	762.28	801.00	791.00	795.00
	- From DVC at 132 kV	263.56	285.00	285.00	293.56	293.56	293.56	294.00
	- From DVC at 400 kV	1,034.28	1,250.00	1,281.28	1,331.05	1,432.25	1,491.20	1,567.79
	- From TSW Captive	18.76	35.04	20.00	20.00	20.00	20.00	20.00
	- RPO	-	-					
	- From Open access / other	0.91	-	4.00	4.00	4.00	4.00	4.00
	Total Pooled Energy Availability	2,856.33	3,104.34	3135.28	3197.43	3317.35	3384.76	3470.79

### Capital Investment and Capitalization

- 3.6 The details of scheme wise capital expenditure and capitalization submitted by the Petitioner for FY 2014-15 and FY 2015-16 is as detailed below

**Table 5 Scheme Wise Capital Expenditure Plan for FY 2014-15 and FY 2015-16 (Cr)**

Summary of Capital Expenditure	FY 2014-15	FY 2015-16
Scheme Title	(True Up)	(APR) (H1)*
Installation of SCADA for power distribution in Township – Jamshedpur	4.08	0.13
Installation of Fire Fighting System for 132kV, 2x56 MVA Bara Substation and 132kV, 1x56 MVA Sonari Substation.	0.33	0.37
Strengthening of Testing and Maintenance Facility for power distribution equipment	0.11	-
Installation of 2nd, 45/56 MVA Power Transformer at	5.24	1.30
Other Assets through contribution from consumers (	1.78	2.07
<b>Sub-Total</b>	<b>11.54</b>	<b>3.86</b>
400 KV Substation Cost	-	-
400 KV Switchyard including LA	3.19	0.03
132 KV Substation Cost	-	-
132 KV GIS Board	-	-

Summary of Capital Expenditure	FY 2014-15	FY 2015-16
Scheme Title	(True Up)	(APR) (H1)*
2x315 MVA Transformers	0.20	-
Sub Total	3.39	0.03
Total	14.93	3.89

*\*This is the amount of capital expenditure incurred in H1 of FY 2015-16. The Petitioner has projected to undertake total capital expenditure of Rs 10.89 Cr in FY 2015-16.*

**Table 6 Scheme Wise Capitalization Plan for FY 2014-15 and FY 2015-16 (Cr)**

Scheme Title	FY 2014-15	FY 2015-16
	(True Up)	(APR) (H1)*
Installation of SCADA for power distribution in Township – Jamshedpur	7.13	0.16
Installation of Fire Fighting System for 132kV, 2x56 MVA Bara Substation and 132kV, 1x56 MVA Sonari Substation.	-	0.81
Strengthening of Testing and Maintenance Facility for power distribution equipment	0.68	-
Installation of 2nd, 45/56 MVA Power Transformer at Sonari 132kV Substation with 132kV bay	-	-
Other Assets through contribution from consumers ( Self Financing Scheme)	6.38	0.77
Sub-Total	14.19	1.74
400 KV Substation Cost	-	-
400 KV Switchyard including LA	3.19	0.03
132 KV Substation Cost	-	-
132 KV GIS Board	-	-
2x315 MVA Transformers	0.20	-
Sub Total	3.39	0.03
Total	17.58	1.77

*\*This is the amount of capitalization for H1 of FY 2015-16. The Petitioner has projected a total capitalization of Rs 11.77 Cr in FY 2015-16.*

- 3.7 The Petitioner also submitted detailed capital expenditure and capitalisation plan in the Business Plan Petition for the MYT Control Period FY 2016-17 to FY 2020-21, which shall form the basis for future projections of ARR. The following tables summarizes the scheme-wise details of proposed capital expenditure and capitalization for the MYT Control Period:

**Table 7 Scheme Wise Capital Expenditure Plan for MYT Control Period (Cr)**

Summary of Capital Expenditure	Total Project Cost	FY 2016-17 (Projected)	FY 2017-18 (Projected)	FY 2018-19 (Projected)	FY 2019-20 (Projected)	FY 2020-21 (Projected)
Scheme Title						
Articulated boom lifter for safe working at height in 400 kV Bulk Power receiving substation.	1.00	1.00				
Infrastructure development at BPRS for 33 KV Power Supply & Enhancement of Telco Area Substation	58			10.00	30.00	18.00
Upgradation of Tinplate Area Substation	17.50				2.00	2.50
Alternate power supply arrangement for 132 kV Line 6 for Bara / Sonari Substation	20.00			5.00	5.00	10.00
33 KV Substation at northern town	24.17	19.07	2.00			
6.6 kV Network Extension for power supply in fringe areas	8.00	1.00	1.00	2.00	2.00	2.00
Strengthening of Testing facilities	2.00			1.00	1.00	
Other assets to provide consumer connection from consumers (self-financing scheme)	10.00	2.00	2.00	2.00	2.00	2.00
<b>Total</b>	<b>140.67</b>	<b>23.07</b>	<b>5.00</b>	<b>20.00</b>	<b>42.00</b>	<b>34.50</b>

**Table 8 Scheme Wise Capitalization for MYT Control Period (Cr)**

Summary of Capital Expenditure	Total Capitalization	FY 2016-17 (Projected)	FY 2017-18 (Projected)	FY 2018-19 (Projected)	FY 2019-20 (Projected)	FY 2020-21 (Projected)
Scheme Title						
Articulated boom lifter for safe working at height in 400 kV Bulk Power receiving substation.	1.00	1.00				
Infrastructure development at BPRS for 33 KV Power Supply & Enhancement of Telco Area Substation	58.00			5.00	20.00	33.00
Upgradation of Tinplate Area Substation	4.50				1.00	3.50

Summary of Capital Expenditure	Total Capitalization	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Scheme Title		(Projected)	(Projected)	(Projected)	(Projected)	(Projected)
Alternate power supply arrangement for 132 kV Line 6 for Bara / Sonari Substation	20.00			5.00	5.00	10.00
33 KV Substation at northern town	24.17		24.17			
6.6 kV Network Extension for power supply in fringe areas	8.00	1.00	1.00	2.00	2.00	2.00
Other assets to provide consumer connection from consumers (self-financing scheme)	10	2.00	2.00	2.00	2.00	2.00
Strengthening of Testing facilities	2.00			1.00	1.00	
<b>Total</b>	<b>127.67</b>	<b>4.00</b>	<b>27.17</b>	<b>15.00</b>	<b>31.00</b>	<b>50.50</b>

### Annual Revenue Requirements

3.8 The True-Up for FY 2014-15, Revised estimates for FY 2015-16 and ARR for FY 2016-17 till FY 2020-21 has been summarized below:

**Table 9: Proposed ARR for FY 2014-15, FY 2015-16 and MYT Control Period FY 2016-17 to FY 2020-21 (Cr)**

Annual Revenue Requirement (Rs Cr.)	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
	(True Up)	(APR)	(Projected)	(Projected)	(Projected)	(Projected)	(Projected)
Power Purchase Cost	1,228.32	1,335.56	1,421.17	1,532.18	1,682.23	1,818.99	1,952.94
Operation & Maintenance Expenses	62.17	107.43	75.20	77.75	86.46	90.21	94.88
Depreciation	29.05	29.35	30.35	30.85	32.29	33.38	35.58
Interest on Loan	27.11	23.74	15.67	13.29	11.23	9.18	8.35
Return on Equity	21.56	21.98	22.51	23.14	24.03	25.00	26.80
Interest on Working Capital	12.30	20.02	19.64	19.50	21.32	22.81	24.40
Interest on Security Deposit	1.17	1.32	1.49	1.60	1.71	1.83	1.93
CGRF Expenses	-	-	0.30	0.30	0.30	0.30	0.30
DSM Expenses	-	-	0.30	0.50	0.50	0.50	0.50
<b>Gross ARR</b>	<b>1381.68</b>	<b>1539.40</b>	<b>1,586.63</b>	<b>1,699.11</b>	<b>1,860.07</b>	<b>2,002.19</b>	<b>2,145.68</b>
<b>Less: Non-tariff Income</b>	<b>5.86</b>	<b>5.86</b>	<b>5.00</b>	<b>5.00</b>	<b>5.00</b>	<b>5.00</b>	<b>5.00</b>

Annual Revenue Requirement (Rs Cr.)	FY 2014-15 (True Up)	FY 2015-16 (APR)	FY 2016-17 (Projected)	FY 2017-18 (Projected)	FY 2018-19 (Projected)	FY 2019-20 (Projected)	FY 2020-21 (Projected)
Add: Income Tax on RoE	11.11	11.32	22.80	11.91	12.37	12.87	13.80
Add: Sharing on Gains – O&M Expenses	25.36						
Add: Sharing of Gains: Distribution Loss	17.71						
Add: Income Tax on Incentives	22.18	-	45.82				
Net ARR for the Control Period	<b>1452.18</b>	<b>1544.86</b>	<b>1,650.25</b>	<b>1,706.02</b>	<b>1,867.44</b>	<b>2,010.07</b>	<b>2,154.48</b>
Revenue from Sale of Power @ Existing Tariff	1133.77	1,486.54					
Opening Revenue Gap	708.82	1155.26					
Revenue Gap / (Surplus) created during the year	318.41	58.33					
Closing Gap at the end of the year	1027.23	1213.60					
Rate of Interest (as per prevailing SBI Base Rate)	14.75%	14.75%					
Carrying Cost on Opening Balance	104.55	170.40					
Carrying Cost on Additional Gap	23.48	4.30					
Total Carrying Cost	128.03	174.70					
Total Gap incl. carrying cost	1155.26	1388.30*					
Energy Sales (in MU)	2756.79	2950.00	3,009.87	3,069.54	3,184.66	3,249.37	3,331.96
Average Cost of Supply	<b>5.27</b>	<b>5.23</b>	<b>5.48</b>	<b>5.56</b>	<b>5.86</b>	<b>6.19</b>	<b>6.47</b>

### Proposed Tariff for FY 2016-17

- 3.9 TSL has proposed an average tariff hike of around 40% which would reduce the revenue gap to Rs.1,338.97 Cr at the end of FY 2016-17.
- 3.10 The consumer category-wise tariff proposal by TSL for FY 2016-17 has been summarized in following table.

**Table 10 Tariff Proposed by the Petitioner for FY 2016-17**

Consumer Category	Fixed Charges (Rs)			Energy Charges (Rs/kWh)		
	Slab	Existing	Proposed	Slab	Existing	Proposed
<i>Domestic</i>						
<i>Domestic DS-I</i>	220 V single phase upto 5 kW	12 Rs/Month	25 Rs/Month	0-100	2.10	3.00
<i>Domestic DS-II</i>				101-200*	3.50	5.00
<i>Domestic DS-III</i>	415 V three phase upto 5 kW	24 Rs/Month	50 Rs/Month	Above 200**	3.90	5.50
<i>Bulk Domestic Supply LT</i>		-	100 Rs/ Consumer / Month	-	-	5.00
<i>Domestic DS HT</i>		375 Rs/ Consumer/M onth	100 Rs /KVA/ Month	-	4.25	4.60
<i>Commercial</i>	220 V single phase upto 5 kW	40 Rs/ Consumer/M onth	60 Rs /kW/Month	220 V single phase upto 5 kW	5.85	8.50
	415 V three phase upto 5 kW	100 Rs/ Consumer/M onth	100 Rs /kW/Month	415 V three phase upto 5 kW		
<i>High Tension -I</i>		270 Rs/kVA/ Month	425 Rs/kVA/ Month	-	5.25	7.40
<i>High Tension -II</i>	-	270 Rs/kVA/ Month	425 Rs/kVA/ Month	-	5.20	7.35
<i>High Tension -III</i>	-	265 Rs/kVA/ Month	415 Rs/kVA/ Month	-	5.15	7.30
<i>High Tension -IV</i>	-	265 Rs/kVA/ Month	415 Rs/kVA/ Month	-	5.15	7.30
<i>Utilities / Street Light</i>	-	30 Rs/Month	100 Rs/Month	-	4.10	5.50
<i>Sales to other licensee</i>	-	-	-	-		<i>*Weighted Average Rate of Power Purchase Cost of Petitioner</i>

Consumer Category	Fixed Charges (Rs)			Energy Charges (Rs/kWh)		
	Slab	Existing	Proposed	Slab	Existing	Proposed
<i>Temporary supply LT</i>	-	40 Rs/Month	100 Rs/Month	-	6.60	9.00
<i>Temporary supply HT</i>	-	-	425 Rs/kVA/ Month	-	-	7.50

*\*Existing slab is 101-400 units, \*\* Existing slab is Above 400 Units*

#### **A4: PUBLIC CONSULTATION PROCESS**

- 4.1 The tariff petition evoked response from several consumers. A public hearing was held on January 29, 2017, in Jamshedpur, to ensure the maximum public participation wherein the Petitioner presented a summary of the Petition, filed by it, before the Commission as well as the public.
- 4.2 The members of the public put forth their comments and suggestions before the Commission in the presence of the Petitioner. Seventy Six attendees took part in the public hearing process. The list of the attendees is attached in **Annexure 1**. The Commission also received written suggestions/ comments by the public on the tariff petition filed by the Petitioner.
- 4.3 During the course of public hearing, the Commission allowed persons/ representatives of entities, who had not submitted prior written representations but attended the public hearing, to express their views regarding the petition filed by the Petitioner.
- 4.4 The issues raised in the written submissions, by the participants in the hearing and the reply of the Petitioner have been summarized herein below.

#### **Tariff Proposal**

##### *Public Comments/Suggestions*

- 4.5 Raising objection against the tariff proposal, it was pointed out that the Petitioner has proposed a steep hike in tariff of about 40%. The Objector submitted that the proposed reduction in the size of the most common slab from 101-400 units to 101-200 units shall have a devastating impact on the consumers. The Objector further submitted that a domestic consumer having a monthly consumption of 300 units will need to pay 58% more as compared to what is being paid as per the prevailing tariff.
- 4.6 Also, the proposal of the Petitioner to vary the fixed charge with respect to sanctioned load instead of keeping it fixed per month will have a devastating effect on DSHT/ Commercial Consumers. The objector stated that the Commercial consumers are paying at par with HT Consumers even though they consume negligible load of the Petitioner. The Objector requested the Commission to restructure the tariff structure keeping in mind the average consumption of consumers.
- 4.7 One of the Objectors also requested the Commission to thoroughly scrutinize the tariff for Bulk Domestic LT Category since many of the expenses of the licensee in case of society complexes such as maintenance of the electricity system inside the society complex, distribution loss expenses, payment collection are borne by the society and not the licensee.

##### *Petitioners' Response*

- 4.8 The Petitioner submitted that in the Tariff Order dated May 2015, the Commission had restricted the hike to 18.06% in the interest of the consumers even though the existing revenue gap was 65% of annual revenue. Further, in light of the APTEL judgement the revenue gap has been re-determined and has reached to a level of 87% of annual billing revenue as on March 2016. Hence, in order to liquidate this revenue gap in a timely manner, the Petitioner has proposed a hike of 40%.



- 4.9 With respect to the tariff for Bulk Domestic LT Category, the Petitioner submitted that the DSHT category is applicable to consumers having a contract demand of 100 KVA & above while the proposed Bulk DS LT is applicable for housing colonies which require power supply below 100 KVA. Since, these consumers are currently being treated as an individual retail LT consumer, separate tariff structure has been proposed.

*Views of the Commission*

- 4.10 The Commission has thoroughly dealt with this issue in Section A13: of this Order.

**Return on Equity**

*Public Comments/Suggestions*

- 4.11 The Objectors pointed out that the petitioner has claimed Rs 11.11 Crores as Income Tax on ROE and Rs 22.18 Crores as Income Tax on gains. The Objector stated that no income tax should be allowed to the Petitioner since it has incurred losses for the year, as per its audited accounts.
- 4.12 The Objector also pointed out that the Petitioner has claimed Rs.20.74 Crores as past period Income tax on ROE. The Hon'ble APTEL has not considered passing an order after arguments by the petitioner in APTEL (Case No. 203 of 2014).
- 4.13 The Objector submitted that the petitioner has claimed Income tax on ROE for FY 2010-11 to FY 2015-16 amounting to 33.86 crores in ARR of FY 2015-16 quoting the judgement of APTEL in the Appeal no 203 of 2014. The Objector mentions that the Petitioner cannot claim rather could only request the Commission to approve the same according to the judgement of APTEL.
- 4.14 The Objector also stated that the Commission has taken a firm stand in the matter of Income tax claim which is allowing income tax if there is a liability of income tax payment and whether the licensee has actually paid or made provisions of income tax in its accounts. Hence, the Objector requested that the Petitioner should be directed to furnish a certificate from its statutory auditors regarding the tax liability of the Power Business Division (PBD) after considering the past losses.

*Petitioners' Response*

- 4.15 The Petitioner submitted that the True up petition has been submitted in December 2015 and the matter was pending before the Hon'ble APTEL at the time of filing. The Hon'ble APTEL has made its judgement subsequently on 19th February, 2016. The Petitioner further requested the Commission to pass suitable Orders in this regard.
- 4.16 The Petitioner further submitted that they have revised the earlier submissions made considering Income Tax on ROE for past periods in the MYT Petition dated 25.7.2016 and the same is reflected in the section 2.1 of the TSL MYT Petition dated 25.7.2016.

- 4.17 The Petitioner submitted that as per APTEL Judgement dated 19.02.2016, licensee can urge to allow income tax, in the future year, in the year of payment of income tax by the licensee. The Licensee has made profits during FY 2015-16 and thus became liable to pay taxes for previous years also. Hence, the Petitioner has requested the Hon'ble commission to consider income tax on ROE to the extent of profit before tax of FY 2015-16 or total ROE amount from FY 2010-11 to FY 2015-16 whichever is lower.

#### *Views of the Commission*

- 4.18 With respect to income tax claim of Rs 11.11 Cr and Rs 22.18 on ROE and Gains respectively, the Commission has not allowed any income tax savings since the Power Business Division of the Petitioner has reported a negative Profit before tax (PBT) for FY 2014-15, therefore, the Commission is of the view that income tax paid for other business of the Petitioner cannot be allocated to the licensed business.
- 4.19 With respect to claim of Income Tax on past periods in the ARR for FY 2015-16, the Commission is of the view that currently there is no income tax chargeable to the power business division of the Petitioner and hence, has disallowed grossing up of estimated PBT for FY 2015-16 by the income tax rate. However, the Commission shall again deal with this matter in the true up based on audited accounts for FY 2015-16.

#### **Sharing of Incentives**

##### *Public Comments/Suggestions*

- 4.20 The Objector pointed out that the petitioner has claimed sharing of incentives under many counts and requested the Hon'ble Commission to check the applicability of JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2015.

#### *Petitioners' Response*

- 4.21 The Petitioner submitted that all the claims have been made on prevailing regulations and have also been upheld by the Hon'ble APTEL.

#### *Views of the Commission*

- 4.22 The Commission has scrutinized the claims made by the Petitioner on account of sharing of gains and has accordingly dealt with it in Para 5.74 5.68 and Para 9.8 of the Tariff Order.

#### **Power Purchase Cost**

##### *Public Comments/Suggestions*

- 4.23 The Objector has pointed out that the Licensee has claimed higher power purchase cost for the year FY 2015-16 from DVC in 400 KV in the second half of the year by stating that the additional fixed cost debit bills are expected from DVC in H-2. The objector claims that any such estimation should be avoided and the effect of the same can be considered at the time of True up.

*Petitioners' Response*

- 4.24 The Petitioner submitted that the submission was made in compliance with the regulations and the details are provided in the petition.

*Views of the Commission*

- 4.25 The Commission has carried out analysis of the Power Purchase cost for the year FY 2015-16 in Para 6.15 of the Tariff Order.

**Operation & Maintenance Expenses**

*Public Comments/Suggestions*

- 4.26 The Objector has pointed out that the petitioner has estimated the growth in the Employee and A&G expenses for FY 2015-16 on the basis of revised inflation factor i.e. 8.02% which is more than what is allowed as per JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2015.
- 4.27 For the MYT Period, the Objector has pointed out that the petitioner has taken much higher inflation rate than the inflation factor as per JSERC (Terms & Conditions for the Determination of Distribution Tariff), Regulations 2015 which is coming out to be 4.36%.
- 4.28 The Objector also submitted that the Petitioner has not considered the 'K' Factor as per the applicable provisions of the JSERC (Terms & Conditions for the Determination of Distribution Tariff), Regulations 2015.
- 4.29 The Objector has pointed out that the petitioner has added additional compensation factor for worker's wage revision and one-time payment for the arrear of last 4 years as per agreement on estimation basis. The objector requests the Hon'ble commission to defer the same and should be considered at the time of True-up with regard to JSERC (Terms & Conditions for the Determination of Distribution Tariff), Regulations 2015.

*Petitioners' Response*

- 4.30 With regards to the inflation factor for FY 2015-16, The Petitioner has submitted that the detailed explanation has already been submitted in the Petition for the estimation of O&M Expenses and requests the Hon'ble Commission to kindly consider the same.
- 4.31 With respect to the inflation factor for the MYT Period FY 2016-17 to FY 2020-21, the Petitioner has submitted that inflation rate of 4.36% has been considered, which is in compliance with the JSERC Distribution Tariff Regulations, 2015.
- 4.32 The Petitioner has submitted that the detailed explanation for the consideration of 'K' factor has already been submitted in the Business plan for the perusal of the Hon'ble commission.

- 4.33 With respect to the additional compensation factor for worker's wage revision, the Petitioner submitted that as per the agreement between the Union and Management, the next revision is due in 2018 and hence the impact of the same has been considered. The Petitioner further stated that by excluding the known impact of Pay-Revision from the forecasts, the very purpose of forecast is defeated.

*Views of the Commission*

- 4.34 For the purpose of indexing the Employee and A&G Expenses for the year FY 2015-16, the Commission has considered the inflation factor for FY 2015-16 i.e. 1.98% which is in line with the Distribution Tariff Regulations, 2010.
- 4.35 With respect to the determination of O&M Expenses for the MYT Period, the Commission has dealt with this matter in detail in Para 8.30 of this Tariff Order.

**Depreciation**

*Public Comments/Suggestions*

- 4.36 The Objector pointed out that the Hon'ble Commission should ensure that other provisions of Depreciation as mentioned in Para 6.34 to 6.36 of the JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2015 are also being followed with the petitioner's claim of calculating depreciation by Straight Line Method of computation.
- 4.37 The Objector has asked for the basis for the assumption of Depreciation rate of 6.50% based on previous year's data which is in contrary to the Provisions of the JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2015.

*Petitioners' Response*

- 4.38 The Petitioner has submitted that the Annual Performance Review (APR) of FY 2015-16 is to be carried out as per Distribution Tariff Regulations 2010 and the Distribution Tariff Regulations 2015 will become applicable from APR of FY 2016-17.
- 4.39 The Petitioner submitted that the Depreciation rate for the previous year was arrived as per Regulations by considering asset wise actual depreciation allowed. Further, since most of the Assets are either depreciated upto 90%, or are far below 70%, the depreciation rates for majority of the assets would remain similar in the next 5 years. Further it is to be clarified, that no depreciation is considered on Land, and the same is not considered in previous years also, as land is not a depreciable asset. In any case, the actual depredation shall be trued up by the Hon'ble Commission.

*Views of the Commission*

- 4.40 The depreciation computed in the Accounts of the Power Business Division of the Petitioner is to be determined on the basis of applicable provisions of the JSERC Regulations. Further, the depreciation approved in the MYT Control Period FY 2016-17 to FY 2020-21 is subject to True up of the respective years.

- 4.41 The Commission directs the petitioner to submit asset class wise depreciation in accordance with the relevant provisions of the JSERC Distribution Tariff Regulations, 2015 in subsequent tariff petition.

### **Consumer Contribution for Capital Expenditure**

#### *Public Comments/Suggestions*

- 4.42 The stakeholder requested the Petitioner for the details of consumer contribution for capital expenditure for the last 5 years and also asked the Petitioner to submit the basic guidelines or criteria for taking consumer contribution for capital expenditures.
- 4.43 The objector further enquired whether the petitioner takes contribution from consumers in case there is enhancement of load.
- 4.44 The Objector further requested the details of the consumers, contract load and consumer contribution taken from each consumer added under High Tension and details of the consumption parameters and sales projections for existing HT-IV category.
- 4.45 The Objector has also asked for the basis for the assumption of consumer contribution at 2 Crores per annum with respect to total expected capital expenditure for the entire control period.

#### *Petitioners' Response*

- 4.46 The details of the Consumer Contribution received for the last 5 years as provided by the Petitioner is as follows:

Particulars	2010-11	2011-12	2012-13	2013-14	2014-15
Opening Consumer Contribution	16.73	21.80	34.74	40.32	43.06
Capital Contribution received during	5.07	12.94	5.58	2.74	6.05
<b>Closing Consumer Contribution</b>	<b>21.80</b>	<b>34.74</b>	<b>40.32</b>	<b>43.06</b>	<b>49.11</b>

- 4.47 The Petitioner submitted that the Consumer contribution is taken from the consumers based on the expenses to be incurred by the licensee in providing the power connection to the consumer.
- 4.48 The Petitioner submitted that they take contribution from consumers in case there is enhancement of load.
- 4.49 With respect to the details of consumers, connected load and consumer contribution taken by the Petitioner, the Petitioner submitted that they are not authorized to disclose customer specific information to public, without specific permission from the concerned customer. The Petitioner has submitted that the HT 4 category consists of only one consumer, and projection of power consumption of this consumer is given, based on information provided by the consumer.

- 4.50 The Petitioner submitted that very large scale developments are not expected due to subdued economic conditions in the license area and accordingly, the consumer contribution has been projected at Rs. 2 Cr per annum.

*Views of the Commission*

- 4.51 With respect to the assumption on addition of 2 Cr of Consumer Contribution for each year of the Control Period FY 2016-17 to FY 2020-21, the Commission is of the view that the Petitioner's submission can be accepted for the purpose of projections in the Control Period since it is based on the expected developments in the license area. However, the same is subject to true up of the respective years.

**Interest on Security Deposit**

*Public Comments/Suggestions*

- 4.52 The Objector submitted that in the Allocation Statement, Interest on security deposit for wheeling business has been taken at 10% of total interest, however, no security deposit under wheeling business has been found.
- 4.53 The Objector further submitted that according to the provisions of the electricity supply code, a rough estimate of security deposit to be held by Tata Steel in FY 2014-15 should be Rs. 189 Crores. In contrary, the security deposits with Tata Steel was found to be Rs 15.47 Crores (Approx.). The Objector has asked for clarifications from the petitioner with respect to these discrepancies.

*Petitioners' Response*

- 4.54 The Petitioner submits that there is no security deposit for wheeling business with TSL and hence, it has not been included in the Business plan. Further, the same will not have any impact on the ARR.
- 4.55 The Petitioner submits that the choice of taking security deposit from a consumer is left to licensee according to section 47 of the Electricity Act 2003. The licensee had chosen not to take security deposit from industrial consumers who pay their bills in advance.

*Views of the Commission*

- 4.56 The Commission notes the concern of the Objector and directs the Petitioner to submit the detail of security deposit collected from each HT Consumer along with the next Tariff Petition

**Individual Domestic Power Supply**

*Public Comments/Suggestions*

- 4.57 The Objector pointed out that they are being supplied power under single phase domestic power supply which has further been restricted at 10 Amps by fixing MCB in each line. However, they are charged at the rate of DSHT category instead of DS category. The Objector seeks clarification in this regard.

- 4.58 The Objector pointed out that the Board of Directors of their society based on resident's demand passed a resolution on 4-4-2014 stating that any individual member willing to have direct connection from TSL may do so without objection from the society.
- 4.59 The objector submitted that about 500 Residents have put an application to JUSCO for individual domestic power supply connection. In response to the application, the Petitioner issued a letter to them requesting to arrange RoW and indicate proposed locations to install load centres. The Objector stated that an affidavit bearing responsibility of RoW and sketches indicating free land available for setting up load centres was submitted to the Petitioner.
- 4.60 The objector stated that the Petitioner doesn't have any intention to provide individual domestic power connection as no further work has been done even after all the requirements were fulfilled by the applicants. The objector stated that
- (a) TSL/JUSCO are extorting huge amount of money from consumers in convenience with their business partner since the last 25 years.
  - (b) TSL/JUSCO is not following Tariff rules by charging enhanced rates in the category of DSHT whereas supply is in DS category.
  - (c) Installation charges of an Air Conditioner stands somewhere between Rs 70,000 to 80,000 whereas no additional infrastructure is required for the installation.
  - (d) Additional 25 to 50 units is being charged every month without proper justification.

#### *Petitioners' Response*

- 4.61 The Petitioner stated that the Objector is a single point HT consumer with tariff structure under DSHT category as per tariff order issued by the Hon'ble Commission. The Petitioner further submitted that sharing of electricity is an internal matter and any such clarification as to fixing the supply to 10 Amps and charge of additional units should come from the society.
- 4.62 With respect to the application for individual domestic connections, the Petitioner submitted that the approvals from the respective owner/authorities has not been received for the proposed locations for load centres. Further, the Petitioner submitted that they are exploring alternative options to provide power supply to the society for which some information is still pending from the society.
- 4.63 The point wise replies of the Petitioner on the Tariff charged are as follows:
- (a) The Petitioner denied the objector's allegation and stated that it raises bills strictly as per Tariff order of the Hon'ble Commission.
  - (b) The Petitioner stated that any charge being levied by society in the process of sharing of electricity consumption and bills is a matter between the society and its members. The petitioner reiterated that they raise bills as per the Tariff order issued by the Hon'ble Commission and doesn't take any additional charge from the society.

*Views of the Commission*

- 4.64 The Commission notes the concern of the objector. However, any issue with respect to incorrect bills and untimely processing of applications may be taken up at the CGRF as per the JSERC (Guidelines for establishment of forum for redressal of grievances of the consumers and electricity Ombudsman) Regulations, 2011, for redressal.



## A5: TRUE- UP FOR FY 2014-15

- 5.1 The Commission in its MYT Order for FY 2013-14 to FY 2015-16 determined the ARR for each year of the Control period i.e. FY 2013-14 to FY 2015-16 based on the principles specified in the Distribution Tariff Regulations, 2010 and the information provided by the Petitioner.
- 5.2 The Commission later undertook the Annual Performance Review for FY 2014-15 in its Tariff Order dated 31.05.2015 for True up of FY 2013-14, Annual Performance Review of FY 2014-15 and Revised ARR and Tariff for FY 2015-16.
- 5.3 The Petitioner has now sought approval from the Commission for True-Up of variation in ARR for FY 2014-15, based on audited annual accounts.
- 5.4 The Commission has undertaken the exercise for Truing-Up of controllable and uncontrollable components of ARR in line with Regulations 5.30 to 5.32 of the Distribution Tariff Regulations, 2010, as reproduced below.

*“5.30 The variation on account of uncontrollable elements shall be treated as a pass through to be ultimately charged to the consumers, subject to validation and approval by the Commission;*

*5.31 The Commission shall also permit pass-through of variations in controllable items on account of Force Majeure events such as acts of god, war, change in law etc, in the ARR for the ensuing year, based on the submission of actual values by the Licensee and subsequent validation and approval by the Commission;*

*5.32 The variation, from targets specified by the Commission, on account of controllable elements shall be subject to incentive-penalty framework, as detailed in the subsequent section”.*

- 5.5 For the purpose of clarity, the following table summarises the controllable and uncontrollable elements of the ARR, as defined in the Regulation 5.29 of the above-mentioned regulations.

**Table 11 Controllable & Un-controllable ARR elements**

ARR Element	“Controllable”/“Uncontrollable”
Sales	Uncontrollable
Power Purchase Cost (excluding short term power)	Uncontrollable
Transmission & Load Dispatch charges;	Uncontrollable
O&M Expenses (excluding terminal liabilities of employees)	Controllable
Terminal liabilities of employees	Uncontrollable
Interest and Financial Charges (including interest on loans, interest on working capital, interest on consumer security deposit, lease charges)	Controllable
Return on Equity	Controllable

ARR Element	“Controllable”/“Uncontrollable”
Depreciation	Controllable
Taxes on Income	Uncontrollable
Foreign Exchange Rate variation	Uncontrollable
Non-Tariff income	Uncontrollable
Income from Other Businesses	Uncontrollable
Distribution Loss and Collection Efficiency	Controllable
Quality of Supply	Controllable
Capital Expenditure	Controllable

5.6 Accordingly, the Commission has passed through variation on account of uncontrollable parameters after scrutiny with due diligence and verification and analysed the variation on account of controllable parameters which are subject to incentive/penalty framework subject to prudence check and verification.

5.7 In addition to above, while undertaking the truing up for FY 2014-15, the Commission is also guided by the Regulation 11.3, 11.4 and 11.5 of the Distribution Tariff Regulations, 2010, as reproduced below.

*“11.3 These Regulations do not provide for any truing up for controllable items during the Control Period. Depreciation and return on capital shall be trued up only at the end of the Control Period. Truing up of other controllable items would be done only on account of Force Majeure events;*

*11.4 Variations on account of uncontrollable items like energy sales and power purchase cost shall be trued up with the Annual Performance Review. Truing-up shall be carried out for each year based on the actual/audited information and subject to the prudence check by the Commission;*

*11.5 Provided that if such variations are large, and it is not feasible to recover in one year alone, the Commission may take a view to create a regulatory asset, as per the guidelines provided in clause 8.2.2 of the National Tariff Policy;*

*Provided further that any adverse financial impact for variation in uncontrollable items due to lapse on part of the Licensee or its suppliers/contractors shall not be allowed in truing up;*

*The Commission, to ensure tariff stability, may include the trued-up costs in the subsequent Control Period’s ARR instead of including in the year succeeding the relevant year of the Control Period”*

5.8 Accordingly, the Commission has analysed the submission of the Petitioner with respect to the truing up of ARR for FY 2014-15, and has undertaken the true up exercise of various components based on the principles specified in the Distribution Tariff Regulations, 2010.

- 5.9 The component-wise description of the Petitioner's submission and the Commission's analysis thereof is provided hereunder.

### **Sales Forecast**

#### *Petitioner's Submission*

- 5.10 The Petitioner has submitted the sales for FY 2014-15 as 2,756.79 MUs, in line with the audited accounts.

#### *Commission's Analysis*

- 5.11 The Commission has approved the total energy sales for FY 2014-15 as 2,756.79 MUs which have been verified from the audited accounts of FY 2014-15. These sales also include 284.93 MU of sales to other licensee/ JUSCO. The Commission also verified sales to JUSCO from power purchase bills of TSL to JUSCO for FY 2014-15.
- 5.12 The category wise sales submitted by the Petitioner for FY 2014-15 and those approved by the Commission is as under:

**Table 12: Category wise Sales for FY 2014-15 (MU)**

Category	Submitted by the Petitioner	Approved by the Commission
Domestic-LT	188.04	188.04
Domestic-DSHT	89.15	89.15
Commercial	59.26	59.26
Temporary Supply	4.55	4.55
High Tension I	27.54	27.54
High Tension II	128.06	128.06
High Tension III	1,744.06	1,744.06
High Tension IV	137.08	137.08
Utilities/Street Light	94.12	94.12
Sale to other Licensee	284.93	284.93
<b>Total</b>	<b>2,756.79</b>	<b>2,756.79</b>

### **Energy Balance**

#### *Petitioner's Submission*

- 5.13 The Petitioner submitted the actual energy sales, distribution losses and power purchase as per its audited annual accounts for FY 2014-15.

- 5.14 Accordingly, the Petitioner submitted the actual energy availability and energy sales (including sales to steel works) for FY 2014-15 as 2,856.33 MU and 2,756.79 MU respectively. The Petitioner also submitted that the actual distribution losses achieved by the Petitioner for FY 2014-15 are 3.48%.

*Commission's Analysis*

- 5.15 During FY 2014-15, the Petitioner has procured power from Tata Power Company Ltd (TPCL), Damodar Valley Corporation (DVC), Tata Steel Works - captive (TSW Captive) and Open Access sources for meeting energy requirements of its steel works and consumption in its licensed area. In addition, the Petitioner has also purchased RECs to meet its Renewable Purchase Obligations (RPO).
- 5.16 For power procured from Unit –2 and Unit – 3 of TPCL, the Commission has approved the quantum of 1539.12 MU for truing up after due verification of bills submitted for Unit-2 and Unit-3 respectively. With respect to the power purchased from DVC, the Commission has approved 263.27 MU from DVC 132 kV and 1034.28 MU from DVC 400 kV after scrutinizing the power purchase bills issued by DVC to the Petitioner. For power purchased from TSL Captive, the Commission has approved 18.76 MU in accordance with the audited accounts and details submitted by the Petitioner. Further, the Commission has also approved the quantum of 0.91 MU from open access sources on account of restriction from DVC 400kV source due to shortage of coal.
- 5.17 Based on the approved energy sales and power purchase quantum for FY 2014-15, the Commission estimated the distribution losses as 3.48% and the same has been approved for FY 2014-15.
- 5.18 The following table details the energy sales, distribution losses and power purchase as approved by Commission in the MYT Order dated June 2014, approved by the Commission in the previous Tariff Order dated 31<sup>st</sup> May 2015, actuals submitted by the Petitioner and approved now by the Commission for FY 2014-15.

**Table 13 Energy Balance approved for FY 2014-15**

Particulars	Approved in MYT	As approved in APR	Petitioners submission	Approved now
<b>A. ENERGY REQUIREMENT (MUs)</b>				
<b>Sales to Other Licensee</b>	55	271	284.93	284.93
Dist. Losses on Sales to Other Licensee	0.00%	0.00%	0.00%	0.00%
Units Lost on Sales to Other Licensee	-	-	0.00%	0.00%
<b>Energy Req. for Sales to Other Licensee</b>	<b>55</b>	<b>271</b>	<b>284.93</b>	<b>284.93</b>
<b>Sales to Steel Works (HT IV)</b>	98	156	137.08	137.08
Dist. Losses on Steel Works	0.00%	0.00%	0.00%	0.00%
Units Lost on Sales to Steel Works	-	-	-	-
<b>Energy Req. for Steel Works</b>	<b>98</b>	<b>156</b>	<b>137.08</b>	<b>137.08</b>

Particulars	Approved in MYT	As approved in APR	Petitioners submission	Approved now
<b>Sale to other consumers</b>				
Sales to LT consumers	387	401	345.97	345.97
Sales to HT consumers	2,181	1,982	1,988.81	1,988.81
Total Sales to Other Consumers	2,568	2,383	2,334.78	2,334.78
Dist. Losses on Sales to Other Consumers	5.75%	4.81%	4.09%	4.09%
Units Lost on Sales to Other Consumers	156	120	99.54	99.54
<b>Energy Req. for Sales to Other Consumers</b>	<b>2,724</b>	<b>2,503</b>	<b>2,434.32</b>	<b>2,434.32</b>
<b>Overall Sales</b>	2,721	2,810	2,756.79	2,756.79
Overall Distribution Losses %	5.47%	4.11%	3.48%	3.48%
Overall Distribution Losses	156	120	99.54	99.54
<b>TOTAL ENERGY REQUIREMENT</b>	<b>2,877</b>	<b>2,930</b>	<b>2,856.33</b>	<b>2,856.33</b>
<b>B. ENERGY AVAILABILITY</b>				
TPCL	1,608	1,601	1,538.83	1,539.12
Damodar Valley Corporation 132kV	438	261	263.56	263.27
Damodar Valley Corporation 400kV	547	1,038	1,034.28	1,034.28
TSW - Captive	169	28	18.76	18.76
RPO	115	-	-	-
Open access/ other sources	-	2	0.91	0.91
<b>Total Pooled Energy Availability</b>	<b>2,877</b>	<b>2,930</b>	<b>2,856.33</b>	<b>2,856.33</b>

## Power Purchase Cost

### *Petitioner's Submission*

- 5.19 As mentioned above, the Petitioner is procuring power from TPCL, DVC, TSW-Captive, Open Access Sources and mandatory procurement of REC's for RPO.
- 5.20 The Petitioner submitted the actual power purchase cost for FY 2014-15 as Rs 1228.32 Cr. The rate of power purchase for Unit 2 of TPCL was Rs. 3.93 per unit, for Unit 3 of TPCL was Rs 3.89 per unit, for DVC 132 kV was Rs 4.70 per unit, for DVC 400 kV was Rs 4.62 per unit, for TSW Captive was Rs 3.91 per unit and was Rs 5.52 per unit for power purchased from Open Access Sources.
- 5.21 The Petitioner further submitted that during the year FY 2014-15, the Petitioner, despite financial constraints has made all efforts to meet a part of its RPO for FY 2014-15. It has procured 27 MUs equivalent solar RECs and 51 MUs equivalent Non Solar RECs at an average rate of Rs. 3.50 per unit and Rs. 1.50 per unit respectively and same is requested to be allowed.

### *Commission's Analysis*

- 5.22 The Commission scrutinised the actual power purchase bills from all sources as submitted by the Petitioner for FY 2014-15, the audited accounts for the year and the information submitted as part of the Tariff Petition.
- 5.23 In case of power purchase from TPCL – Unit II and Unit III, the Commission has approved the cost of power purchase on the basis of audited annual accounts after verification of all the power purchase bills for the year. Similarly, the power purchase cost from DVC at 132 kV and at 400 kV has been approved on the basis of audited annual accounts after verification of all the power purchase bills for the year. The impact on change in rate of power purchase is also passed on for TSL captive that is approved at the lowest rate of power purchase during the year. Further, the power purchase cost from the Open Access Sources has been approved on the basis of audited annual accounts after verification of all the power purchase bills.
- 5.24 With respect to the computation of RPO for the Petitioner, the Commission accepts the methodology proposed by the Petitioner which is consistent with the methodology followed by the Commission in its last Tariff Order dated 31.05.2015 and accordingly, has estimated the RPO on total energy requirement for FY 2014-15 net of power purchase from DVC at 132 kV. Accordingly, the Commission estimates the revised RPO of the Petitioner for FY 2014-15 as 104 MU out of which 26 MU is solar obligation 78 MU is non-solar obligation. Moreover, the Commission in its previous Tariff Order had allowed for carry forward of shortfall/ excess in RPO for FY 2013-14 while estimating the RPO targets for FY 2014-15. After adjusting past shortfall/excess in RPO targets, the revised target for solar obligation during FY 2014-15 is 48 MU and that for non-solar obligation is 85 MU.
- 5.25 The Petitioner submitted that it has only procured 27 MU equivalent RECs to fulfil its solar obligation and 51 equivalent REC's to fulfil its non-solar obligation at a cost of Rs. 17.31 Crore and same has been verified from the IEX bills submitted by the Petitioner. The Commission notes that the Petitioner has submitted that it experienced challenges with respect to its financial position, which hindered the Petitioner in meeting the RPO. Hence the Commission grants the carry forward of the shortfall in RPO to the subsequent year.
- 5.26 The following table summarises the Power Purchase cost for FY 2014-15 as approved by the Commission in the MYT Order dated June 2014, approved by the Commission in the APR Order dated May 31, 2015, the actual Power Purchase Cost submitted by the Petitioner in its Tariff petition and Power Purchase Cost now approved by the Commission for the truing up for FY 2014-15.

**Table 14 Power Purchase Cost approved for truing up of FY 2014-15 (Rs Cr)**

Sl. No.	Particulars	Approved in MYT	Approved in APR	Petitioner's submission	Approved Now
A	<b>Tata Power Co. Ltd. - Regulated</b>				
	Units Purchased (MU's)				
	<i>Unit II</i>	804	797	756.54	756.68
	<i>Unit III</i>	804	804	782.28	782.44
	<i>Total</i>	1,608	1,601	<b>1,538.83</b>	<b>1,539.12</b>

Sl. No.	Particulars	Approved in MYT	Approved in APR	Petitioner's submission	Approved Now
	Per Unit Price (Rs. / kWh)				
	<i>Unit II</i>	2.89	3.87	3.93	3.93
	<i>Unit III</i>	2.82	3.86	3.89	3.89
	<i>Total</i>	2.86	3.86	3.91	<b>3.91</b>
	<b>Power Purchase Cost (Rs. Crs)</b>				
	<i>Unit II</i>	233	308	297.62	297.62
	<i>Unit III</i>	227	310	304.01	304.01
	<i>Total</i>	<b>459</b>	<b>618</b>	<b>601.63</b>	<b>601.63</b>
<b>B</b>	<b>Damodar Valley Corporation - 132 kV</b>				
	Units Purchased (MU's)	438	261	263.56	263.27
	Per Unit Price (Rs. / kWh)	4.06	4.18	4.70	4.71
	<b>Power Purchase Cost (Rs. Crs)</b>	178	109	123.90	123.90
<b>C</b>	<b>Damodar Valley Corporation - 400 kV</b>				
	Units Purchased (MU's)	547	1,038	1,034.28	1,034.28
	Per Unit Price (Rs. / kWh)	4.96	4.57	4.62	4.62
	<b>Power Purchase Cost (Rs. Crs)</b>	272	475	477.65	477.65
<b>D</b>	<b>TSL Captive</b>				
	Units Purchased (MU's)	169	28	18.76	18.76
	Per Unit Price (Rs. / kWh)	2.76	3.86	3.91	3.91
	<b>Power Purchase Cost (Rs. Crs))</b>	48	11	7.33	7.33
<b>E</b>	<b>RPO</b>				
	RECs purchased (MU's)	115	-		
	Power Purchase Cost (Rs. Crs)	52	17	17.31	17.31
<b>F</b>	<b>Other Sources/Open Access</b>				
	Units Purchased (MU's)	-	2	0.91	0.91
	Per Unit Price (Rs. / kWh)	-	4.00	5.52	5.47
	<b>Power Purchase Cost (Rs. Crs)</b>	-	0.80	0.50	0.50
<b>G</b>	<b>Net Power Purchase</b>				
	Units Purchased (MU's)	2,877	2,930	2,856.33	2,856.33
	Per Unit Price (Rs. / kWh)	3.51	4.20	4.30	4.30
	<b>Net Power Purchase Cost (Rs. Crs)</b>	<b>1,009</b>	<b>1,231</b>	<b>1,228.32</b>	<b>1,228.32</b>



## Operation and Maintenance Expenses

### *Petitioner's Submission*

- 5.27 The Petitioner has submitted projections for O&M cost comprising of employee costs, A&G costs and R&M costs based on actual costs incurred during FY 2014-15. The Petitioner submitted that it has incurred employee costs, A&G costs and R&M costs of Rs. 18.80 Crore, Rs 20 Crore and Rs 23.37 Crore respectively in FY 2014-15.
- 5.28 The Petitioner stated that as per the audited accounts, the employee costs incurred is Rs 3.07 which is of the nature of Direct Expenses booked for the employees on its payroll. The Outsourced employee costs (payable to JUSCO) of O&M expenses of Rs 15.73 Cr has been captured under R&M head which has now been transferred to Employee Expenses by the Petitioner. Hence, the total O&M expenses claimed by the Petitioner is Rs 62.17 Cr which is lower than the approved costs in the Tariff Order dated 31<sup>st</sup> May 2015 order due to efficiency improvements made by the Petitioner during the year.

### *Commission's Analysis*

- 5.29 The Commission in its Tariff Order dated 31<sup>st</sup> May, 2015 had estimated the norm for O&M costs as Rs. 104.43 Crore.
- 5.30 In line with the Regulations 5.29 to 5.32 of the Distribution Tariff Regulations, 2010, the O&M expense (excluding terminal liabilities of employees) is a controllable element of the ARR and any variation from targets on account of controllable elements is subject to incentive-penalty framework.
- 5.31 Accordingly, the Commission has approved the actual O&M costs incurred during FY 2014-15 of Rs. 62.17 Crore and pass through the share of Petitioner in aggregate savings in reduction of O&M cost which is dealt in in Paras 5.77 and 5.78 of this Order.
- 5.32 The following table summarises the O&M expenses as approved by the Commission in the MYT Order dated June, 2014, the revised estimates approved by the Commission in the Tariff Order dated 31<sup>st</sup> May 2015, the actual O&M expenses submitted by the Petitioner in the present petition and now approved by the Commission for the truing up for FY 2014-15:

**Table 15 O&M expenses for FY 2014-15 trued up by the Commission ( Rs Cr)**

Particulars	Approved in MYT	Approved in APR	Submitted by TSL	Approved Now
Employee Expenses	15.13	17.47	18.80	18.80
R&M costs	58.51	72.31	23.37	23.37
A&G costs	18.00	14.65	20.00	20.00
<b>Total O &amp; M Expenses</b>	<b>91.64</b>	<b>104.43</b>	<b>62.17</b>	<b>62.17</b>



## Capital Works In Progress (CWIP) & Gross Fixed Asset (GFA)

### *Petitioner's Submission*

- 5.33 The Petitioner submitted that the CWIP, GFA have been arrived on the basis of audited annual accounts of FY 2014-15. The closing CWIP submitted by the Petitioner was to the tune of Rs 12.87 Cr and additions to GFA were to the tune of Rs. 17.58 Cr.

### *Commission's Analysis*

- 5.34 Regulation 5.28 read with Regulation 11.3 of the Distribution Tariff Regulations, 2010 specifies that capital expenditure is a controllable element of the ARR and any truing up under this head shall be carried out at end of control period. However, Note 1 under Regulation 6.16 of the above-mentioned regulations provides for re-look at the capitalisation on account of deferment in actual capitalisation falling within the original scope of work and same can be serviced in the normative debt –equity ratio specified in the said Regulations.
- 5.35 On scrutiny of the information submitted by the Petitioner, the Commission observed that the works carried out by the Petitioner were within the original scope of work approved by the Commission in its MYT Order dated June 04, 2014, while change in the phasing of works have been observed. Accordingly, the Commission has approved the GFA, CWIP and capital expenditure incurred during the year as per the audited accounts for FY 2014-15 based on the provisions specified in the above mentioned Regulations and the information submitted by the Petitioner.
- 5.36 The following table summarises the GFA & CWIP as approved by the Commission in the MYT Order dated June, 2014, the revised estimates approved in Tariff Order dated 31<sup>st</sup> May.2015, the actual submitted by the Petitioner in present petition and now approved by the Commission for FY 2014-15.

**Table 16 CWIP and GFA trued up for FY 2014-15 by the Commission ( Rs Cr)**

Particulars	Approved in MYT Order	Approved In APR	Submitted by TSL	Approved Now
<b>A. Capital Works in Progress ( CWIP)</b>				
Opening CWIP	28.29	15.52	15.52	15.52
Add: Additions (Capex during FY)	27.77	10.82	14.93	14.93
<b>Sub-total</b>	<b>56.06</b>	<b>26.34</b>	<b>30.44</b>	<b>30.44</b>
Less: Capitalization (T/fed to GFA during FY)	16.82	7.35	17.58	17.58
<b>Closing CWIP</b>	<b>39.24</b>	<b>18.99</b>	<b>12.87</b>	<b>12.87</b>
<b>B. Gross Fixed Assets(GFA)</b>				
Opening GFA	378.33	486.41	486.41	486.41
Add: Additions during FY	16.82	7.35	17.58	17.58
<b>Closing GFA</b>	<b>395.15</b>	<b>493.76</b>	<b>503.99</b>	<b>503.99</b>

## Depreciation

### *Petitioner's Submission*

- 5.37 The Petitioner submitted that its computation of depreciation has been carried out on the basis of the rates as provided in Appendix -I to the Distribution Tariff Regulations 2010 as per the Straight Line Method of computation. Further, the depreciation costs proportionate to the extent of fixed assets being funded through Consumer Contribution amounting to Rs. 2.15 Cr has been deducted from the total depreciation in order to arrive at the net depreciation of Rs.30.03 Cr for FY 2014-15.

### *Commission's Analysis*

- 5.38 As per the Regulation 11.3 of the Distribution Tariff Regulations, 2010, the Depreciation and return on capital shall be trued up only at the end of the Control Period. Accordingly, the Commission has not trued up depreciation expense as per the actual expenditure incurred and shall undertake that exercise on completion of the control period. Meanwhile, as revised capitalization schedule has been approved, the Commission has passed this adjustment and revised depreciation charges only to that extent.
- 5.39 The following table summarizes the gross and net depreciation as approved by the Commission in the MYT order dated June , 2014, revised estimates approved in Tariff Order dated 31 May 2015, actual submitted by the Petitioner in present petition and now approved by the Commission for FY 2014-15.

**Table 17 Depreciation for FY 2014-15 by the Commission (Rs Cr)**

Particulars	Approved in MYT Order	Approved in APR	Submitted by TSL	Approved Now
Depreciation during the year	23.88	30.26	32.18	30.57
Less: Dep. on A/c of CC	2.95	2.90	2.15	2.98
<b>Net Depreciation during the year</b>	<b>20.93</b>	<b>27.36</b>	<b>30.03</b>	<b>27.60</b>

## Consumer Contribution

### *Petitioner's Submission*

- 5.40 The Petitioner submitted that while calculating normative equity and loan in FY 2013-14, the Petitioner had inadvertently considered capital contribution capitalized as Rs 43.06 Cr which was capital contribution received instead of actual capital contribution capitalized upto 31<sup>st</sup> March 2014 which was Rs 27.28 Cr.
- 5.41 Further, in order to determine the financing components for FY 2014-15, the Petitioner submitted that the capital contribution capitalized in FY 2014-15 is Rs 6.38 Cr while capital contribution received is Rs 6.05 Cr. The Petitioner requested the Hon'ble Commission to consider actual capital contribution capitalized rather than capital contribution received while determining deemed additions to loan and equity.

### *Commission's Analysis*

- 5.42 The applicable provisions of the JSERC Distribution Tariff Regulations, 2010 for determining additions to loan and equity are as follows:

*“6.13 The amount of any contribution made by consumers, distribution system users and government subsidy towards work for connection to the distribution system of the Licensee shall be deducted from the original cost of the project for the purpose of calculating the amount under debt and equity under these regulations.”*

- 5.43 Hence, in view of the applicable provisions of the JSERC Distribution Tariff Regulations, 2010, The Commission has considered the consumer contribution received upto 31<sup>st</sup> March 2015 i.e. 49.11 Cr while determining deemed additions to loan and equity.

## **Interest and Other Finance Charges**

### **Interest on Loan**

#### *Petitioner's Submission*

- 5.44 The Petitioner while determining the deemed additions to loan for FY 2014-15 has considered 70% of the fixed asset addition after reducing assets funded from Consumer Contribution.
- 5.45 The Petitioner submitted normative interest on loan at Rs. 27.14 Cr for FY 2014-15 as per the methodology prescribed by the Commission in previous Tariff Orders.

#### *Commission's Analysis*

- 5.46 In accordance with the Distribution Tariff Regulations, 2010, the Commission has computed the normative loan for the year equal to 70% of the closing GFA. The GFA has been considered at net of consumer contribution received while the normative repayment is deemed to be equal to the depreciation charge during the year.
- 5.47 Further, in accordance with the above mentioned regulations, interest on normative loan has been calculated on the average normative loan outstanding during the year at the interest rate of 14.75% per annum which is equal to the SBI PLR on 1<sup>st</sup> April 2014.
- 5.48 The following table summarises interest on loan as approved by the Commission in the MYT order dated June, 2014, revised estimated approved in Tariff Order dated 31<sup>st</sup> May 2015, actuals now submitted by the Petitioner and approved by the Commission for truing up of FY 2014-15.

**Table 18 Interest on loan trued up for FY 2014-15 ( Rs Cr)**

Particulars	Approved in the MYT order	Approved in APR	Submitted by the Petitioner	Approved now
Opening Balance of Normative Loan	128.24	195.11	195.11	195.11
Deemed Addition during the year	8.67	2.13	7.84	8.07
Deemed Repayments	20.93	27.36	30.03	27.60
Closing Balance of Deemed Loan	115.98	169.89	172.91	175.59
<b>Average balance during the Year</b>	<b>122.11</b>	<b>182.50</b>	<b>184.01</b>	<b>185.35</b>
Interest Rate (%)	14.75%	14.75%	14.75%	14.75%
<b>Interest Payment</b>	<b>18.01</b>	<b>26.92</b>	<b>27.14</b>	<b>27.34</b>

## Interest on Security Deposits

### *Petitioner's Submission*

- 5.49 The Petitioner has claimed interest on security deposits as per the actual amount paid to the consumers as the interest. The interest of consumer security deposits claimed by the Petitioner is Rs 1.17 for FY 2014-15.

### *Commission's Analysis*

- 5.50 Regulation 5.28 read with Regulation 11.3 of the Distribution Tariff Regulations, 2010 specifies that interest on security deposits is controllable and adjustment shall be done only at end of control period.
- 5.51 Accordingly the Commission has approved interest on security deposit as per Tariff Order dated 31<sup>st</sup> May 2015. The following table summarizes the interest on security deposits as approved in the MYT Tariff Order dated June, 2014, revised estimates approved in Tariff Order dated 31<sup>st</sup> May 2015, actuals now submitted by the Petitioner and approved now by the Commission for FY 2014-15.

**Table 19 Interest on Security Deposits for FY 2014-15 (Rs Cr)**

Particulars	Approved in the MYT order	Approved in APR	Submitted by the Petitioner	Approved now
<b>Interest on Security Deposit</b>	1.61	1.61	1.17	1.61

## Interest on Working Capital

### *Petitioner's Submission*

- 5.52 The Petitioner submitted normative interest on working capital at Rs 12.30 Cr for FY 2014-15 as per the methodology prescribed by the Commission and considering an interest rate of 14.75%.

### *Commission's Analysis*

- 5.53 The Commission has allowed interest on working capital for FY 2014-15 as per the methodology specified in the Distribution Tariff Regulations 2010. The interest rate of 14.75% p.a. equivalent to the SBI PLR as on 1<sup>st</sup> April 2014 has been considered for the purposes of estimating interest on normative working capital.
- 5.54 The following table summarises the total interest on working capital as approved in the MYT Tariff Order dated June , 2014, revised estimates approved in the Tariff Order dated 31<sup>st</sup> May 2015, actual now submitted by the Petitioner and approved by the Commission for FY 2014-15:

**Table 20 Interest on Working Capital for FY 2014-15 (Rs Crore)**

Particulars	Approved in the MYT order	Approved in APR	Submitted by the Petitioner	Approved in True up order
Receivables for 2 months' sale @ existing tariff	172.79	216.76	188.96	188.73
O&M expenses for 1 month	7.64	8.70	5.18	5.18
Maintenance spares @ 1% of Op. GFA	3.78	4.86	4.86	4.86
<b>Sub-total</b>	<b>184.21</b>	<b>230.32</b>	<b>199.00</b>	<b>198.78</b>
Less: Security deposit	17.90	17.90	13.23	17.90
Less: Power purchase cost for 1 month	84.06	102.58	102.36	102.36
<b>Total Working Capital</b>	<b>82.25</b>	<b>109.84</b>	<b>83.41</b>	<b>78.52</b>
Interest Rate (%)	14.75%	14.75%	14.75%	14.75%
<b>Interest on Working Capital</b>	<b>12.13</b>	<b>16.20</b>	<b>12.30</b>	<b>11.58</b>

### **Return on Equity (RoE)**

#### *Petitioner's Submission*

- 5.55 The Petitioner submitted that, the normative equity has been taken at 30% of the total fixed asset addition during the FY 2014-15 net of Consumer Contribution being transferred to Capital Reserve. Accordingly, Petitioner submitted RoE for FY 2014-15 as Rs 21.61 Cr
- 5.56 Further, the Petitioner has grossed up ROE for tax in accordance with Distribution Tariff Regulations, 2010 and claimed Rs 32.74 Cr ROE with Income tax. The Petitioner has claimed the Income Tax on ROE on the premise that if the Tariff revisions were allowed on time, then the petitioner would have recovered its costs plus a return on its equity and then the petitioner would have paid income tax on such Return on Equity. The claim is in line with the Petitioner's argument in Appellate Tribunal of Electricity in Appeal No 203 of 2014.

### *Commission's Analysis*

- 5.57 In accordance with the Distribution Tariff Regulations, 2010, the Commission has considered the equity base to be equal to 30% of GFA. The GFA has been considered net of consumer contribution received.
- 5.58 The Commission has allowed a rate of return of 15.5% (post tax) on equity for FY 2014-15, which is as specified in the Clause 6.21 of the above mentioned regulations. Further, as per the audited accounts for FY 2014-15 the Power Business Division of the Petitioner has reported a negative Profit before tax (PBT), the Commission is of the view that income tax paid for other business of the Petitioner cannot be allocated to the licensed business.
- 5.59 Further, According to the judgment of Appellate Tribunal of Electricity dated February 19, 2016 in Appeal No 203 of 2014, the issue of taxes paid on revenue derived from regulatory assets and extra taxes paid will be considered at the stage when these revenues are realized and not at this stage. The relevant provision of the aforementioned Order has been reproduced below:
- “32 The issue of taxes paid on revenue derived from regulatory assets and extra taxes paid on such revenue would arise in the years in which such revenues are derived. This cannot be considered at this stage of the proceedings. Without expressing any opinion on the merits of this claim being raised, the Appellant can urge these aspects in the relevant years in future for consideration by the State Commission. Hence, the Appellant is not entitled to any order on this issue at this stage”*
- 5.60 Accordingly, the Commission approves the RoE for FY 2014-15 at post tax return of 15.50% only, which is in line with the methodology followed by the Commission in previous Tariff Orders and the judgment of Appellate Tribunal of Electricity as mentioned above.
- 5.61 The following table summarizes the return on equity as approved in the MYT Tariff Order dated June 4, 2014, revised estimates approved in the Tariff Order dated 31<sup>st</sup> May 2015, actual now submitted by the Petitioner and approved by the Commission for FY 2014-15:

**Table 21 RoE approved by the Commission FY 2014-15 (Rs Cr)**

Particulars	Approved in the MYT order	Approved in APR	Submitted by the Petitioner	Approved in True up order
Opening Balance of Normative Equity	100.19	133.00	137.74	133.00
Deemed Additions	3.71	0.91	3.36	3.46
Closing Balance of Normative Equity	103.90	133.91	141.10	136.46
Average Equity	<b>102.05</b>	<b>133.46</b>	139.42	<b>134.73</b>
RoE (%)	15.50%	15.50%	<b>15.50%</b>	15.50%
RoE	<b>15.82</b>	<b>20.69</b>	<b>21.61</b>	<b>20.88</b>
Income Tax Rate	-		33.99%	
Normative ROE with Income TAX	-		<b>32.74</b>	

## **Non-Tariff Income (NTI)**

### *Petitioner's Submission*

- 5.62 The Petitioner submitted Non-tariff income for FY 2014-15 to be Rs. 4.48 Cr which includes delayed payment surcharge, miscellaneous expenses and supervision charges, etc.

### *Commission's Analysis*

- 5.63 The Non-tariff income includes meter rent, equipment charges, hire charges from electrical installations and supervision charges.
- 5.64 As per Regulation 5.28 of the Distribution Tariff Regulations, 2010, Non-Tariff Income is an uncontrollable element of the ARR. Regulation 5.30 of the said Regulations specifies that variation on account of uncontrollable items shall be treated as a pass through to be ultimately charged to the consumers subject to validation and approval of the Commission. Further Regulation 11.4 also provides for trueing up for each year of variation on account of uncontrollable items based on actual/ audited information subject to prudence check by the Commission.
- 5.65 In the audited accounts, for FY 2014-15, the revenue from sale of power and other non-tariff income has been provided as Rs 1132.40 Cr and Rs 5.86 Cr respectively.
- 5.66 The Petitioner clarifying the discrepancy between its submission and the audited accounts for FY 2014-15 submitted that fixed charges and meter charges which are of the nature of revenue from operations are captured under the head of other income in the audited accounts. Hence, the Petitioner has transferred the revenue of Rs 1.38 Cr from the aforementioned charges to Revenue from Operations and submitted Non-Tariff Income as Rs 4.48Cr.
- 5.67 However, the Commission is of the view that such deviations from the audited accounts cannot be accepted and hence, the Commission approves the Non-tariff income as per the audited accounts for the FY 2014-15 as Rs.5.86 Cr. Further, the Commission directs the Petitioner to capture the Income from different sources under the appropriate heads in the audited accounts.

## **Sharing of aggregate gains/losses on account of controllable parameters**

### *Petitioner's submission*

- 5.68 The Petitioner submitted that its actual distribution loss of 3.48% is below the target of 5.75% set by the Hon'ble Commission in Distribution Tariff Regulations, 2010. The Petitioner has further submitted that it is able to attain distribution losses at such a low level because of deployment of extra ordinary resources and efforts. To encourage such extra ordinary efforts, the petitioner requested the Commission to allow sharing of gains for controlling losses as per the prevailing JSERC terms and conditions of Tariff Regulations 2010.

- 5.69 The Petitioner has considered a sharing of 40% of total savings with the consumers and 60% to be added in its revenue requirement. Accordingly, the Petitioner has claimed Rs. 17.71 Crore as its entitlement on account of savings in distribution loss for FY 2014-15.
- 5.70 The Petitioner later as a part of additional submission claimed Rs 11.06 Cr as its entitlement on account of savings in distribution loss for FY 2014-15.
- 5.71 The Petitioner has also claimed efficiency gains on accounts of lower O&M expenditure for FY 2014-15. The Petitioner submitted that it has been able to reduce its O&M Expenditure by various innovative measures such as best management practices and better management of available resources.
- 5.72 Accordingly, the Petitioner has claimed 60% of total savings on account of lower O&M expenditure which is Rs 25.36 Cr for FY 2014-15
- 5.73 Further, The Petitioner has claimed income tax on Licensee's share of gain of Rs 43.07 Cr and accordingly computed income tax as Rs 22.18 Cr.

#### *Commission's Analysis*

- 5.74 Appellate Tribunal of Electricity in its judgement dated February 19, 2016 in Appeal No 203 of 2014, in the matter of loss levels of the Distribution licensee, directed that the loss level considered by the Commission for determination of incentive/penalty should be the normative one and not the actual one and should be strictly in accordance with the relevant provisions of Distribution Regulations, 2010. The relevant provisions of the judgement is reproduced below:

*"18 The State Commission has fixed different percentage of loss level in their Regulations for different licensees considering their respective peculiarities. It is observed that the loss level of Jharkhand State Electricity Board has been fixed at a much higher level considering its specific position since it is catering to domestic & rural areas and the fact that the distribution licensees are not comparable. The loss level fixed in the above regulations is normative. There is no provision in the Regulations providing for adjustment of loss level from normative to the actual one. In the circumstances, the State Commission was required to follow its applicable Regulations and not to have adjusted the normative loss to actual loss. The concern expressed by the State Commission on the Appellant not extending the supply of electricity in various areas including domestic and rural for which the distribution license has been given and that the Appellant maintains the better consumer mix need to be addressed separately in an independent proceeding and the State Commission is at its liberty to act appropriately in accordance with the law. However, the same can not be a ground for not allowing the benefit of incentive to the Appellant on achieving lower loss level as compared to that of normative as per the applicable Regulations."*

*"20 In view of the above, loss level to be considered should be the normative one and not actual and should be strictly in accordance with the relevant provisions contained in the Tariff Regulations, 2010 as notified by the State Commission"*



- 5.75 Thus, in view of above, the Commission allows the sharing of gains on account of lower T&D loss of 4.09% on sales to other consumers achieved by the Petitioner against the target of 5.75% for FY 2014-15. Regulation 5.34 of Distribution Tariff Regulations, 2010, specifies that the aggregate gain is to be shared in the ratio of 60:40 between the licensee and customers; while the aggregate loss is to be borne by the Licensee.
- 5.76 Based on the above methodology, the total savings in power purchase cost due to reduction in T&D losses for FY 2014-15 is Rs 18.45 Cr considering the Average Power Purchase Cost of 4.30 Rs/kWh and energy sales of 2334.78 MUs to other consumers approved in Para 5.26 and 5.11 above. The entitlement of the Petitioner towards savings on account of lower T&D losses is approved as 11.07 Cr for FY 2014-15.
- 5.77 In case of O&M expenses, the Commission observes that the Petitioner has incurred an actual O&M expense of Rs 62.17 Cr as against the revised O&M expenses of Rs 104.43 Cr approved in the Tariff Order dated May 31, 2015.
- 5.78 The aggregate gain on account of savings in O&M expenses is estimated at Rs 42.26 Cr (104.43 – 62.17) for FY 2014-15. The entitlement of the Petitioner towards savings in O&M Cost is approved as 25.36 Cr for FY 2014-15.
- 5.79 However, the Commission has not allowed any income tax savings on above amount since the Power Business Division of the Petitioner has reported a negative Profit before tax (PBT) for FY 2014-15, therefore, the Commission is of the view that income tax paid for other business of the Petitioner cannot be allocated to the licensed business. Further, as discussed in Para 5.59 above, the issue of taxes paid on revenue derived from regulatory assets and extra taxes paid will be considered at the stage when these revenues are realized and not at this stage of the proceedings.

## **Revenue from Existing Tariff**

### *Petitioner's Submission*

- 5.80 The Petitioner submitted the total revenue from sales during FY 2014-15 as Rs 1133.77 Cr. The Petitioner has included the income of Rs 1.38 Cr from fixed charges and meter charges in Revenue from Operations which is in Other Income head of accounts and accordingly submitted total revenue from operations as Rs 1133.77 Cr.

### *Commission's Analysis*

- 5.81 The Commission scrutinised the accounts for verification of revenue from sale of power and approves the total revenue from energy sales as Rs. 1132.40 Crore during FY 2014-15.

## **Summary of ARR for FY 2014-15 and Revenue Gap**

- 5.82 The following table details the ARR as approved in the previous tariff order, actual now submitted by the Petitioner and approved now by the Commission for FY 2014-15.

**Table 22 Summary of True up for FY 2014-15 (Rs Cr)**

Particulars	Approved in MYT	Approved in APR	Petitioner's submission	Approved Now
Power Purchase Cost	1,008.68	1,230.97	1,228.32	1,228.32
O&M Expenses	91.64	104.43	62.17	62.17
Interest & Other Finance Charges				
Interest on Loan	18.01	26.92	27.14	27.34
Interest on consumer security deposit	1.61	1.61	1.17	1.61
Interest on Working Capital	12.13	16.20	12.30	11.58
Depreciation	20.93	27.36	30.03	27.60
<b>Total Costs</b>	<b>1,153.00</b>	<b>1,407.49</b>	<b>1,361.14</b>	<b>1,358.61</b>
Add: Return on Equity including Income Tax	15.82	20.69	32.74	20.88
Less: Non-tariff income	4.06	4.06	4.48	5.86
<b>Annual Revenue Requirement</b>	<b>1,164.76</b>	<b>1,424.12</b>	<b>1,389.39</b>	<b>1,373.64</b>
Add: Sharing of Gains – O&M Expenses			25.36	25.36
Add: Sharing of Gains – Distribution Loss			17.71*	11.07
Add: Income Tax on Sharing of Gains			22.18	-
<b>Net ARR</b>			1454.64	<b>1410.07</b>
Less: Revenue @Existing tariff		1,300.66	1,133.77	1,132.40
<b>Revenue Gap / (Surplus)</b>		<b>123.46</b>	<b>320.87</b>	<b>277.67</b>

\*Submitted as Rs 11.06 Cr as part of additional submission by the Petitioner.

## **A6: ANNUAL PERFORMANCE REVIEW FOR FY 2015-16**

- 6.1 The Petitioner, in its Petition submitted estimates for FY 2015-16 based on actuals for first half (H1) and revised estimates for second half of FY 2015-16.
- 6.2 However, since the APR Petition was filed in December 2015, updated data for FY 2015-16 was now available. The Petitioner has submitted the revised data for FY 2015-16 with the Business Plan and MYT Petition for the Control Period FY 2016-17 to FY 2020-21. Hence, for the purpose of undertaking the Annual Performance Review for FY 2015-16, the Commission has considered the revised values submitted by the Petitioner in the Business Plan and MYT Petition.
- 6.3 Regulation 10.1 to 10.4 of the JSERC Multi Year Distribution Tariff Regulations 2010 specify the principles for annual review of performance of the licensee during the control period:
- “10.1 To ensure smooth implementation of the Multi Year Tariff (MYT) Framework, the Commission may undertake periodic reviews of Licensees’ performance during the Control Period, to address any practical issues, concerns or unexpected outcomes that may arise;*
- 10.2 The Licensee shall submit the Annual Performance Review report as part of annual review on actual performance as per the timelines specified in the Section 12 of these Regulations to assess the performance vis-à-vis the targets approved by the Commission at the beginning of the Control Period. This shall include annual statements of its performance and accounts including latest available audited/actual accounts and the tariff worked out in accordance with these Regulations;*
- 10.3 The Licensee shall also submit the revised Aggregate Revenue Requirement and corresponding tariff adjustments as per the timelines specified in the Section 12 of these Regulations. The revised estimates shall be required to true-up the costs on account of uncontrollable variations, profit sharing mechanism for exceeding the targets, and implementation of performance framework for quality of supply targets;*
- 10.4 The Commission may also specify any modifications to the forecast of the Licensee for the remainder of the Control Period, with detailed reasons for the same.”*
- 6.4 Accordingly based on the principles specified in the aforesaid Regulations and the information made available by the Petitioner, the Commission has analysed all the components of revenue and expenditure for FY 2015-16 and has undertaken the Annual Performance Review exercise of various components after a prudence check.
- 6.5 The component-wise description of the Petitioner’s submission and the Commission’s analysis thereof is provided hereunder.

## Sales Forecast

### *Petitioner's Submission*

- 6.6 The Petitioner has projected the sales for FY 2015-16 as 2921 MU's which also includes 335.22 sales to other licensee/ JUSCO.

### *Commission's Analysis*

- 6.7 The Commission has approved the energy sales for FY 2015-16 based on data submitted by the Petitioner for FY 2015-16. Accordingly, energy sales approved now by the Commission is 2923.68 MU for FY 2015-16. The Commission has revised the sales to other licensee/ JUSCO to 337.95 MU's based on verification with the projections made by JUSCO in its power purchase projections for FY 2015-16.

**Table 23: Category wise Sales for FY 2015-16 ( MU)**

Category	Submitted by the Petitioner in APR Petition	Revised Estimates submitted by the Petitioner	Approved by the Commission
Domestic-LT	221.75	221.75	221.75
Domestic-DSHT	107.81	107.81	107.81
Commercial	73.19	73.19	73.19
Temporary Supply	1.04	4.55	4.55
High Tension I	33.28	33.28	33.28
High Tension II	153.41	153.41	153.41
High Tension III	1,819.99	1,810.00	1,810.00
High Tension IV	91.75	91.75	91.75
Utilities/Street Light	85.36	90.00	90.00
Sale to other Licensee	362.43	335.22	337.95
<b>Total</b>	<b>2,950.00</b>	<b>2,920.96</b>	<b>2,923.68</b>

## Energy Balance

### *Petitioner's Submission*

- 6.8 The Petitioner has submitted the energy sales for FY 2015-16 as 2920.96 MU's and overall distribution loss as 4%. Accordingly, the Petitioner submitted that the energy available from all sources during FY 2015-16 as 3042.66 MU.

### *Commission's Analysis*

- 6.9 The Commission has approved the energy sales of the Petitioner for FY 2015-16 as 2923.68 MU's as discussed in Para 6.7 above.

- 6.10 During FY 2015-16, the Petitioner has projected to procure power from Tata Power Company Ltd (TPCL), Damodar Valley Corporation (DVC), Tata Steel Works - captive (TSW Captive) and variations in demand through short term power procurement for meeting its energy requirement in its licensed area. The Commission has approved the energy available from these sources as per the projections made by the Petitioner. Accordingly, the Commission approves the total energy available during FY 2015-16 at 3045.39 MU.
- 6.11 Based on approved energy sales and energy availability, the approved distribution losses for FY 2015-16 are estimated at 4.00%.
- 6.12 The following table details the energy sales, distribution losses and power purchase as approved by Commission in MYT Order dated June, 2014, Tariff Order dated 31<sup>st</sup> May 2015, estimated submitted by the Petitioner in APR Petition, revised estimates submitted by the Petitioner and approved now by the Commission for FY 2015-16.

**Table 24 Energy Balance approved for FY 2015-16 (MU)**

Particulars	As approved in MYT	Approved in Revised ARR	Petitioner's Submission	Revised Petitioners submission	Approved now
<b>A. ENERGY REQUIREMENT (MUs)</b>					
Sales to Other Licensee	35	173	362.43	335.22	337.95
Dist. Losses on Sales to Other Licensee	0%	0%	0%	0%	0.00%
Units Lost on Sales to Other Licensee	0.00	0.00	0.00	0.00	0.00
Energy Req. for Sales to Other Licensee	35	173	362.43	335.22	337.95
Sales to Steel Works (HT IV)	113	113.00	91.75	91.75	91.75
Dist. Losses on Steel Works	0%	0%	0%	0%	0.00%
Units Lost on Sales to Steel Works	0.00	0.00	0.00	0.00	0.00
Energy Req. for Steel Works	113	113.00	91.75	91.75	91.75
Sale to other consumers					
Sales to LT consumers	416	416.00	381.34	389.49	389.49
Sales to HT consumers	2,340	2,340.00	2114.48	2,104.49	2,104.49
Total Sales to Other Consumers	2,756	2,756.00	2495.82	2,493.98	2,493.98
Dist. Losses on Sales to Other Consumers	5.50%	5.50%	5.82%	4.88%	4.65%
Units Lost on Sales to Other Consumers	160	160	154.34	121.71	121.71
Energy Req. for Sales to Other Consumers	2,916	2,916	2650.16	2,615.69	2,615.69
Overall Sales	2,904	3,042	2950.00	2,920.96	2,923.68
Overall Distribution Losses %	5.27%	5.01%	5%	4.00%	4.00%
Overall Distribution Losses	160	160.40	154.34	121.71	121.71
<b>TOTAL ENERGY REQUIREMENT</b>	<b>3,064</b>	<b>3,203</b>	<b>3104.34</b>	<b>3,042.66</b>	<b>3,045.39</b>
<b>B. ENERGY AVAILABILITY</b>					

Particulars	As approved in MYT	Approved in Revised ARR	Petitioner's Submission	Revised Petitioners submission	Approved now
TPCL (Unit II and Unit III)	1,612	1,612	1,534.30	1,534.30	1,534.30
Damodar Valley Corporation 132kV	438	391	285.00	275.00	275.00
Damodar Valley Corporation 400kV	722	1,005	1250	1,212.49	1,212.49
TSW - Captive	169	25	35.04	20.00	20
RPO	123	170	-	-	-
Open access/ other sources	-	-	-	0.88	3.61
<b>Total Pooled Energy Availability</b>	<b>3,064</b>	<b>3,203</b>	<b>3104.34</b>	<b>3,042.66</b>	<b>3,045.39</b>

## Power Purchase Cost

### *Petitioner's Submission*

- 6.13 The Petitioner has projected the rate of power purchase from different sources based on the revised estimates available for FY 2015-16. The rate of power purchase from Unit 2 and Unit 3 of TPCL has been estimated at Rs. 4.03 per unit and Rs. 4.16 per unit respectively, from DVC 132 kV at Rs. 5.36 per unit, from DVC 400 kV at 4.11 per unit and from TSL Captive at Rs. 4.09 per unit. In addition, Petitioner has submitted rate of power purchase from open access and short term sources at Rs. 3.95 per unit.
- 6.14 The Petitioner has also estimated to procure 168.30 MU of equivalent RECs (both solar & non-solar) at a total cost of Rs 35. 08 Cr to fulfil its RPO for FY 2015-16 along with carry forward of shortfall from FY 2014-15.

### *Commission's Analysis*

- 6.15 The Commission has scrutinised the information submitted by the Petitioner as part of its Petition as well as the actual power purchase bills for FY 2015-16.
- 6.16 For power purchase from TPCL – Unit 2 and Unit 3, the Commission has approved the cost of power purchase at the average rate of power purchase in the actual bills for FY 2015-16. Accordingly, the Commission has approved the rate of power purchase from Unit 2 and Unit 3 of TPCL as Rs 3.95 per unit and Rs 3.94 per unit.
- 6.17 Similarly, the power purchase cost from DVC at 132 kV and DVC 400 kV has been approved at the average rate of power purchase in the actual bills for FY 2015-16
- 6.18 Further, the rate of purchase of power from TSL Captive has been considered at lowest rate of power purchase during the year and the rate of purchase of power from other sources/ open access has been estimated at an average trading price at Indian Energy Exchange for region E1 during FY 2015-16.

- 6.19 The total RPO for FY 2015-16 (including shortfall for FY 2014-15) has been estimated by the Commission as 166 MU (which includes 49 MU towards solar obligation and 117 MU towards non-solar obligation). In view of above, the Commission has estimated the cost of RECs to be purchased at Rs. 34.77 Crore in FY 2015-16 based on the average price of solar and non-solar REC's in the Indian Energy Exchange for FY 2015-16
- 6.20 The following table summarises Power Purchase cost for FY 2014-15 approved by the Commission in the MYT order dated June, 2014, the revised estimates approved by the Commission in the Tariff Order dated May 31, 2015, estimates submitted by the Petitioner in APR Petition, the actual Power Purchase Cost submitted by the Petitioner in the Business Plan petition and now approved by the Commission for FY 2015-16:

**Table 25 Power Purchase Cost approved for FY 2015-16 (Rs Cr)**

Sl. No.	Particulars	Approved in MYT	Approved in Revised ARR	Petitioner's submission	Revised Petitioner's submission	Approved Now
<b>A</b>	<b>Tata Power Co. Ltd. - Regulated</b>					
	Units Purchased (MU's)					
	Unit II	806	806	784.30	784.30	784.30
	Unit III	806	806	750.00	750.00	750.00
	<b>Total</b>	<b>1,612</b>	<b>1,612</b>	<b>1,534.30</b>	<b>1,534.30</b>	<b>1,534.30</b>
	Per Unit Price (Rs. / kWh)			4.09	4.09	3.95
	Unit II	2.94	3.76	4.03	4.03	3.95
	Unit III	2.86	3.80	4.16	4.16	3.94
	<b>Power Purchase Cost (Rs. Crs) *</b>					
	Unit II	236.75	302.86	315.97	315.97	310.08
	Unit III	230.25	306.00	312.11	312.11	295.38
	<b>Total</b>	<b>467.00</b>	<b>608.86</b>	<b>628.08</b>	<b>628.08</b>	<b>605.46</b>
<b>B</b>	<b>Damodar Valley Corporation - 132 kV</b>					
	Units Purchased (MU's)	438	391	285.00	275.00	275.00
	Per Unit Price (Rs. / kWh)	4.06	4.18	5.17	5.36	5.10
	<b>Power Purchase Cost (Rs. Crs)</b>	<b>177.98</b>	<b>163.47</b>	<b>147.48</b>	<b>147.48</b>	<b>140.13</b>
<b>C</b>	<b>Damodar Valley Corporation - 400 kV</b>					
	Units Purchased (MU's)	722	1,005	1250.00	1,212.49	1,212.49
	Per Unit Price (Rs. / kWh)	4.96	4.57	4.08	4.11	4.02

Sl. No.	Particulars	Approved in MYT	Approved in Revised ARR	Petitioner's submission	Revised Petitioner's submission	Approved Now
D	<b>Power Purchase Cost (Rs. Crs)</b>	358.28	459.35	510.14	497.73	487.83
	<b>TSL Captive</b>					
	Units Purchased (MU's)	169	25	35.04	20.00	20.00
	Per Unit Price (Rs. / kWh)	2.76	3.78	4.09	4.09	3.95
E	<b>Power Purchase Cost (Rs. Crs)</b>	<b>48.83</b>	<b>9.44</b>	<b>14.34</b>	<b>8.18</b>	<b>7.89</b>
	<b>RPO</b>					
	RECs purchased (MU's)	122.56	169.79	-	-	-
	Power Purchase Cost (Rs. Crs)	<b>55.09</b>	<b>74.83</b>	<b>35.17</b>	<b>35.08</b>	<b>34.77</b>
F						
	<b>Other Sources/Open Access</b>					
	Units Purchased (MU's)	-	-	1	0.88	3.61
	Per Unit Price (Rs. / kWh)	-	-	3.93	3.95	2.47
	<b>Power Purchase Cost (Rs. Crs)</b>	-	-	<b>0.35</b>	<b>0.35</b>	<b>0.89</b>
G						
	<b>Net Power Purchase</b>					
	Units Purchased (MU's)	2,941.00	3,202.50	3105.34	3,042.66	3,045.39
	Per Unit Price (Rs. / kWh)	3.76	4.11	4.30	4.33	4.19
	<b>Net Power Purchase Cost (Rs. Crs)</b>	<b>1,107.18</b>	<b>1,315.95</b>	<b>1335.21</b>	<b>1,316.90</b>	<b>1,276.98</b>

## Operation and Maintenance Expenses

### *Petitioner's Submission*

- 6.21 The Petitioner has submitted separate projections for O&M cost comprising of employee costs, A&G costs and R&M costs based on the guidelines prescribed in the Distribution Tariff Regulations, 2010.



- 6.22 The Petitioner submitted that the inflation figures for WPI and CPI for FY 2014-15 have been considered to project Employee and A&G Expenses. Further, the Petitioner has also claimed additional employee expenses on account of addition in manpower and Wage revision of supervisors and workers which has been finalized and signed in August 2015. Also, onetime payment of Rs 4.30 Cr has been claimed for payment of arrears of wages for the last 4 years. Accordingly, the Petitioner has claimed revised cost of Rs 27.75 Crore for employee expenses and Rs 20.87 Crore for A&G costs during FY 2015-16.
- 6.23 The Petitioner has estimated the R&M expenses at Rs 30.28 Crore for FY 2015-16. Thus, the total O&M expenses as submitted by the Petitioner for FY 2015-16 is Rs 78.90 Crore.
- 6.24 In addition to above, the Petitioner has also claimed 0.30 Cr on CGRF Expenses for FY 2015-16 under a separate head. However, since these expenses form a part of A&G costs, it has been considered as a part of O&M costs

#### *Commission's Analysis*

- 6.25 Note 1 under Regulation 6.8 of the Distribution Tariff Regulations, 2010 specifies that the Commission will consider the actual values in the inflation factor at the end of each year during the Annual Performance Review exercise and true up the employee cost and A&G expenses on account of this variation for the Control Period.
- 6.26 Accordingly, as per the provisions of the Distribution Tariff Regulations 2010 and the methodology followed by the Commission in the previous Tariff Orders, the Commission has revised the projections for employee expenses, A&G expenses on the basis of actual value of inflation factor for FY 2015-16 only. The Commission has disallowed the increase in employee cost on account of wage agreement since the provisions of Distribution Tariff Regulations, 2010 allows increase in employee expenses by applying the weighted average inflation rate only and any increase in wages of the workers and the supervisors through wage agreement are not allowed separately.
- 6.27 Accordingly, the employee expenses and A&G expenses including CGRF/DSM Expenses approved by the Commission is Rs 19.18 Cr and Rs 20.39 Cr respectively.
- 6.28 For purpose of projecting R&M expenses, the Commission has considered the actual opening value of Gross Fixed Assets for FY 2015-16 and the 'K' factor as per the MYT Order dated 4<sup>th</sup> June 2014.
- 6.29 With regards to CGRF Expenses in FY 2015-16, since these expenses form part of A&G costs, the Commission has considered them as a part of O&M Expenses.
- 6.30 The following table summarises the O&M expenses as approved by the Commission in the MYT order dated June , 2014, O&M expenses as approved by the Commission in the Tariff order dated May 31, 2015, estimates submitted by the Petitioner in APR Petition, the actual O&M expenses submitted by the Petitioner in the present petition and now approved by the Commission for FY 2015-16:

**Table 26 O&M expenses for FY 2015-16 approved by the Commission (Rs Cr)**

Particulars	Approved in the MYT	Approved in Revised ARR	Submitted by the Petitioner	Revised Estimates Submitted by TSL	Approved Now
Employee Expenses	19.38	18.28	20.31	27.75	19.18
R&M Expenses	61.42	73.65	65.52	30.28	65.52
A&G Expenses	16.31	15.29	21.60	20.87	20.39*
CGRF Expenses	-	-	-	<b>0.30</b>	
<b>Total O &amp; M Expenses</b>	<b>97.11</b>	<b>107.22</b>	<b>107.43</b>	<b>79.20</b>	<b>105.09</b>

\*Includes 0.30 Cr of CGRF Expenses for FY 2015-16 submitted by the Petitioner.

### Capital Works In Progress (CWIP) & Gross Fixed Asset (GFA)

#### *Petitioner's Submission*

- 6.31 The Petitioner has proposed a reduction in capital expenditure and capitalisation for FY 2015-16 in comparison to approved in Tariff Order dated 31 May 2015. Accordingly, Petitioner has projected capital expenditure during the year at Rs 8.85 Cr and additions to GFA at Rs 16.34 Cr.

#### *Commission's Analysis*

- 6.32 Note 1 under Regulation 6.16 of the Distribution Tariff Regulations, 2010 provides for re-look at the capitalisation on account of deferment in actual capitalisation falling within the original scope of work and same can be serviced in the normative debt-equity ratio.
- 6.33 The Commission has approved the GFA, CWIP and capital expenditure projected for FY 2015-16 in line with the revised estimates submitted by the Petitioner.
- 6.34 The following table summarises the GFA & CWIP as approved by the Commission in the MYT Order dated June, 2014, GFA & CWIP as approved by the Commission in the Tariff Order dated 31<sup>st</sup> May 2015, estimates submitted by the Petitioner in the APR Petition, the revised estimates submitted by the Petitioner in present petition and now approved by the Commission for FY 2015-16.

**Table 27 CWIP and GFA for FY 2015-16 approved by the Commission ( Rs Cr)**

Particulars	Approved in the MYT order	Approved in Revised ARR	Submitted by the Petitioner	Revised Estimates Submitted by the Petitioner	Approved Now
<b>Capital Works in Progress ( CWIP)</b>					
Opening CWIP	39.24	18.99	12.87	12.87	12.87
Add: Additions (Capex during FY)	25.49	25.49	10.89	8.85	8.85
<b>Sub-total</b>	<b>64.73</b>	<b>44.48</b>	<b>23.76</b>	<b>21.72</b>	<b>21.72</b>

Particulars	Approved in the MYT order	Approved in Revised ARR	Submitted by the Petitioner	Revised Estimates Submitted by the Petitioner	Approved Now
Less: Capitalization (T/fed to GFA during FY)	19.42	19.42	11.77	16.34	16.34
Closing CWIP	<b>45.31</b>	<b>25.06</b>	<b>11.99</b>	<b>5.38</b>	<b>5.38</b>
Gross Fixed Assets(GFA)					
Opening GFA	395.14	493.76	503.99	503.99	503.99
Add: Additions during FY	19.42	19.42	11.77	16.34	16.34
Closing GFA	<b>414.56</b>	<b>513.18</b>	<b>515.75</b>	<b>520.33</b>	<b>520.33</b>

## Depreciation

### *Petitioner's Submission*

- 6.35 The Petitioner submitted that it has computed depreciation by applying the rates as provided in Appendix I to the JSERC MYT Distribution Tariff Regulations 2010 as per the Straight Line Method (SLM) on projected GFA. Further, the depreciation cost proportionate to the extent of fixed assets being funded through Consumer Contribution have been deducted from the total depreciation in order to arrive at the net depreciation allowable to be charged in the ARR. The Petitioner has claimed net depreciation of Rs 29.62 Cr for FY 2015-16.

### *Commission's Analysis*

- 6.36 The Commission has determined the gross depreciation amount as per the opening and closing values of Gross Fixed Assets and the depreciation rates as per the JSERC MYT Distribution Tariff Regulations 2010. Further, the depreciation has been considered as net of depreciation on account of consumer contribution. The depreciation on account of consumer contribution has been calculated as per the methodology adopted in the Tariff Order dated 31<sup>st</sup> May 2015.
- 6.37 The following table summarizes the depreciation as approved by the Commission in the MYT Order dated June, 2014, depreciation as approved by the Commission in the Tariff Order dated 31<sup>st</sup> May 2015, estimates submitted by the Petitioner in APR Petition, revised estimates submitted by the Petitioner and approved by the Commission for review of FY 2015-16.

**Table 28 Depreciation for FY 2015-16 (Rs Cr)**

Particulars	Approved in the MYT order	Approved in Revised ARR	Submitted by the Petitioner	Revised Estimates Submitted by the Petitioner	Approved Now
Depreciation during the year	25.00	31.09	32.64	33.02	31.62
Less: Dep. on A/c of CC	3.24	3.16	3.29	3.40	3.17
Net Depreciation during the year	<b>21.76</b>	<b>27.93</b>	<b>29.35</b>	<b>29.62</b>	<b>28.46</b>

## Interest and Other Finance Charges

### Interest on Loan

#### *Petitioner's Submission*

- 6.38 The Petitioner has projected the normative interest on loan at Rs. 24.02 Cr for FY 2015-16 considering the rate of interest of 14.75% per annum on the basis of the methodology prescribed by the Commission in Distribution Tariff Regulations, 2010.

#### *Commission's Analysis*

- 6.39 In accordance with the Distribution Tariff Regulations, 2010 and the principles adopted in the previous tariff order, the Commission has computed the normative loan for the year equal to 70% of the closing value of GFA. The GFA has been considered net of consumer contribution while the normative repayment is deemed to be equal to the depreciation charge during the year.
- 6.40 Further, in accordance with the above mentioned regulations, interest on normative loan has been calculated on the average normative loan outstanding during the year at the interest rate of 14.75% p.a. for FY 2015-16.
- 6.41 The following table summarises interest on loan as approved by the Commission in the MYT order dated June, 2014, interest on loan as approved by the Commission in the Tariff Order dated 31<sup>st</sup> May, 2015, estimates submitted by the Petitioner in APR Petition, revised estimates submitted by the Petitioner and approved by the Commission for FY 2015-16.

**Table 29 Interest on loan for FY 2015-16 approved by the Commission (Rs Cr)**

Particulars	Approved in the MYT order	Approved in Revised ARR	Submitted by the Petitioner	Revised Estimates Submitted by the Petitioner	Approved now
Opening Balance of Normative Loan	115.98	169.89	172.49	172.49	175.59
Deemed Addition during the year	10.18	10.28	6.21	10.28	9.34
Deemed Repayments	21.76	27.93	29.35	29.62	28.46
Closing Balance of Deemed Loan	104.40	152.24	149.35	153.16	156.47
Average balance during the Year	<b>110.19</b>	<b>161.06</b>	<b>160.92</b>	<b>162.83</b>	<b>166.03</b>
Interest Rate (%)	14.75%	14.75%	14.75%	14.75%	14.75%
Interest Payment	<b>16.25</b>	<b>23.76</b>	<b>23.74</b>	<b>24.02</b>	<b>24.49</b>

## Interest on Security Deposits

### *Petitioner's Submission*

- 6.42 The Petitioner has projected the interest on security deposits at interest rate of 9.30% p.a. and accordingly estimated the interest on security deposit at Rs.1.37 Cr. for FY 2015-16.

### *Commission's Analysis*

- 6.43 Regulation 5.28 read with Regulation 11.3 of the Distribution Tariff Regulations, 2010 specifies that interest on security deposit is a controllable element of the ARR and any truing up under this head shall be carried out at end of control period. Accordingly the Commission has approved interest on security deposit as per MYT Order dated June, 2014.
- 6.44 The following table summarizes interest on security deposits as approved in MYT order, interest on security deposits as approved in Tariff Order dated 31<sup>st</sup> May 2015, estimates submitted by the Petitioner in APR Petition, revised Petitioner's submission and approved now by the Commission for FY 2015-16.

**Table 30 Interest on Security Deposits for FY 2015-16 ( Rs Cr)**

Particulars	Approved in the MYT order	Approved in Revised ARR	Submitted by the Petitioner	Revised Estimates Submitted by the Petitioner	Approved now
Interest on Security Deposit	1.98	1.98	1.32	1.37	1.98

## Interest on Working Capital

### *Petitioner's Submission*

- 6.45 The Petitioner submitted that interest on working capital has been projected on the basis of the methodology specified in the Distribution Tariff Regulations, 2010. Accordingly, the normative interest on working capital projected by Petitioner for FY 2015-16 is Rs 21.02 Crore.

### *Commission's Analysis*

- 6.46 The Commission has approved the normative working capital for FY 2015-16 on the basis of the methodology specified in the Distribution Tariff Regulations, 2010. The interest on normative working capital has been considered at the interest rate of 14.75% per annum. The following table summarises the total interest on working capital as approved in the MYT Order dated June, 2014, interest on working capital as approved in the Tariff Order dated 31<sup>st</sup> May,2015, estimates submitted by the Petitioner in APR Petition, revised Petitioners submission and approval by the Commission for FY 2015-16:

**Table 31 Interest on Working Capital approved for FY 2015-16**

Particulars	Approved in the MYT order	Approved in Revised ARR	Submitted by the Petitioner	Revised Estimates Submitted by the Petitioner	Approved Now
Receivables for 2 months' sale @ existing tariff	184.41	232.78	247.76	253.85	244.63
O&M expenses for 1 month	8.09	8.93	8.95	6.58	8.76
Maintenance spares @ 1% of Op. GFA	3.95	4.94	5.04	5.04	5.04
<b>Sub-total</b>	<b>196.45</b>	<b>246.65</b>	<b>261.75</b>	<b>265.47</b>	<b>258.43</b>
Less: Security deposit	22.02	22.02	14.72	13.23	22.02
Less: Power purchase cost for 1 month	92.27	109.66	111.30	109.74	106.41
<b>Total Working Capital</b>	<b>82.16</b>	<b>114.97</b>	<b>135.73</b>	<b>142.49</b>	<b>129.99</b>
Interest Rate (%)	14.75%	14.75%	14.75%	14.75%	14.75%
<b>Interest on Working Capital</b>	<b>12.12</b>	<b>16.96</b>	<b>20.02</b>	<b>21.02</b>	<b>19.17</b>

## Return on Equity (RoE)

### *Petitioner's Submission*

- 6.47 The Petitioner submitted that, the normative equity had been considered at 30% of the total capitalisation projected during the FY 2015-16 net of Consumer Contribution being transferred to Capital Reserve. Accordingly, The Petitioner has submitted that it has projected Return in Equity at Rs 22.12 Cr for FY 2015-16.

### *Commission's Analysis*

- 6.48 In accordance with the Distribution Tariff Regulations, 2010, the Commission has considered the equity base to be equal to 30% of GFA. The GFA has been considered net of consumer contribution.
- 6.49 The Commission has allowed a rate of return of 15.5% (post tax) on equity for FY 2015-16, which is as per Regulation 6.21 of the above mentioned regulations.
- 6.50 The following table summarizes the return on equity as approved in the MYT Tariff Order dated June, 2014, return on equity approved in the Tariff Order dated 31<sup>st</sup> May 2015, estimates submitted by the Petitioner in APR Petition, revised estimates now submitted by the Petitioner and approved by the Commission for FY 2015-16.

**Table 32 RoE approved by the Commission FY 2015-16 ( Rs Cr)**

Particulars	Approved in the MYT order	Approved in Revised ARR	Submitted by the Petitioner	Revised Estimates Submitted by the Petitioner	Approved Now
Opening Balance of Normative Equity	103.91	133.46	140.50	140.50	136.46
Deemed Additions	4.36	4.86	2.66	4.41	4.00
Closing Balance of Normative Equity	108.27	138.32	143.16	144.90	140.47
Average Equity	<b>106.09</b>	<b>135.89</b>	141.83	142.70	<b>138.47</b>
RoE (%)	15.50%	15.50%	15.50%	15.50%	15.50%
RoE	<b>16.44</b>	<b>21.06</b>	<b>21.98</b>	<b>22.12</b>	<b>21.46</b>

### Non-Tariff Income (NTI)

#### *Petitioner's Submission*

6.51 The Petitioner has considered Non-tariff income for FY 2015-16 at Rs. 5. Cr.

#### *Commission's Analysis*

6.52 The Commission has approved NTI as per the approval granted in its MYT Order dated June, 2014 as Rs 4.37 Cr subject to true-up based on audited annual accounts for FY 2015-16.

### Income Tax on ROE

#### *Petitioner's Submission*

6.53 The Petitioner submitted that since there were losses in the Annual Accounts from FY 2010-11 to FY 2014-15, the Commission has disallowed Income Tax on ROE Amount. However, from FY 2015-16, it has started earning profits and has a Profit before Tax (PBT) of Rs 65.76 Cr. The Petitioner further stated that the total ROE amount on which no Income Tax has been allowed from FY 2010-11 to FY 2014-15 is Rs 87.53 Cr. Since, PBT of FY 2015-16 is only Rs 65.76 Cr, the Petitioner has requested the Commission to gross up Rs 65.76 Cr to the Income Tax rate of FY 2015-16. Accordingly, the Petitioner has claimed Rs 33.86 Cr as Income Tax on ROE.

#### *Commission's Analysis*

6.54 The Power Business Division of the Petitioner as per the audited accounts for FY 2014-15 has reported a negative profit before tax (PBT). Hence, the Commission is of the view that there is no income tax chargeable to the power business division of the Petitioner and has disallowed grossing up of estimated PBT of FY 2015-16 by the income tax rate. However, this is subject to true up based on audited accounts for FY 2015-16.

## Revenue from Existing Tariff

### *Petitioner's Submission*

6.55 The Petitioner submitted the total revenue from sales during FY 2015-16 at Rs 1466.65 Crore.

### *Commission's Analysis*

6.56 The Commission has projected revenue from existing tariff for FY 2015-16 based on projected number of consumers, connected load and energy sales as approved for FY 2015-16 now and the tariff rates as approved in MYT Order dated June 2014 for 2 months (April'2015 and May '2015) and tariff rates as approved in the Tariff Order dated 31<sup>st</sup> May 2015. In case of revenue from sale of power to JUSCO, the Commission has considered revenue at average power purchase rate for FY 2015-16 i.e. Rs. 4.19 per unit. Accordingly, the Commission approved the total revenue from sale of power in FY 2015-16 as Rs. 1467.79 Crore.

## Summary of ARR for FY 2015-16 and Revenue Gap

6.57 The following table details the ARR for FY 2015-16 as approved in the MYT Order dated June , 2014, ARR as approved in the Tariff Order dated 31<sup>st</sup> May 2015, estimates submitted by the Petitioner in APR Petition, projections submitted by the Petitioner now and approved now by the Commission:

**Table 33 Summary of ARR and Revenue Gap for FY 2015-16 ( Rs Cr)**

Particulars	Approved in MYT Order	Approved in Revised ARR	Petitioner's submission	Revised Estimates submitted by the Petitioner	Approved Now
Power Purchase Cost	1,107.18	1,315.95	1335.56	1,316.90	1,276.98
O&M Expenses	97.11	107.22	107.43	78.90	105.09*
Interest & Other Finance Charges					
Interest on Loan	16.25	23.76	23.74	24.02	24.49
Interest on consumer security deposit	1.98	1.98	1.32	1.37	1.98
Interest on Working Capital	12.12	16.96	20.02	21.02	19.17
Depreciation	21.76	27.93	29.35	29.62	28.46
CGRF Expenses			-	0.30	-
<b>Total Costs</b>	<b>1,256.40</b>	<b>1,493.79</b>	<b>1517.42</b>	<b>1,472.13</b>	<b>1,456.17</b>
Add: Return on Equity	16.44	21.06	21.98	22.12	21.46
Less: Non-tariff income	4.37	4.37	5.86	5.00	4.37
Add: Income Tax on ROE			11.32	33.86	-
<b>Annual Revenue Requirement</b>	<b>1,268.47</b>	<b>1,510.49</b>	<b>1544.87</b>	<b>1,523.10</b>	<b>1,473.26</b>
Revenue @Existing tariff		1,396.68	1486.54	1466.65	1,467.79
<b>Revenue Gap / (Surplus)</b>		<b>113.81</b>	<b>58.33</b>	<b>56.46</b>	<b>5.46</b>

\*O&M Expenses are inclusive of CGRF expenses of Rs 0.30 Cr.



## **A7: BUSINESS PLAN FOR MYT PERIOD FROM FY 2016-17 TO FY 2020-21**

- 7.1 The Petitioner filed its Business Plan for the MYT Control Period FY 2016-17 to FY 2020-21 in line with the Distribution Tariff Regulations, 2015. The relevant extract of the Regulations is as under:

*“5.8 The business plan shall be for the entire Control Period and shall inter-alia contain;*

*a) Capital Investment Plan for the entire Control Period commensurate with load growth, distribution loss reduction trajectory and quality improvement measures proposed in the Business Plan;*

*b) Sales/Demand Forecast for each customer category and sub-categories for each year of the Control Period;*

*c) Power Procurement Plan based on the sales forecast and distribution loss trajectory for each year of the Control Period. The power procurement plan should also include energy efficiency and demand side management measures;*

*d) A set of targets proposed for other controllable items such as distribution losses, collection efficiency, working capital requirement, quality of supply targets, etc. The targets shall be consistent with the capital investment plan proposed by the Licensee;*

*e) Business Plan shall also contain the requisite information for the preceding five years. Provided that requisite information shall include year wise audited data on Scheme wise capital investment, distribution loss trajectory, quality improvement measures undertaken, category wise number of consumers, connected load and sales, source wise power procurement quantum and cost and any other information used for preparing projections of various components during the control period. In case of a new licensee such information is required to be submitted for the period of operations up to the start of the control period.”*

- 7.2 Accordingly, the Commission has approved the Business plan for the 2<sup>nd</sup> MYT control period from FY 2016-17 to FY 2020-21 in line with the relevant Regulations mentioned above containing approval for the load/sales growth, loss trajectory, power procurement plan, expected capital investment and collection efficiency targets.

- 7.3 However, the Commission has not set any target for working capital requirement in the Business Plan as per Regulation 5.8 (d) of above-mentioned regulations. This is because the methodology for computing the working capital requirements would include determination of ARR for the entire MYT control period from FY 2016-17 to FY 2020-21. The relevant provision of the Distribution Tariff Regulations, 2015 regarding working capital has been reproduced below:

*“6.29 Working Capital for the wheeling business of electricity for the Control Period shall consist of*

*(a) One-twelfth of the amount of Operation and Maintenance expenses for wheeling business*

*for such financial year; plus*

*(b) Maintenance spares at 1% of Opening GFA of wheeling business; plus*

*(c) Two months equivalent of the expected revenue from wheeling charges at the prevailing tariffs; minus*

*(d) Amount, if any, held as security deposits.*

*6.30 Working Capital for the retail supply of electricity for the Control Period shall consist of:*

*(a) One-twelfth of the amount of Operation and Maintenance expenses for retail supply business for such financial year; plus*

*(b) Maintenance spares at 1% of Opening GFA for retail supply business; plus*

*(c) Two months equivalent of the expected revenue from sale of electricity at the prevailing tariffs; minus*

*(d) Amount held as security deposits under clause (a) and clause (b) of subsection (1) of Section 47 of the Act from consumers and Distribution System Users net of any security held for wheeling business; minus*

*(e) One month equivalent of cost of power purchased, based on the annual power procurement plan.”*

7.4 As the above components would be determined as part of the ARR and Tariff for the entire control period, the targets for working capital for the MYT period from FY 2016-17 to FY 2020-21 would be approved by the Commission in its section for approval of ARR for the 2nd MYT period from FY 2016-17 to FY 2020-21 and Tariff for FY 2016-17.

7.5 The component-wise description of the Petitioner’s submission and the Commission’s analysis thereof is provided hereunder.

## **Capital Investment Plan**

### *Petitioner’s Submission*

7.6 The Petitioner for the MYT Period FY 2016-17 to FY 2020-21 has proposed to undertake new capital expenditure schemes which are broadly classified into:

- a) Augmentation of Power Supply
- b) Installation of SCADA
- c) Installation and Upgradation of Power Transformers
- d) New Substations
- e) Renovation of sub stations

7.7 The brief of the schemes as proposed by the Petitioner is as follows:

- 1) **Articulated Boom Lifter for safe working at height in 400kV Bulk Power receiving substation:** The Petitioner has proposed this scheme to enable yard maintenance of equipment in 400kV BPRS substation which are at a significant height. The Petitioner has proposed an expenditure of 1 Cr in FY 2016-17 on this scheme
- 2) **Infrastructure Development at BPRS for 33kV Power Supply Enhancement of Telco Area Substation:** The Petitioner submitted that the transformers in existing 2\*10 MVA 33/6.6 kV Telco Area substation are old and have outlived their useful life. Hence, replacement of this equipment is required. Further, the additional power demand projected for future is proposed to be received from the 400kV BPRS substation. Therefore, it is proposed to load the tertiary winding of the 315 MVA transformers at BPRS and set up a new 33/6.6 kV substation at Ramdin Bagan Area near existing substation since there is a space constraint in the existing substation
- 3) **Upgradation of TinPlate Area Substation:** The Petitioner has proposed to install a new 2\*20 MVA, 33/6.6 kV substation in nearby area to meet the additional load demand in the areas from the Tinplate Area Substation since the existing transformers are old and have outlived their useful life and would not be able to meet the additional demand which would lead to load shedding.
- 4) **Alternate Power Supply arrangement for 132 kV Line 6/Sonari:** 132kV Line 6 currently serves major part of town load and industrial load e.g Tata Blue Scope, CRM Plant etc. The line is 14km long and is connected with 4 nos 56 MVA, 132/33kV transformers and there is no alternate arrangement to manage load distribution in case of breakdown of this line. The Petitioner has proposed to make an alternate arrangement for 132kV power by utilizing the existing dummy circuit in 132kV tower. The dummy circuit will be connected by extension of existing 132 kV GIS bus at MPDS- 4 inside Tata Steel and will be terminated by extension of 132 kV outdoor bus at Sonari. Hence, in case of failure of 132kV Line, power supply can be restored.
- 5) **33kV substation at northern town:** The petitioner has proposed to install new 2\*20 MVA , 33/6.6 kV substation near the CH Area substation which feeds the northern town since both the transformers in CH Area substation have reached 90% capacity. Hence, in case of failure of any one transformer, there would be power outages in the served areas. Further, additional demand of 3-4 MVA has also not been sanctioned due to constraint in capacity. Due to space constraints in the existing substation, the petitioner has proposed to install a new substation in nearby location.
- 6) **6.6 kV network extension for Power Supply in fringe areas:** The Petitioner has proposed to create a 6.6 kV ring main system including 1 MVA, 6.6kV/415 V compact substation in unserved areas like Uliyan, Ramnagar, Shastri Nagar, Bagun Nagar etc. to provide power supply to LT consumers.

### *Commission's Analysis*

- 7.8 The Commission has scrutinized the capital expenditure plan submitted by the Petitioner and had asked the Petitioner to submit the board approvals for the proposed schemes for the MYT Period. However, even after repeated reminders, the Petitioner has only been able to provide Board Approvals for two schemes namely Construction of 33kV substation at norther town and Compact Crawler Articulating Boom Lifter for Rs 24.17 Cr and Rs 1 Cr respectively.
- 7.9 **In absence of the board approvals, the Commission only provisionally approves the capital expenditure scheme proposed by the Petitioner.** Further, the Petitioner is directed to submit the board approvals for the proposed schemes within 3 months of issue of this Tariff Order.
- 7.10 The Commission further observes that, historically, the Petitioner has been unable to capitalize its capital expenditure as per projections submitted with the ARR & Tariff Petitions. Hence, for the schemes which have not been approved by the Board yet, the Commission has considered any new capital expenditure to be capitalized in the ratio of 50:30:20 in the first, second and third year, on the basis of historical trends.
- 7.11 Capitalization for Construction of 33kV substation at norther town has been spread over two years i.e FY 2017-18 and FY 2018-19 and capitalization for the Compact Crawler Articulating Boom Lifter has been approved as submitted by the Petitioner.
- 7.12 The scheme wise capital expenditure and capitalization as submitted by the Petitioner for and as approved by the Commission is tabulated below:

**Table 34 Scheme Wise Capital Expenditure Plan for MYT Control Period submitted by the Petitioner (Cr)**

Particulars	Submitted By Petitioner					
Summary of Capital Expenditure	Total Project Cost	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Articulated boom lifter for safe working at height in 400 kV Bulk Power receiving substation.	1.00	1.00				
Infrastructure development at BPRS for 33 KV Power Supply & Enhancement of Telco Area Substation	58			10.00	30.00	18.00
Upgradation of Tinplate Area Substation	17.50				2.00	2.50
Alternate power supply arrangement for 132 kV Line 6 for Bara / Sonari Substation	20.00			5.00	5.00	10.00
33 KV Substation at northern town	24.17*	19.07	2.00			

Particulars	Submitted By Petitioner					
Summary of Capital Expenditure	Total Project Cost	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
6.6 kV Network Extension for power supply in fringe areas	8.00	1.00	1.00	2.00	2.00	2.00
Strengthening of Testing facilities	2.00			1.00	1.00	
Other assets to provide consumer connection from consumers (self-financing)	10.00	2.00	2.00	2.00	2.00	2.00
<b>Total</b>	<b>140.67</b>	<b>23.07</b>	<b>5.00</b>	<b>20.00</b>	<b>42.00</b>	<b>34.50</b>

*\*The Petitioner has submitted that 3.10 Cr of Capital expenditure on this scheme has already been incurred in FY 2015-16*

**Table 35 Scheme Wise Capitalization for MYT Control Period submitted by the Petitioner (Cr)**

Particulars	Submitted By Petitioner					
Summary of Capital Expenditure	Total Capitalizat	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Articulated boom lifter for safe working at height in 400 kV Bulk Power receiving substation.	1.00	1.00				
Infrastructure development at BPRS for 33 KV Power Supply & Enhancement of Telco Area Substation	58.00			5.00	20.00	33.00
Upgradation of Tinsplate Area Substation	4.50				1.00	3.50
Alternate power supply arrangement for 132 kV Line 6 for Bara / Sonari Substation	20.00			5.00	5.00	10.00
33 KV Substation at northern town	24.17		24.17			
6.6 kV Network Extension for power supply in fringe areas	8.00	1.00	1.00	2.00	2.00	2.00
Other assets to provide consumer connection from consumers (self-financing scheme)	10	2.00	2.00	2.00	2.00	2.00
Strengthening of Testing facilities	2.00			1.00	1.00	
<b>Total</b>	<b>127.67</b>	<b>4.00</b>	<b>27.17</b>	<b>15.00</b>	<b>31.00</b>	<b>50.50</b>

**Table 36 Scheme Wise Capital Expenditure Plan for MYT Control Period approved by the Commission (Cr)**

Particulars	Approved by the Commission					
Summary of Capital Expenditure	Total Project	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Articulated boom lifter for safe working at height in 400 kV Bulk Power receiving substation.	1.00	1.00				
Infrastructure development at BPRS for 33 KV Power Supply & Enhancement of Telco Area Substation	58			10.00	30.00	18.00
Upgradation of Tinplate Area Substation	17.50				2.00	2.50
Alternate power supply arrangement for 132 kV Line 6 for Bara / Sonari Substation	20.00			5.00	5.00	10.00
33 KV Substation at northern town	24.17*	19.07	2.00			
6.6 kV Network Extension for power supply in fringe areas	8.00	1.00	1.00	2.00	2.00	2.00
Strengthening of Testing facilities	2.00			1.00	1.00	
Other assets to provide consumer connection from consumers (self-financing	10.00	2.00	2.00	2.00	2.00	2.00
<b>Total</b>	<b>140.67</b>	<b>23.07</b>	<b>5.00</b>	<b>20.00</b>	<b>42.00</b>	<b>34.50</b>

\*The Petitioner has submitted that 3.10 Cr of Capital expenditure on this scheme has already been incurred in FY 2015-16

**Table 37 Scheme Wise Capitalization for MYT Control Period approved by the Commission (Cr)**

Particulars	Approved by the Commission				
Summary of Capital Expenditure	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Articulated boom lifter for safe working at height in 400 kV Bulk Power receiving substation.	1.00				
Infrastructure development at BPRS for 33 KV Power Supply & Enhancement of Telco Area Substation			5.00	18.00	20.00
Upgradation of Tinplate Area Substation				1.00	1.85
Alternate power supply arrangement for 132 kV Line 6 for Bara / Sonari Substation			2.50	4.00	7.50
33 KV Substation at northern town		12.09	12.09		
6.6 kV Network Extension for power supply in fringe areas	0.50	0.80	1.50	1.80	2.00
Other assets to provide consumer connection from consumers (self-financing scheme)	2.00	2.00	2.00	2.00	2.00
Strengthening of Testing facilities			0.50	0.80	0.50
<b>Total</b>	<b>3.50</b>	<b>14.89</b>	<b>23.59</b>	<b>27.60</b>	<b>33.85</b>

## Distribution Loss Trajectory

### *Petitioner's Submission*

- 7.13 The Petitioner has submitted a uniform loss trajectory of 4% during the Control Period FY 2016-17 to FY 2020-21 on the basis of current loss position of the licensee.

### *Commission's Analysis*

- 7.14 The Commission for the purpose of projections for the MYT Period FY 2016-17 to FY 2020-21 approves the distribution loss trajectory of 4% on sales to other consumers.

## Demand and Sales Forecast

### *Petitioner's Submission*

- 7.15 For the MYT Control Period FY 2016-17 to FY 2020-21, the Petitioner has projected the number of consumers, connected load and no of consumers on the basis of historical trends and specific information available to the Petitioner.
- 7.16 The projections for sales to retail consumers has been done based on the actual trend of increase in sales over the past years adjusted with specific information available to TSL while for bulk and HT consumers, sales and demand assessment has been done mostly on specific information available to TSL.

### *Commission's Analysis*

- 7.17 In order to project the overall energy sales, connected load and no of consumers for the MYT Control Period FY 2016-17 to FY 2020-21, the Commission has considered the actual trend of yearly sales during the past years and other category specific information submitted by the Petitioner.
- 7.18 Further, the Commission observed a decreasing trend in sales to JUSCO in the Petitioner's submission without any adequate justification of the same from JUSCO. In absence of any suitable justification, the Commission finds it prudent to approve the sales to JUSCO for the entire Control Period FY 2016-17 to FY 2020-21 equal to the sales approved for FY 2015-16 by the Commission. Further, Commission directs the Petitioner to submit a detailed justification for the decrease in sales to JUSCO in its next Tariff Petition.
- 7.19 The following table summarizes the energy sales , connected load and no of consumers as submitted by the Petitioner and approved by Commission for MYT period FY 2016-17 to FY 2020-21

**Table 38: Energy Sales for MYT Period submitted by the Petitioner (MUs)**

Particulars	Submitted by Petitioner				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Domestic LT	232.09	244.38	255.99	266.76	276.53
Domestic - DS HT	111.65	115.49	119.33	123.17	127.01
Commercial	73.82	75.08	76.37	77.69	79.02
High Tension I	35.25	37.22	39.20	41.17	43.14
High Tension II	156.48	159.61	168.00	171.37	174.79
High Tension III	1864.30	1920.23	2014.32	2074.75	2136.99
High Tension IV	120.00	120.00	120.00	120.00	120.00
Street Lights	90.00	89.00	89.00	88.00	88.00
Other Licensee/ JUSCO	324.28	306.52	300.44	284.47	284.47
Temporary Supply	2.00	2.00	2.00	2.00	2.00
<b>Total</b>	<b>3009.87</b>	<b>3069.54</b>	<b>3184.66</b>	<b>3249.37</b>	<b>3331.96</b>



**Table 39: Connected Load for MYT Period submitted by the Petitioner (kW)**

Particulars	Submitted by Petitioner				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Domestic LT	192,485	196,829	201,203	205,606	210,040
Domestic - DS HT	49,734	51,469	53,203	54,938	56,672
Commercial	40,168	40,851	41,545	42,252	42,971
High Tension I	19,042	20,149	21,256	22,364	23,471
High Tension II	34,816	34,816	34,816	36,566	36,566
High Tension III	303,981	326,527	349,073	371,619	394,165
High Tension IV	110,000	110,000	110,000	110,000	110,000
Street Lights	19,278	19,278	19,278	19,278	19,278
Other Licensee/ JUSCO	-	-	-	-	-
Temporary Supply	-	-	-	-	-
<b>Total</b>	<b>769,504</b>	<b>799,919</b>	<b>830,375</b>	<b>862,622</b>	<b>893,162</b>

**Table 40: No of Consumers for MYT Period submitted by the Petitioner (No's)**

Particulars	Submitted by Petitioner				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Domestic LT	39,196	40,063	40,936	41,814	42,699
Domestic - DS HT	141	146	151	156	161
Commercial	8,921	9,074	9,230	9,389	9,550
High Tension I	85	90	95	100	105
High Tension II	20	20	21	21	21
High Tension III	14	14	14	14	14
High Tension IV	1	1	1	1	1
Street Lights	393	393	393	393	393
Other Licensee/ JUSCO	1	1	1	1	1
Temporary Supply	-	-	-	-	-
<b>Total</b>	<b>48,772</b>	<b>49,802</b>	<b>50,841</b>	<b>51,889</b>	<b>52,945</b>

**Table 41: Energy Sales for MYT Period approved by the Commission (MUs)**

Particulars	Approved by the Commission				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Domestic LT	232.09	244.38	255.99	266.76	276.53
Domestic - DS HT	111.65	115.49	119.33	123.17	127.01
Commercial	73.82	75.08	76.37	77.69	79.02
High Tension I	35.25	37.22	39.20	41.17	43.14
High Tension II	156.48	159.61	168.00	171.37	174.79

Particulars	Approved by the Commission				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
High Tension III	1864.30	1920.23	2014.32	2074.75	2136.99
High Tension IV	100	100	100	100	100
Street Lights	90.00	89.00	89.00	88.00	88.00
Other Licensee/ JUSCO	337.95	337.95	337.95	337.95	337.95
Temporary Supply	2.00	2.00	2.00	2.00	2.00
<b>Total</b>	<b>3003.54</b>	<b>3080.97</b>	<b>3202.17</b>	<b>3282.85</b>	<b>3365.43</b>

**Table 42: Connected Load for MYT Period approved by the Commission (kW)**

Particulars	Approved by the Commission				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Domestic LT	192,485	196,829	201,203	205,606	210,040
Domestic - DS HT	49,734	51,469	53,203	54,938	56,672
Commercial	40,168	40,851	41,545	42,252	42,971
High Tension I	19,042	20,149	21,256	22,364	23,471
High Tension II	34,816	34,816	34,816	36,566	36,566
High Tension III	303,981	303,981	310,981	310,981	310,981
High Tension IV	110,000	110,000	110,000	110,000	110,000
Street Lights	19,278	19,278	19,278	19,278	19,278
Other Licensee/ JUSCO	-	-	-	-	-
Temporary Supply	-	-	-	-	-
<b>Total</b>	<b>769,504</b>	<b>777,383</b>	<b>792,283</b>	<b>801,984</b>	<b>809,978</b>

**Table 43: No of Consumers for MYT Period approved by the Commission**

Particulars	Approved by the Commission				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Domestic LT	39,196	40,063	40,936	41,814	42,699
Domestic - DS HT	141	146	151	156	161
Commercial	8,921	9,074	9,230	9,389	9,550
High Tension I	85	90	95	100	105
High Tension II	20	20	21	21	21
High Tension III	14	14	14	14	14
High Tension IV	1	1	1	1	1
Street Lights	393	393	393	393	393
Other Licensee/ JUSCO	1	1	1	1	1
Temporary Supply	-	-	-	-	-
<b>Total</b>	<b>48,772</b>	<b>49,802</b>	<b>50,841</b>	<b>51,889</b>	<b>52,945</b>

## Power Procurement Plan

### *Petitioner's Submission*

- 7.20 The Petitioner projected the net energy requirement for MYT Period by grossing up the energy sales projections with distribution loss of 4% for each year of the control period.
- 7.21 To meet the projected energy requirement for the MYT period, the Petitioner has projected to source power from various sources which include TPCL (total from Unit II & Unit III), DVC at 132 kV, DVC at 400 kV, TSW Captive and open access/ other sources.

### *Commission's Analysis*

- 7.22 The Commission has projected the energy requirement for MYT period after grossing up the approved energy sales to other consumers by the distribution loss target of 4.00% for each year of the Control Period. Further, distribution loss on sales to JUSCO and HT IV is considered as 0%.
- 7.23 The energy requirement shall be met through power sourced from TPCL-Unit II & III, DVC at 132 kV and 400 kV and TSW – Captive as per following approval:
- (a) The Commission has approved the expected availability of power from TPCL to be 1608.34 MU's each year based on contracted capacity of TSL and NAPLF of TPCL. Similarly, the Commission has approved the projected energy availability from DVC at 400 kV to be 1399.85 MU's each year subject to True up on the basis of audited data.
  - (b) In case of TSW Captive, the Commission has approved the projected energy availability as 20 MU's as submitted by the Petitioner subject to True up on the audited data.
  - (c) In case of DVC at 132 kV, the Commission has approved the projected energy availability of 82.25 MU, 162.91 MU, 289.16 MU, 373.20 MU and 459.23 MU for FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20 and FY 2020-21 respectively subject to True up on the basis of audited data. However, the Petitioner should use merit order principles and procure power at lower rates available in the short term market whenever feasible so as to rationalize its power purchase costs.
  - (d) Further, the Petitioner is mandated to purchase power from renewable energy (RE) sources to meet its RPO. The Petitioner has submitted that it would make all efforts to purchase power from renewable sources, however for the purpose of Business Plan projections, the Petitioner has proposed to meet its RPO through purchase of REC's.

- (e) The Petitioner had estimated the RPO for the Control Period on total energy requirement without netting off the power purchase from 132 kV source on the basis of the trajectory defined in the Draft JSERC (Renewable Purchase Obligation and its Compliance) Regulations, 2015. The Petitioner, subsequently, re-determined its RPO on total energy requirement after netting off power purchase from 132 kV DVC source on the basis of targets defined in JSERC (Renewable Purchase Obligation and its Compliance) Regulations, 2016.
- (f) The RPO Targets applicable to the petitioner according to the provisions of these Regulations is as follows:

**Table 44: Minimum Quantum of purchase (%) from RES**

Year	Solar	Non Solar	Total
2016-17	1.80%	3.50%	5.30%
2017-18	3.75%	4.00%	7.75%
2018-19	5.50%	4.50%	10.00%
2019-20	6.55%	5.00%	11.55%

- (g) The Commission on the basis of the RPO notified in JSERC (Renewable Purchase Obligation and its Compliance) Regulations, 2016 and approved energy requirement has approved the target power available from RE sources to be 160 MU ( Non-Solar 106 MU and Solar 55 MU), 235 MU ( Non-Solar 121 MU and Solar 114 MU), 303 MU ( Non-Solar 136 MU and Solar 167 MU), 350 MU ( Non-Solar 151 MU and Solar 198 MU) and 350 MU ( Non-Solar 151 MU and Solar 198 MU) respectively for FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20 and FY 2020-21.
- (h) The Commission has estimated the RPO on total energy requirement net of power purchase from DVC 132 kV source which is in line with the methodology followed by the Commission in the previous Tariff Orders. Further, RPO for the year FY 2020-21 has been estimated to be equal to FY 2019-20 subject to amendments in JSERC (Renewable Purchase Obligation and its Compliance) Regulations, 2016.

7.24 Based on the above, the energy availability for the MYT period as submitted by the Petitioner and approved by the Commission has been summarised in following table.

**Table 45: Energy Availability for MYT Period submitted by the Petitioner (MUs)**

Particulars	Submitted by Petitioner				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
- TPCL – Unit II & III	1,545.00	1,548.82	1,567.54	1,576.00	1,585.00
- Damodar Valley Corporation 132 kV	285.00	293.56	293.56	293.56	294.00
- Damodar Valley Corporation 400 kV	1,281.28	1,331.05	1,432.25	1,491.20	1,567.79
- TSW – Captive	20.00	20.00	20.00	20.00	20.00
- RPO	-	-	-	-	-
- Others/ Open access	4.00	4.00	4.00	4.00	4.00

Particulars	Submitted by Petitioner				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
<b>TOTAL ENERGY AVAILABILITY</b>	3135.28	3197.43	3317.35	3384.76	3470.79

**Table 46: Energy Availability for MYT Period approved by the Commission (MUs)**

Particulars	Approved by the Commission				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
- TPCL – Unit II & III	1608.34	1608.34	1608.34	1608.34	1608.34
- Damodar Valley Corporation 132 kV	82.25	162.91	289.16	373.20	459.23
- Damodar Valley Corporation 400 kV	1399.85	1399.85	1399.85	1399.85	1399.85
- TSW – Captive	20.00	20.00	20.00	20.00	20.00
- RPO	-	-	-	-	-
- Others/ Open access	0	0	0	0	0
<b>TOTAL ENERGY AVAILABILITY</b>	<b>3,110.43</b>	<b>3,191.09</b>	<b>3,317.34</b>	<b>3,401.38</b>	<b>3,487.41</b>

## Collection Efficiency

### *Petitioner's Submission*

7.25 The Petitioner has not submitted any targets for collection efficiency for the MYT Control Period.

### *Commission's Analysis*

7.26 The Commission approves the collection efficiency targets for the MYT Control Period as per the provisions of the Distribution Tariff Regulations, 2015 which is 100% for each year of the Control Period.

## **A8: ARR FOR MYT PERIOD FROM FY 2016-17 TO FY 2020-21**

- 8.1 This section contains a summary of the projections for various cost components of the ARR for the MYT period from FY 2016-17 to FY 2020-21 as submitted by the Petitioner and approved by the Commission.

### **Energy Sales**

#### *Petitioner's Submission*

- 8.2 The Petitioner has projected the sales based on the actual trend of increase in sales over the past years adjusted with specific information available to TSL. Accordingly, the Petitioner has submitted total sales as 3009.87 MU, 3069.54 MU, 3184.66 MU, 3249.37 MU, 3331.96 MU during FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20 and FY 2020-21, respectively.

#### *Commission's Analysis*

- 8.3 As discussed in Para 7.17 above, the Commission has considered the actual trend of yearly sales during the past years and other category specific information submitted by the Petitioner. Further, the sales to other licensee/ JUSCO have been determined as per the approval granted by the Commission for sale to JUSCO in FY 2015-16.
- 8.4 The following table summarizes the energy sales submitted by the Petitioner and approved by Commission for MYT period FY 2016-17 to FY 2020-21:

**Table 47: Energy Sales for MYT Period submitted by the Petitioner (MUs)**

Particulars	Submitted by Petitioner				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Domestic LT	232.09	244.38	255.99	266.76	276.53
Domestic - DS HT	111.65	115.49	119.33	123.17	127.01
Commercial	73.82	75.08	76.37	77.69	79.02
High Tension I	35.25	37.22	39.20	41.17	43.14
High Tension II	156.48	159.61	168.00	171.37	174.79
High Tension III	1864.30	1920.23	2014.32	2074.75	2136.99
High Tension IV	120.00	120.00	120.00	120.00	120.00
Street Lights	90.00	89.00	89.00	88.00	88.00
Other Licensee/ JUSCO	324.28	306.52	300.44	284.47	284.47
Temporary Supply	2.00	2.00	2.00	2.00	2.00
<b>Total</b>	<b>3009.87</b>	<b>3069.54</b>	<b>3184.66</b>	<b>3249.37</b>	<b>3331.96</b>

**Table 48: Energy Sales for MYT Period approved by the Commission (MUs)**

Particulars	Approved by the Commission				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Domestic LT	232.09	244.38	255.99	266.76	276.53
Domestic - DS HT	111.65	115.49	119.33	123.17	127.01
Commercial	73.82	75.08	76.37	77.69	79.02
High Tension I	35.25	37.22	39.20	41.17	43.14
High Tension II	156.48	159.61	168.00	171.37	174.79
High Tension III	1864.30	1920.23	2014.32	2074.75	2136.99
High Tension IV	100	100	100	100	100
Street Lights	90.00	89.00	89.00	88.00	88.00
Other Licensee/ JUSCO	337.95	337.95	337.95	337.95	337.95
Temporary Supply	2.00	2.00	2.00	2.00	2.00
<b>Total</b>	<b>3003.54</b>	<b>3080.97</b>	<b>3202.17</b>	<b>3282.85</b>	<b>3365.43</b>

## Energy Balance and Distribution Losses

### *Petitioner's Submission*

- 8.5 The Petitioner projected the net energy requirement for MYT Period by grossing up the energy sales projections with distribution loss of 4% for each year of the control period.
- 8.6 The Petitioner projected that power would be sourced from various sources including TPCL (total from Unit II & Unit III), DVC at 132 kV, DVC at 400 kV, TSW Captive and open access/ other sources to meet the projected energy requirement for the MYT period.

### *Commission's Analysis*

- 8.7 As discussed in Para 7.22, The Commission has projected the energy requirement for MYT period after grossing up the approved energy sales to other consumers by the distribution loss target of 4.00% for each year of the Control Period. Further, distribution losses on sales to JUSCO and HT- IV are considered as 0%.
- 8.8 Accordingly, the total power requirement shall be procured from Unit TPCL-Unit II & III, DVC at 132 kV and 400 kV and TSW – Captive as per the approvals granted in the Business Plan Chapter above.
- 8.9 Based on the above, the energy balance for the MYT period as submitted by the Petitioner and approved by the Commission has been summarised in following table.

**Table 49: Energy Balance for MYT Period submitted by the Petitioner (MUs)**

Particulars	Submitted by Petitioner				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
<b>A. ENERGY REQUIREMENT</b>					
Sales to Other Licensee	324.28	306.52	300.44	284.47	284.47
Dist. Losses on Sales to Other Licensee	0.00%	0.00%	0.00%	0.00%	0.00%
Units Lost on Sales to Other Licensee	-	-	-	-	-
Energy Req. for Sales to Other Licensee	<b>324.28</b>	<b>306.52</b>	<b>300.44</b>	<b>284.47</b>	<b>284.47</b>
Sales to Steel Works (HT IV)	120.00	120.00	120.00	120.00	120.00
Dist. Losses on Steel Works	0.00%	0.00%	0.00%	0.00%	0.00%
Units Lost on Sales to Steel Works	-	-	-	-	-
Energy Req. for Steel Works	120.00	120.00	120.00	120.00	120.00
Sales to LT consumers	397.91	410.47	423.36	434.44	445.55
Sales to HT consumers (other than HT-IV)	2167.68	2232.55	2340.85	2410.25	2,481.94
Sales to Other Consumers	2,565.59	2,643.02	2,764.22	2,844.90	2,927.48
Dist. Losses on Sales to Other Consumers	4.66%	4.62%	4.58%	4.54%	4.53%
Units Lost on Sales to Other Consumers	125.41	127.90	132.69	135.39	138.83
Energy Req. for Sales to Other Consumers	<b>2691.00</b>	<b>2770.91</b>	<b>2896.91</b>	<b>2980.29</b>	<b>3,066.32</b>
Overall Sales	3,009.87	3,069.54	3,184.66	3,249.37	3,331.96
Overall Distribution Losses %	4.00%	4.00%	4.00%	4.00%	4.00%
Overall Distribution Losses (MU)	125.41	127.90	132.69	135.39	138.83
<b>TOTAL ENERGY REQUIREMENT</b>	<b>3135.28</b>	<b>3197.43</b>	<b>3317.35</b>	<b>3384.76</b>	<b>3470.79</b>
<b>B. ENERGY AVAILABILITY</b>					
- TPCL – Unit II & III	1,545.00	1,548.82	1,567.54	1,576.00	1,585.00
- Damodar Valley Corporation 132 kV	285.00	293.56	293.56	293.56	294.00
- Damodar Valley Corporation 400 kV	1,281.28	1,331.05	1,432.25	1,491.20	1,567.79
- TSW – Captive	20.00	20.00	20.00	20.00	20.00
- RPO	-	-	-	-	-
- Others/ Open access	4.00	4.00	4.00	4.00	4.00
<b>TOTAL ENERGY AVAILABILITY</b>	<b>3135.28</b>	<b>3197.43</b>	<b>3317.35</b>	<b>3384.76</b>	<b>3470.79</b>



**Table 50: Energy Balance for MYT Period approved by the Commission (MUs)**

Particulars	Approved by the Commission				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
<b>A. ENERGY REQUIREMENT</b>					
Sales to Other Licensee	337.95	337.95	337.95	337.95	337.95
Dist. Losses on Sales to Other Licensee	0.00%	0.00%	0.00%	0.00%	0.00%
Units Lost on Sales to Other Licensee	0.00	0.00	0.00	0.00	0.00
Energy Req. for Sales to Other Licensee	337.95	337.95	337.95	337.95	337.95
Sales to Steel Works (HT IV)	100.00	100.00	100.00	100.00	100.00
Dist. Losses on Steel Works	0.00%	0.00%	0.00%	0.00%	0.00%
Units Lost on Sales to Steel Works	0.00	0.00	0.00	0.00	0.00
Energy Req. for Steel Works	100.00	100.00	100.00	100.00	100.00
Sales to LT consumers	397.91	410.47	423.36	434.44	445.55
Sales to HT consumers (other than HT-IV)	2,167.68	2,232.55	2,340.85	2,410.45	2,481.94
Sales to Other Consumers	2,565.59	2,643.02	2,764.22	2,844.90	2,927.48
Dist. Losses on Sales to Other Consumers	4.00%	4.00%	4.00%	4.00%	4.00%
Units Lost on Sales to Other Consumers	106.90	110.13	115.18	118.54	121.98
Energy Req. for Sales to Other Consumers	<b>2,672.48</b>	<b>2,753.14</b>	<b>2,879.39</b>	<b>2,963.43</b>	<b>3,049.46</b>
Overall Sales	3,003.54	3,080.97	3,202.17	3,282.85	3,365.43
Overall Distribution Losses %	3.44%	3.45%	3.47%	3.48%	3.50%
Overall Distribution Losses (MU)	106.90	110.13	115.18	118.54	121.98
<b>TOTAL ENERGY REQUIREMENT</b>	<b>3,110.43</b>	<b>3,191.09</b>	<b>3,317.34</b>	<b>3,401.38</b>	<b>3,487.41</b>
<b>B. ENERGY AVAILABILITY</b>					
- TPCL – Unit II & III	1608.34	1608.34	1608.34	1608.34	1608.34
- Damodar Valley Corporation 132 kV	82.25	162.91	289.16	373.20	459.23
- Damodar Valley Corporation 400 kV	1399.85	1399.85	1399.85	1399.85	1399.85
- TSW – Captive	20.00	20.00	20.00	20.00	20.00
- RPO	-	-	-	-	-
- Others/ Open access	0	0	0	0	0
<b>TOTAL ENERGY AVAILABILITY</b>	<b>3,110.43</b>	<b>3,191.09</b>	<b>3,317.34</b>	<b>3,401.38</b>	<b>3,487.41</b>

## **Power Purchase Cost**

### *Petitioner's Submission*

- 8.10 The Petitioner projected the cost of power purchase from TPCL Unit 2 and Unit 3 at the rate of Rs 4.03 per unit and Rs 4.16 per unit respectively for FY 2015-16. The Petitioner estimated a 5% p.a. increase for projections of power purchase rate of TPCL Unit 2 and Unit 3 for the MYT Period FY 2016-17 to FY 2020-21 over the power purchase rate of FY 2015-16. Accordingly, total power purchase cost for procuring power from TPCL is projected at Rs. 1545 Cr, Rs. 1548 Cr, Rs 1567.54 Cr, 1576 Cr and Rs. 1585.00 Cr for FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20 and FY 2020-21 respectively.
- 8.11 The Petitioner had projected the cost of power purchase from DVC at 132 kV at the rate of Rs.5.36 per unit during FY 2015-16 and thereafter considered a 5.00% p.a. increase for projections of power purchase rate for the Control Period FY 2016-17 to FY 2020-21. Thus power purchase cost from DVC at 132 kV has been projected as Rs. 160.48 Cr, Rs. 173.57 Cr, Rs 182.25 Cr, Rs 191.36 Cr and Rs. 201.23 Cr for FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20 and FY 2020-21 respectively.
- 8.12 In case of power from DVC at 400 kV, the rate of power purchase submitted by the Petitioner is Rs.4.11 per unit during FY 2015-16 which includes charges for transmission, UI, PGCIL and ERLDC. Further, for projecting power purchase cost for FY 2016-17 to FY 2020-21, the Petitioner has estimated an increase of 5.0% per annum over previous year rate. Accordingly, the projected power purchase cost from DVC at 400 kV during FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20 and FY 2020-21 is Rs. 552.57 Cr, Rs 602.41 Cr, Rs 680.62 Cr, Rs 744.07 Cr and Rs 821.40 Cr respectively.
- 8.13 The Petitioner also projected purchase of power from Tata Steel Works based on the availability of its other long term sources. The Petitioner has projected the power purchase rate of TSW as the weighted average cost of power from Unit 2 & 3. Accordingly, the projected cost of power purchase from TSW during FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20 and FY 2020-21 is Rs 8.60 Cr, Rs 9.03 Cr, Rs 9.48 Cr, Rs 9.96 Cr and Rs 10.45 Cr.
- 8.14 The Petitioner has also projected to meet balance energy requirement through other sources/ open access/ etc. at an average rate of Rs. 6.00 per unit for FY 2016-17 escalated at 5% p.a during the remaining MYT period. Accordingly, the cost of power procured from open access/ other sources has been projected as Rs. 2.40 Cr, Rs 2.52 Cr, Rs 2.65 Cr, Rs 2,78 Cr and Rs 2.92 Cr for FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20 and FY 2020-21 respectively.
- 8.15 In addition to above, the Petitioner proposes to meet its RPO through purchase of RECs from market. The Petitioner has estimated its RPO for the period FY 2016-17 to FY 2020-21 in line with draft RPO Regulations 2016. Accordingly, cost of meeting RPO during FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20 and FY 2020-21 is projected as Rs. 32.92 Cr, Rs. 45.56 Cr, Rs 63.86 Cr, Rs 86.31 Cr and Rs. 88.51 Cr, respectively.

- 8.16 As discussed in Para 7.23(e) above, the Petitioner as an additional submission to the Commission re-determined its RPO on the basis of JSERC (Renewable Purchase Obligation and its Compliance) Regulations, 2016 and submitted the revised cost as Rs 32.92 Cr, Rs 55.54 Cr, Rs 78.62 Cr, Rs 94.05 Cr and Rs 96.65 Cr for FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20 and FY 2020-21 respectively.

#### *Commission's Analysis*

- 8.17 The energy requirement of the Petitioner, for the MYT Control Period, shall be met through power available from TPCL – Unit II and III, DVC at 132 kV, TSW-Captive and DVC at 400 kV.
- 8.18 The Commission has approved the energy charges and the fixed charges separately from TPCL – Unit II & III for the MYT period. The energy charges have been approved at the average rate of energy charge during FY 2015-16 i.e. Rs 2.63 per unit and Rs 2.64 per unit, respectively, subject to FPPPA claim as per prevailing Regulations. The fixed charges for each year of the Control Period have been approved considering the total fixed charges for FY 2015-16 escalated at the rate of 2.5% p.a. subject to true up on the basis of actual data. Further, revenue gap of TPCL of Rs 23.53 Cr on account of Commission's Order for True up for FY 2012-13 dated 27<sup>th</sup> November 2016 and Rs 12 Cr and Rs 14.51 Cr Order on True up for FY 2013-14 and FY 2014-15 dated 30<sup>th</sup> December 2016 has also been allowed as a pass through.
- 8.19 Similarly, the energy charges for DVC 132 kV and DVC 400kV have been approved at the rate of average energy charge during FY 2015-16 i.e Rs 3.51 per unit and Rs 2.18 per unit subject to FPPPA claim as per prevailing Regulations. Further, the fixed charges for each have been approved as the total fixed charges paid by the Petitioner in FY 2015-16 escalated at the rate of 2.5% subject to true up on the basis of actual data.
- 8.20 The power purchase cost from TSW – captive has been projected at the rate equivalent to the lowest rate of power sourced from any source during the MYT period as approved by the Commission.
- 8.21 The cost of purchase of power from REC's to meet RPO for the Control Period has been estimated at an average price of solar and non-solar REC at Indian Energy Exchange for FY 2015-16. The RPO for the Petitioner has been computed as per the JSERC (Renewable Purchase Obligation and its compliance) Regulations, 2016.
- 8.22 Accordingly, the power purchase cost to meet RPO has been approved as Rs 34.98 Cr, Rs 57.91 Cr, Rs 78.73 Cr, Rs 92.13 Cr and Rs 92.13 Cr respectively for FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20 and FY 2020-21.
- 8.23 The following table summarises the power purchase cost as submitted by the Petitioner and approved by the Commission for MYT period.

**Table 51: Power Purchase Cost for MYT Period submitted by the Petitioner (Rs Cr)**

Particulars		Submitted by Petitioner				
		FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
<b>A. TPCL</b>						
Units Purchased (MU's)	Unit II	760.00	786.54	766.54	785.00	790.00

Particulars		Submitted by Petitioner				
		FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
	Unit III	785.00	762.28	801.00	791.00	795.00
	<b>Total</b>	<b>1,545.00</b>	<b>1,548.82</b>	<b>1,567.54</b>	<b>1,576.00</b>	<b>1,585.00</b>
Per Unit Price (Rs. / kWh)	Unit II	4.23	4.44	4.66	4.90	5.14
	Unit III	4.37	4.59	4.82	5.06	5.31
	<b>Total</b>	<b>4.30</b>	<b>4.51</b>	<b>4.74</b>	<b>4.98</b>	<b>5.23</b>
Power Purchase Cost (Rs. Cr)	Unit II	321.48	349.35	357.49	384.40	406.19
	Unit III	343.01	349.74	385.88	400.11	422.24
	<b>Total</b>	<b>664.50</b>	<b>699.08</b>	<b>743.36</b>	<b>784.51</b>	<b>828.44</b>
<b>B. DVC at 132 kV</b>						
Units Purchased (MU's)		285.00	293.56	293.56	293.56	294.00
Per Unit Price (Rs. / kWh)		5.63	5.91	6.21	6.52	6.84
Power Purchase Cost (Rs. Cr)		160.48	173.57	182.25	191.36	201.23
<b>C. DVC at 400 kV</b>						
Units Purchased (MU's)		1,281.28	1,331.05	1,432.25	1,491.20	1,567.79
Per Unit Price (Rs. / kWh)		4.31	4.53	4.75	4.99	5.24
Power Purchase Cost (Rs. Cr)		552.27	602.41	680.62	744.07	821.40
<b>D. TSW - Captive</b>						
Units Purchased (MU's)		20.00	20.00	20.00	20.00	20.00
Per Unit Price (Rs. / kWh)		4.30	4.51	4.74	4.98	5.23
Power Purchase Cost (Rs. Cr)		8.60	9.03	9.48	9.96	10.45
<b>E. RPO / RECs</b>						
Units Purchased (MU's)		-	-	-	-	-
Power Purchase Cost (Rs. Cr) *		32.92	45.56	63.86	86.31	88.51
<b>F. Others/ Open access</b>						
Units Purchased (MU's)		4.00	4.00	4.00	4.00	4.00
Per Unit Price (Rs. / kWh)		6.00	6.30	6.62	6.95	7.29
Power Purchase Cost (Rs. Cr)		2.40	2.52	2.65	2.78	2.92
<b>G. Total Power Purchased</b>						
Units Purchased (MU's)		3,135.28	3,197.43	3,317.35	3,384.76	3,470.79
Per Unit Price (Rs. / kWh)		4.53	4.79	5.07	5.37	5.63

Particulars		Submitted by Petitioner				
		FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Power Purchase Cost (Rs. Cr)		1,421.17	1,532.18	1,682.23	1,818.99	1,952.94

*\*The petitioner as an additional submission submitted revised power purchase cost for meeting RPO as Rs 32.92 Cr, Rs 55.54 Cr, Rs 78.62 Cr, Rs 94.05 Cr and Rs 96.65 Cr for FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20 and FY 2020-21 respectively.*

**Table 52: Power Purchase Cost for MYT Period approved by the Commission (Rs Cr)**

Particulars		Approved by the Commission				
		FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
<b>A. TPCL</b>						
Units Purchased (MU's)	Unit II	804.17	804.17	804.17	804.17	804.17
	Unit III	804.17	804.17	804.17	804.17	804.17
	<b>Total</b>	1608.34	1608.34	1608.34	1608.34	1608.34
Per Unit Energy Charge (Rs. / kWh)	Unit II	2.63	2.63	2.63	2.63	2.63
	Unit III	2.64	2.64	2.64	2.64	2.64
Total Fixed Charges ( Rs Cr.)	Unit II	104.70	107.32	110.01	112.76	115.57
	Unit III	95.89	98.29	100.74	103.26	105.84
	<b>Total</b>	200.59	205.61	210.75	216.02	221.42
Power Purchase Cost (Rs Cr.)	Unit II	316.07	318.69	321.37	324.12	326.94
	Unit III	307.87	310.27	312.73	315.25	317.83
	<b>Total</b>	<b>673.99*</b>	<b>628.96</b>	<b>634.10</b>	<b>639.37</b>	<b>644.77</b>
<b>B. DVC at 132 kV</b>						
Units Purchased (MU's)		82.25	162.91	289.16	373.20	459.23
Per Unit Energy Charge (Rs. / kWh)		3.51	3.51	3.51	3.51	3.51
Total Fixed Charges (Rs Cr.)		48.28	49.49	50.73	51.99	53.29
Power Purchase Cost (Rs. Cr)		<b>77.17</b>	<b>106.71</b>	<b>152.30</b>	<b>183.08</b>	<b>214.60</b>
<b>C. DVC at 400 kV</b>						
Units Purchased (MU's)		1399.85	1399.85	1399.85	1399.85	1399.85
Per Unit Energy Charge (Rs. / kWh)		2.18	2.18	2.18	2.18	2.18
Total Fixed Charges (Rs Cr.)		219.47	224.95	230.58	236.34	242.25
Power Purchase Cost (Rs. Cr)		<b>524.91</b>	<b>530.40</b>	<b>536.02</b>	<b>541.78</b>	<b>547.69</b>

Particulars		Approved by the Commission				
		FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
<b>D. TSW - Captive</b>						
Units Purchased (MU's)		20.00	20.00	20.00	20.00	20.00
Per Unit Price (Rs. / kWh)		3.75	3.79	3.83	3.87	3.91
Power Purchase Cost (Rs. Cr)		<b>7.50</b>	<b>7.58</b>	<b>7.66</b>	<b>7.74</b>	<b>7.83</b>
<b>E. RPO / RECs</b>						
Units Purchased (MU's)						
Power Purchase Cost (Rs. Cr)		<b>34.98</b>	<b>57.91</b>	<b>78.73</b>	<b>92.13</b>	<b>92.13</b>
<b>F. Others/ Open access</b>						
Units Purchased (MU's)		-	-	-	-	-
Per Unit Price (Rs. / kWh)		-	-	-	-	-
Power Purchase Cost (Rs. Cr)		-	-	-	-	-
<b>G. Total Power Purchased</b>						
Units Purchased (MU's)		<b>3,110.43</b>	<b>3,191.09</b>	<b>3,317.34</b>	<b>3,401.38</b>	<b>3,487.41</b>
Per Unit Price (Rs. / kWh)		<b>4.24</b>	<b>4.17</b>	<b>4.25</b>	<b>4.30</b>	<b>4.32</b>
Power Purchase Cost (Rs. Cr)		<b>1318.54</b>	<b>1331.56</b>	<b>1408.81</b>	<b>1464.11</b>	<b>1507.02</b>

\*Includes revenue gap of TPCL of Rs 23.53 Cr, Rs 12 Cr and Rs 14.51 Cr on account of True up for FY 2012-13, FY 2013-14 and FY 2014-15 respectively.

## Operation and Maintenance Expenses

### *Petitioner's Submission*

- 8.24 The Petitioner has segregated the O&M into R&M Expenses, A&G Expenses and Employee expenses. For R&M Expenses, the Petitioner has considered average R&M Expenses for FY 2014-15 and FY 2015-16 to calculate the K Factor instead of R&M Expenses of FY 2014-15 only since R&M Expenses for FY 2015-16 were higher than FY 2014-15. The Petitioner submitted that it has considered this approach because of increase in service tax rate, deferment of works and starting of road widening jobs in the city in FY 2015-16. Accordingly, the Petitioner has considered a K Factor of 5.51% for the entire Control Period
- 8.25 In case of Employee costs, the Petitioner has applied the inflation rate of FY 2014-15 to project the Employee Expenses for the Control Period FY 2016-17 to FY 2020-21. Further, the Petitioner has proposed an addition of manpower to meet the addition in works due to increase in network, consumers, sales and load.
- 8.26 The Petitioner has also considered the impact of Wage agreement signed between JUSCO and workers in August 2015 on its employee expenses. The Petitioner has estimated an increase of 17.5% in FY 2018-19 on account of Wage agreement.

- 8.27 In case of A&G costs, the Petitioner has increased the base costs on the basis of inflation factor per annum to project costs for MYT period.
- 8.28 In addition to above, The Petitioner has also projected expenditure to be incurred during MYT Period on CGRF/DSM Expenses under separate head. However, as these expenses form part of A&G costs, it has been considered as a part of O&M Expenses. The CGRF Expenses are proposed to be Rs 0.30 Cr for each year of the Control Period which will include the salaries and wages of staff, office expenses A&G Expenses etc. Further, the Petitioner proposed that DSM expenditure shall be incurred to promote energy efficiency initiatives through workshops, advertisements. The Petitioner proposed to incur Rs 0.30 Cr in FY 2016-17 and Rs 0.50 Cr in each remaining year of the Control Period.
- 8.29 Thus, the Petitioner has projected total O&M as Rs. 75.20 Cr, Rs 77.75 Cr, Rs 86.46 Cr, Rs 90.21 Cr and Rs 94.88 Cr for FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20 and FY 2020-21 respectively.

#### *Commission's Analysis*

- 8.30 For the MYT period, the Commission has projected the O&M expenses separately for each component of O&M expenses as per the Distribution Tariff Regulations 2015. The Commission has approved the component-wise O&M costs only provisionally and these estimates will be subject to true up during the Annual Performance Review/ True up based on the actual break-up of O&M cost provided by the Petitioner in its audited accounts.
- 8.31 In accordance with the provisions of Regulation 6.6 (a) of Distribution Tariff Regulations, 2015, the Commission has approved the R&M costs for MYT Period as ratio of the opening GFA for the year. The ratio has been estimated on the basis of approved R&M cost for FY 2014-15 and opening GFA for FY 2014-15 and works out to 4.80%.
- 8.32 The Commission has provisionally approved the A&G cost for the MYT period by escalating the A&G cost for FY 2015-16 by the weighted average inflation factor of 4.36% p.a.
- 8.33 For Employee Expenses, the Commission has first escalated the employee expenses of the base year by the weighted average inflation factor of 4.36% p.a.
- 8.34 Further, 6.6 (b) of Distribution Tariff Regulations, 2015 provides for determination of G(n) factor to compute the increase in employee expenses due to increase in consumer base/load growth. In accordance with the above, the Commission has developed a methodology to compute the incremental employee expenses on account of increase in consumer base/load growth of the Petitioner. The Commission has first computed the total employee cost per connected load for FY 2011-12 based on audited data and escalated it by weighted average inflation factor of each year to arrive total employee cost per connected load for FY 2015-16. Thereon, the weighted average inflation factor for FY 2015-16 has been used to determine the total employee cost per connected load for each year of the Control Period. The total employee cost per connected load for each year of the Control Period has then been multiplied by the increase in connected load of each year to determine the increase in employee cost because of increase in load growth/network base. **However, the incremental employee cost approved is only provisional and shall be re-determined on the basis of actual addition in connected load during the year during Annual Performance Review/True up of the respective years.**

- 8.35 The Commission has disallowed the increase in employee cost on account of wage agreement since the provisions of Distribution Tariff Regulations, 2015 allows increase in employee expenses by applying the weighted average inflation rate only and any increase in wages of the workers and the supervisors through wage agreement are not allowed separately.
- 8.36 The following table summarises the O&M expenses as submitted by the Petitioner and approved by the Commission for MYT Period.

**Table 53: O&M Expenses for MYT Period submitted by the Petitioner (Rs Cr)**

Particulars	Submitted by Petitioner				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
A. A&G Costs	21.78	22.73	23.72	24.75	25.83
B. R&M Costs	28.70	28.92	30.41	31.24	32.95
C. Employee costs					
Employee Expenses-Base year	23.45	24.72	26.11	32.33	34.21
Inflation Factor	4.36%	4.36%	4.36%	4.36%	4.36%
Employee Expenses	24.47	25.80	27.24	33.74	35.70
Additional Manpower Cost	0.25	0.30	0.32	0.47	0.40
Additional Compensation for Worker's wage revision	0%	0%	17.5%	0%	0%
Total Employee Expenses	24.72	26.11	32.33	34.21	36.10
<b>Total O&amp;M Expenses (A + B + C)</b>	<b>75.20</b>	<b>77.75</b>	<b>86.46</b>	<b>90.21</b>	<b>94.88</b>
<b>CGRF Expenses</b>	<b>0.30</b>	<b>0.30</b>	<b>0.30</b>	<b>0.30</b>	<b>0.30</b>
<b>DSM Expenses</b>	<b>0.30</b>	<b>0.50</b>	<b>0.50</b>	<b>0.50</b>	<b>0.50</b>

**Table 54: O&M Expenses for MYT Period approved by the Commission Rs Cr)**

Particulars	Approved by the commission				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
A. A&G Costs *	21.28	22.21	23.18	24.19	25.24
B. R&M Costs	25.00	25.16	25.88	27.01	28.34
C. Employee costs					
Employee Expenses-Base year	19.18	20.23	21.35	22.74	24.03
Inflation Factor	4.36%	4.36%	4.36%	4.36%	4.36%
Employee Expenses	20.01	21.11	22.28	23.73	25.08
Additional Manpower Cost on account of increase in Connected Load/Consumer Base	0.22	0.24	0.46	0.30	0.25
Additional Compensation for Worker's wage revision	-	-	-	-	-
Total Employee Expenses	20.23	21.35	22.74	24.03	25.33
<b>Total O&amp;M Expenses (A + B + C)</b>	<b>66.51</b>	<b>68.72</b>	<b>71.79</b>	<b>75.23</b>	<b>78.91</b>

*\*Includes CGRF/DSM Expenditure proposed to be incurred during MYT Period of 0.6 Cr for FY 2016-17 and Rs 0.80 Cr for each remaining year of the Control Period*



## Capital Expenditure Plan

### *Petitioner's Submission*

- 8.37 The Petitioner submitted that it has proposed the capital expenditure and capitalisation plan for the MYT Period FY 2016-17 to FY 2020-21 on the basis of the systematic evaluation of its current network and processes. The total projected capital expenditure for FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20 and FY 2020-21 is Rs 23.07 Cr, Rs 5 Cr, Rs 20 Cr, Rs 42 Cr and Rs 34.50 Cr respectively.

### *Commission's Analysis*

- 8.38 As discussed in Para 7.8 of this Order, the Commission provisionally approves the capital expenditure scheme proposed by the Petitioner and directs the Petitioner to submit the board approvals for the proposed schemes within 3 months of release of this Tariff Order.

## CWIP and Gross Fixed Asset

### *Petitioner's Submission*

- 8.39 In ARR petition for MYT period, the Petitioner proposed that the assets capitalised during FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20 and FY 2020-21 shall be Rs.4.00 Cr, Rs 27.17 Cr, Rs 15.00 Cr, Rs 31.00 Cr and Rs 50.50 Cr respectively.

### *Commission's Analysis*

- 8.40 As discussed in Para 7.10 and 7.11 above, the Commission has approved the total asset additions of Rs 3.50 Cr, 14.89 Cr, 23.59 Cr, 27.60 Cr and 33.85 Cr during FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20 and FY 2020-21 respectively.
- 8.41 The following table summarises the GFA and CWIP as submitted by the Petitioner and approved by the Commission for MYT period.

**Table 55: GFA and CWIP for MYT period submitted by the Petitioner (Rs Cr)**

Particulars	Submitted by Petitioner				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
<b>A. Capital Works in Progress (CWIP)</b>					
Opening CWIP	5.38	24.45	2.28	7.28	18.28
Add: Additions (Capex during FY)	23.07	5.00	20.00	42.00	34.50
Sub-total	28.45	29.45	22.28	49.28	52.78
Less: T/fed to GFA during FY	4.00	27.17	15.00	31.00	50.50
Closing CWIP	<b>24.45</b>	<b>2.28</b>	<b>7.28</b>	<b>18.28</b>	<b>2.28</b>
<b>B. Gross Fixed Assets (GFA)</b>					
Opening GFA	520.33	524.33	551.50	566.50	597.50
Add: T/fed from CWIP	4.00	27.17	15.00	31.00	50.50

Particulars	Submitted by Petitioner				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Closing GFA	524.33	551.50	566.50	597.50	648.00

**Table 56: GFA and CWIP for MYT period approved by the Commission (Rs Cr)**

Particulars	Approved by the Commission				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
<b>A. Capital Works in Progress (CWIP)</b>					
Opening CWIP	5.38	24.95	15.06	11.48	25.88
Add: Additions (Capex during FY)	23.07	5.00	20.00	42.00	34.50
Sub-total	28.45	29.95	35.06	53.48	60.38
Less: T/fed to GFA during FY	3.50	14.89	23.59	27.60	33.85
Closing CWIP	24.95	15.06	11.48	25.88	26.53
<b>B. Gross Fixed Assets (GFA)</b>					
Opening GFA	520.33	523.83	538.71	562.30	589.90
Add: T/fed from CWIP	3.50	14.89	23.59	27.60	33.85
Closing GFA	523.83	538.71	562.30	589.90	623.75

## Depreciation

### *Petitioner's Submission*

- 8.42 The Petitioner submitted that it has computed depreciation by applying the rates as provided in Appendix I to the Distribution Tariff Regulations 2015 on the asset mix of FY 2014-15. The Petitioner has then used this depreciation rate to the average GFA of each year of the Control Period to compute gross depreciation of each year. Further, the depreciation on assets created of consumer contribution has been removed while considering net depreciation charged to ARR.

### *Commission's Analysis*

- 8.43 The Commission estimated the gross depreciation as per the depreciation rates in the Appendix I of the Distribution Tariff Regulations 2015 and the average GFA for the year. Further depreciation is reduced to the extent of depreciation on account of consumer contribution.
- 8.44 Following table summarizes the gross and net depreciation as submitted by the Petitioner and approved by the Commission for the MYT period.

**Table 57: Depreciation for MYT Period submitted by the Petitioner (Rs Cr)**

Particulars	Submitted by Petitioner				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Gross Depreciation	33.88	34.52	36.08	37.32	39.65
Depreciation on Account of Consumer Contribution	3.53	3.66	3.80	3.94	4.07
Net Depreciation	<b>30.35</b>	<b>30.85</b>	<b>32.29</b>	<b>33.38</b>	<b>35.58</b>

**Table 58: Depreciation for MYT Period approved by the Commission (Rs Cr)**

Particulars	Approved by the Commission				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Gross Depreciation	33.93	34.53	35.78	37.44	39.44
Depreciation on Account of Consumer Contribution	3.50	3.60	3.70	3.81	3.93
Net Depreciation	<b>30.42</b>	<b>30.93</b>	<b>32.08</b>	<b>33.62</b>	<b>35.51</b>

## Interest and Other Finance Charges

### Interest on Loan

#### *Petitioner's Submission*

- 8.45 The Petitioner submitted that it has projected normative loan as per the methodology prescribed by the Commission. The deemed additions to the loan have been considered as 70% of additions to GFA and repayments for normative loans has been considered equivalent to the net depreciation cost of the financial year. The interest rate for licensed operations of TSL has been taken at 11.30% and the normative interest is being computed on the average balance of deemed loans for each year of the MYT period.

#### *Commission's Analysis*

- 8.46 In accordance with the regulation 6.15 of Distribution Tariff Regulations, 2015, the Commission has considered the debt equity ratio as allowed earlier by the Commission. Accordingly, the Commission has computed the normative loan for each year of the MYT period equal to 70% of the closing GFA. The GFA has been considered at net of consumer contribution. Normative repayment is deemed to be equal to the depreciation charge during the year. Further, in accordance with the regulation 6.24 and 6.25 of Distribution Tariff Regulations, 2015, the interest on normative loan has been calculated on the average normative loan as outstanding during the year. The rate of interest for the Control Period is considered as applicable SBI Base Rate plus 200 basis points as on April 1<sup>st</sup>, 2016 i.e. 11.30%.
- 8.47 The following table summarises the interest on loan as submitted by the Petitioner and approved by the Commission for MYT period:

**Table 59: Interest on Loan for MYT Period submitted by the Petitioner (Rs Cr)**

Particulars	Submitted by Petitioner				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Opening Balance of Normative Loan	153.16	124.21	110.97	87.79	74.70
Deemed Addition during the year	1.40	17.62	9.10	20.30	33.95
Deemed Repayments	30.35	30.85	32.29	33.38	35.58
Closing Balance of Deemed Loan	124.21	110.97	87.79	74.70	73.07
Average balance during the Year	<b>138.68</b>	<b>117.59</b>	<b>99.38</b>	<b>81.24</b>	<b>73.89</b>
Interest Rate (%)	11.30%	11.30%	11.30%	11.30%	11.30%
Interest Payment	<b>15.67</b>	<b>13.29</b>	<b>11.23</b>	<b>9.18</b>	<b>8.35</b>

**Table 60: Interest on Loan for MYT Period approved by the Commission (Rs Cr)**

Particulars	Approved by the Commission				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Opening Balance of Normative Loan	156.47	127.10	105.19	88.22	72.51
Deemed Addition during the year	1.05	9.02	15.11	17.92	22.30
Deemed Repayments	30.42	30.93	32.08	33.62	35.51
Closing Balance of Deemed Loan	127.10	105.19	88.22	72.51	59.30
Average balance during the Year	141.79	116.14	96.70	80.37	65.91
Interest Rate (%)	11.30%	11.30%	11.30%	11.30%	11.30%
Interest Payment	<b>16.02</b>	<b>13.12</b>	<b>10.93</b>	<b>9.08</b>	<b>7.45</b>

## Interest on Security Deposits

### *Petitioner's Submission*

- 8.48 The Petitioner has provided for interest on projected security deposits for the MYT period at an interest rate of 9.30% p.a.

### *Commission's Analysis*

- 8.49 In accordance with Regulation 8.2.16 of the JSERC Supply Code Regulations 2015, the Petitioner is mandated to pay interest on consumer security deposit as per SBI Base Rate prevailing on the 1<sup>st</sup> of April for the year. Thus the Commission has approved the interest on security deposit at 9.30% p.a. for the MYT period as submitted by the Petitioner; however the same is subject to true up based on the prevailing SBI Base Rate and the actual audited accounts.
- 8.50 The following tables summarise the interest on security deposits as submitted by the Petitioner and approved by the Commission for MYT period:

**Table 61: Interest on Security Deposits for MYT period submitted by the Petitioner (Rs Cr)**

Particulars	Submitted by Petitioner				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Opening security deposit	15.47	16.54	17.81	19.04	20.21
Security deposit received during FY	1.07	1.27	1.23	1.17	1.11
Closing security deposit	16.54	17.81	19.04	20.21	21.32
Average security deposit	<b>16.00</b>	<b>17.17</b>	<b>18.43</b>	<b>19.63</b>	<b>20.76</b>
Interest Rate (%)	9.30%	9.30%	9.30%	9.30%	9.30%
Interest on security deposit	<b>1.49</b>	<b>1.60</b>	<b>1.71</b>	<b>1.83</b>	<b>1.93</b>

**Table 62: Interest on Security Deposits for MYT period approved by the Commission (Rs Cr)**

Particulars	Approved by the commission				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Opening security deposit	15.47	16.54	17.81	19.04	20.21
Security deposit received during FY	1.07	1.27	1.23	1.17	1.11
Closing security deposit	16.54	17.81	19.04	20.21	21.32
Average security deposit	<b>16.00</b>	<b>17.17</b>	<b>18.43</b>	<b>19.63</b>	<b>20.76</b>
Interest Rate (%)	9.30%	9.30%	9.30%	9.30%	9.30%
Interest on security deposit	<b>1.49</b>	<b>1.60</b>	<b>1.71</b>	<b>1.83</b>	<b>1.93</b>

## Interest on Working Capital

### *Petitioner's Submission*

- 8.51 The Petitioner submitted normative interest on working capital for the MYT period separately for wheeling and retail supply business considering an interest rate of 12.80%.

### *Commission's Analysis*

- 8.52 In accordance with Regulation 6.29 of the Distribution Tariff Regulations, 2015, the normative working capital for the MYT period from FY 2016-17 to FY 2020-21 for the wheeling business of electricity has been computed based on the following formula:
- One-twelfth of the amount of Operation and Maintenance expenses for wheeling business for such financial year; plus
  - Maintenance spares at 1% of Opening GFA of wheeling business; plus
  - Two months equivalent of the expected revenue from wheeling charges at the prevailing tariffs; minus
  - Amount, if any, held as security deposits.

8.53 Similarly, the normative working capital in accordance with Regulation 6.30 of the Distribution Tariff Regulations, 2015 for the retail business of electricity has been computed based on the following formula:

- (a) One-twelfth of the amount of Operation and Maintenance expenses for retail supply business for such financial year; plus
- (b) Maintenance spares at 1% of Opening GFA for retail supply business; plus
- (c) Two months equivalent of the expected revenue from sale of electricity at the prevailing tariffs; minus
- (d) Amount held as security deposits under clause (a) and clause (b) of subsection (1) of Section 47 of the Act from consumers and Distribution System Users net of any security held for wheeling business; minus
- (e) One month equivalent of cost of power purchased, based on the annual power procurement plan.

8.54 In accordance with Regulation 6.31 of the JSERC Distribution Tariff Regulations 2015, the rate of interest for each year of the Control Period is considered to be SBI Base Rate as on 1<sup>st</sup> April 2016 plus 350 basis points i.e. 12.80%. The following tables summarise the calculation of working capital as submitted by the petitioner and as approved by the Commission for the MYT period.

**Table 63: Interest on Working Capital for MYT Period for Wheeling Business submitted by the Petitioner (Rs Cr)**

Particulars	Submitted by Petitioner				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Receivables for 2 months' Revenue @ existing tariff from wheeling charges	24.61	20.88	21.97	22.48	23.64
O&M expenses for 1 month for Wheeling Business	4.07	4.21	4.68	4.89	5.14
Maintenance spares @ 1% of Op. GFA of wheeling business	4.68	4.72	4.96	5.10	5.38
<b>Sub-total</b>	<b>33.37</b>	<b>29.81</b>	<b>31.62</b>	<b>32.46</b>	<b>34.15</b>
Less: Security deposit	-	-	-	-	-
<b>Total Working Capital</b>	<b>33.37</b>	<b>29.81</b>	<b>31.62</b>	<b>32.46</b>	<b>34.15</b>
Interest Rate (%)	12.80%	12.80%	12.80%	12.80%	12.80%
<b>Interest on Working Capital</b>	<b>4.27</b>	<b>3.82</b>	<b>4.05</b>	<b>4.16</b>	<b>4.37</b>

**Table 64: Interest on Working Capital for MYT Period for Retail Business submitted by the Petitioner (Rs Cr)**

Particulars	Submitted by Petitioner				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Receivables for 2 months' sale @ existing tariff	246.51	263.46	289.27	312.53	335.44
O&M expenses for 1 month for retail supply business	2.19	2.27	2.52	2.63	2.77

Particulars	Submitted by Petitioner				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Maintenance spares @ 1% of Op. GFA of retail supply business	0.52	0.52	0.55	0.57	0.60
<b>Sub-total</b>	<b>249.22</b>	<b>266.25</b>	<b>292.34</b>	<b>315.73</b>	<b>338.81</b>
Less: Security deposit	14.72	16.00	17.17	18.43	19.63
Less: Power Purchase Cost for 1 Month	118.43	127.68	140.19	151.58	162.74
<b>Total Working Capital</b>	<b>116.07</b>	<b>122.56</b>	<b>134.98</b>	<b>145.72</b>	<b>156.44</b>
Interest Rate (%)	12.80%	12.80%	12.80%	12.80%	12.80%
<b>Interest on Working Capital</b>	<b>14.86</b>	<b>15.69</b>	<b>17.28</b>	<b>18.65</b>	<b>20.02</b>

**Table 65: Interest on Working Capital for MYT Period for Wheeling Business  
Approved by the Commission (Rs Cr)**

Particulars	Approved by the Commission				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Receivables for 2 months' Revenue @ existing tariff from wheeling charges	18.26	18.16	18.47	18.99	19.67
O&M expenses for 1 month for Wheeling Business	3.77	3.88	4.04	4.24	4.44
Maintenance spares @ 1% of Op. GFA of wheeling business	4.68	4.71	4.85	5.06	5.31
<b>Sub-total</b>	<b>26.71</b>	<b>26.76</b>	<b>27.36</b>	<b>28.28</b>	<b>29.42</b>
Less: Security deposit	-	-	-	-	-
<b>Total Working Capital</b>	<b>26.71</b>	<b>26.76</b>	<b>27.36</b>	<b>28.28</b>	<b>29.42</b>
Interest Rate (%)	12.80%	12.80%	12.80%	12.80%	12.80%
<b>Interest on Working Capital</b>	<b>3.42</b>	<b>3.43</b>	<b>3.50</b>	<b>3.62</b>	<b>3.77</b>

**Table 66: Interest on Working Capital for MYT Period for Retail Business  
approved by the Commission (Rs Cr)**

Particulars	Approved by the Commission				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Receivables for 2 months' sale@ existing tariff	225.99	228.30	241.49	251.01	258.47
O&M expenses for 1 month for retail supply business	1.77	1.85	1.94	2.03	2.13
Maintenance spares @ 1% of Op. GFA of retail supply business	0.52	0.52	0.54	0.56	0.59
<b>Sub-total</b>	<b>228.28</b>	<b>230.67</b>	<b>243.97</b>	<b>253.61</b>	<b>261.19</b>
Less: Security deposit	16.00	17.17	18.43	19.63	20.76

Particulars	Approved by the Commission				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Less: Power Purchase Cost for 1 Month	109.88	110.96	117.40	122.01	125.59
Total Working Capital	102.40	102.53	108.15	111.98	114.84
Interest Rate (%)	<b>12.80%</b>	<b>12.80%</b>	<b>12.80%</b>	<b>12.80%</b>	<b>12.80%</b>
Interest on Working Capital	<b>13.11</b>	<b>13.12</b>	<b>13.84</b>	<b>14.33</b>	<b>14.70</b>

## Return on Equity (RoE)

### *Petitioner's Submission*

- 8.55 The Petitioner submitted that it has projected Return on Equity for MYT period based on normative equity of 30% of GFA net of consumer contribution and considering a post tax of return at 15.50% as per the Distribution Tariff Regulations, 2015.

### *Commission's Analysis*

- 8.56 As per the Distribution Tariff Regulations, 2015, the equity base has been considered equal to 30% of GFA net of consumer contribution.
- 8.57 The Commission has allowed a rate of return of 15.50% (post tax) on equity for each year of the Control Period as specified in Regulation 6.17 of the Distribution Tariff Regulations, 2015.
- 8.58 The detailed calculation of Return on Equity projected by the Petitioner and as approved by the Commission for MYT period has been summarised in following tables:

**Table 67: Return on Equity for MYT Period submitted by the Petitioner (Rs Cr)**

Particulars	Submitted by Petitioner				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Opening normative equity	144.90	145.50	153.05	156.95	165.65
Deemed additions during FY	0.60	7.55	3.90	8.70	14.55
Closing normative equity	145.50	153.05	156.95	165.65	180.20
<b>Average normative equity</b>	<b>145.20</b>	<b>149.28</b>	<b>155.00</b>	<b>161.30</b>	<b>172.93</b>
<b>Rate of ROE (%)</b>	<b>15.50%</b>	<b>15.50%</b>	<b>15.50%</b>	<b>15.50%</b>	<b>15.50%</b>
<b>Return on equity</b>	<b>22.51</b>	<b>23.14</b>	<b>24.03</b>	<b>25.00</b>	<b>26.80</b>

**Table 68: Return on Equity for MYT Period approved by the Commission (Rs Cr)**

Particulars	Approved by the Commission				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Opening normative equity	140.47	140.92	144.78	151.26	158.94



Particulars	Approved by the Commission				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Deemed additions during FY	0.45	3.87	6.48	7.68	9.56
Closing normative equity	140.92	144.78	151.26	158.94	168.49
Average normative equity	140.69	142.85	148.02	155.10	163.72
<b>Rate of ROE (%)</b>	15.50%	15.50%	15.50%	15.50%	15.50%
<b>Return on equity</b>	<b>21.81</b>	<b>22.14</b>	<b>22.94</b>	<b>24.04</b>	<b>25.38</b>

## Non-Tariff Income (NTI)

### *Petitioner's Submission*

- 8.59 The Petitioner submitted that it has projected Non-Tariff Income for the MYT Control Period at Rs. 5 Cr per annum.

### *Commission's Analysis*

- 8.60 The Non-Tariff Income includes Meter Rent, Delayed Payment Surcharge and Supervision Charges etc. The Commission has approved NTI based on actual Non-Tariff Income as per audited accounts for FY 2014-15. The approved NTI shall be subject to true up based on actual/audited accounts of each year. Accordingly, the Commission has approved the Non-Tariff Income of Rs 5.86 Cr for each year of the Control Period.

## Income Tax on Incentives on O&M Expenditure, Distribution Loss Reduction and ROE

### *Petitioner's Submission*

- 8.61 The Petitioner has requested the Commission to allow on Income Tax on remaining amount of ROE on which no Income Tax has been allowed and on Incentives on account of reduction in O&M Expenses and Distribution loss reduction. The Petitioner has computed that its Profit before Tax (PBT) is expected to become 314.93 Cr and since the total amount of remaining ROE and Incentives on O&M and Loss Reduction which is 133.26 Cr is less than PBT of Rs 314.93 Cr, the Petitioner has requested Income Tax grossing up on Rs 133.26 Cr.

### *Commission's Analysis*

- 8.62 Since, as per the audited accounts for FY 2014-15, the Power Business Division has reported a negative Profit before tax (PBT), the Commission is of the view that currently there is no income tax chargeable to the power business division. Further, the Commission shall take up the issue of Income Taxes on ROE and Incentives on O&M and distribution loss reduction at the time of true up of the respective years based on audited accounts and income tax liability for power business division.

## Summary of ARR for MYT Period

- 8.63 The following table summarises the ARR for MYT period as submitted by the Petitioner and approved by the Commission:

**Table 69: Summary of ARR for MYT Period submitted by the Petitioner (Rs Cr)**

Particulars	Submitted by Petitioner				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Power Purchase Cost	1421.17	1532.18	1682.23	1818.99	1952.94
O&M Expenses	75.20	77.75	86.46	90.21	94.88
Interest & Other Finance Charges					
Interest on Loan	15.67	13.29	11.23	9.18	8.35
Interest on consumer security deposit	1.49	1.60	1.71	1.83	1.93
Interest on Working Capital	19.64	19.50	21.32	22.81	24.40
Depreciation	30.35	30.85	32.29	33.38	35.58
CGRF Expenses	0.30	0.30	0.30	0.30	0.30
DSM Expenses	0.30	0.50	0.50	0.50	0.50
<b>Total Costs</b>	<b>1564.12</b>	<b>1675.97</b>	<b>1836.04</b>	<b>1977.19</b>	<b>2118.87</b>
Add: Return on Equity	22.51	23.14	24.03	25.00	26.80
Less: Non-tariff income	5.00	5.00	5.00	5.00	5.00
Add: Income Tax on Sharing of Gains	45.82	-	-	-	-
Income Tax on ROE	22.80	11.91	12.37	12.87	13.80
<b>Net ARR</b>	<b>1650.25</b>	<b>1706.02</b>	<b>1867.44</b>	<b>2010.07</b>	<b>2154.48</b>

**Table 70: Summary of ARR for MYT Period approved by the Commission (Rs Cr)**

Particulars	Submitted by Petitioner				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Power Purchase Cost	1318.54	1331.56	1408.81	1464.11	1507.02
O&M Expenses	66.51	68.72	71.79	75.23	78.91
Interest & Other Finance Charges					
Interest on Loan	16.02	13.12	10.93	9.08	7.45
Interest on consumer security deposit	1.49	1.60	1.71	1.83	1.93
Interest on Working Capital	16.53	16.55	17.34	17.95	18.47
Depreciation	30.42	30.93	32.08	33.62	35.51
CGRF Expenses	-	-	-	-	-
DSM Expenses	-	-	-	-	-
<b>Total Costs</b>	<b>1,449.51</b>	<b>1,462.48</b>	<b>1,542.66</b>	<b>1,601.82</b>	<b>1,649.29</b>
Add: Return on Equity	21.81	22.14	22.94	24.04	25.38
Less: Non-tariff income	5.86	5.86	5.86	5.86	5.86
Add: Income Tax on Sharing of Gains	-	-	-	-	-
Income Tax on ROE	-	-	-	-	-
<b>Net ARR</b>	<b>1465.47</b>	<b>1,478.77</b>	<b>1,559.75</b>	<b>1,620.01</b>	<b>1,668.81</b>

*\*Includes CGRF/DSM Expenditure proposed to be incurred during MYT Period of 0.6 Cr for FY 2016-17 and Rs 0.80 Cr for each remaining year of the Control Period*

**A9: DETERMINATION OF REVENUE GAP AND ALLOWANCE OF INCENTIVES ON DISTRIBUTION LOSSES ON ACCOUNT OF JUDGEMENT OF HON'BLE APTEL IN APPEAL NO 203 OF 2014 AND APPEAL NO 29 OF 2016**

- 9.1 The Petitioner had filed an appeal No 203 of 2014 under Section 111 of the Electricity Act at the Appellate Tribunal of Electricity against the order dated 04.06.2014 for True up for FY 2011-12 and FY 2012-13 and ARR for Multi Year Tariff from FY 2013-14 to FY 2015-16 and Tariff for FY 2013-14 passed by the Jharkhand State Electricity Regulatory Commission. The said Order was assailed before the Appellate Tribunal of Electricity on the following grounds:
1. Issues related to Incentives on Distribution Losses
  2. Issues related to determination of Carrying Cost on Regulatory Assets
  3. Issues related to Taxes on Income
- 9.2 The Hon'ble Appellate by its Order dated 19<sup>th</sup> February 2016 on the first issue related to Incentives on Distribution Losses decided that the loss level considered by the Commission should be the normative one and not actual and it should strictly be in accordance with the relevant provisions of Tariff Regulations, 2010 as notified by the State Commission. Further on the second issue of restricting the carrying cost on regulatory assets created in FY 2011-12 and FY 2012-13 from June 2014 only, APTEL decided that the carrying cost should be allowed from the prior period as claimed by the Petitioner. Hence, the APTEL remanded the matter to this Commission for consideration of these two issues.
- 9.3 On the last and final issue of higher tax liability in future years due to deferred income on account of creation of regulatory assets, the APTEL decided that the issue of taxes paid on revenue derived from regulatory assets and extra taxes paid on such revenue would arise in the future years in which such revenues are derived and cannot be considered at this stage of proceedings.
- 9.4 The Petitioner had also filed an appeal No 29 of 2016 under Section 111 of the Electricity Act at the Appellate Tribunal of Electricity against the order dated 31.05.2015 for True up for FY 2013-14, Annual Performance Review of FY 2014-15 and Revised ARR and Tariff for FY 2015-16 passed by the Jharkhand State Electricity Regulatory Commission. The said Order was assailed before the Appellate Tribunal of Electricity on different grounds touching the issues as indicated below:
1. Issues related to Incentives on Distribution Losses
  2. Issues related to Taxes on Income
  3. Redetermination of Revenue Gap and Carrying Cost for the period upto FY 2012-13
- 9.5 The Hon'ble Appellate by its Order dated 7<sup>th</sup> September 2016 disposed of the first two issues related to Incentives on Distribution Losses and Taxes on Income stating that same have already been dealt with in its judgment dated 19.02.2016 in Appeal No 203 of 2014.

- 9.6 Further, on the third issue of determination of Revenue Gap and Carrying Cost upto FY 2012-13, the APTEL remanded the matter to the State Commission for fresh determination as per its judgment dated 19.02.2016 in Appeal No 203 of 2014 with the liberty to the Appellant to urge the grounds raised in this Appeal.
- 9.7 The matters discussed above pertaining to Appeal No 203 of 2014 and Appeal No 29 of 2016 came up before the Commission on remand for consideration. Accordingly, the Commission after reconsideration of issues have addressed the issues afresh under:

#### **Incentives on Distribution losses to be allowed**

- 9.8 The Commission in its Tariff Order dated 4.06.2014 and 31.05.2015 had disallowed the incentives on the premise that the Petitioner had not expanded its service area to domestic and rural areas.
- 9.9 The Petitioner in Appeal No 203 of 2014 had appealed before the Hon'ble Appellate Tribunal of Electricity that Commission has not followed the applicable JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2010 which fixes the normative target loss level to be achieved by the Petitioner. The Petitioner further stated that the Commission has been considering the loss level on actual basis thus denying the Petitioner efficiency gains on account of achieving lower distribution losses as compared to normative loss level as per the Distribution Regulations 2010.
- 9.10 The Hon'ble Tribunal in paragraph no 18 and 20 of the judgement in Appeal No 203 of 2014 dated 19th February 2016 observed as under:

*“18 The State Commission has fixed different percentage of loss level in their Regulations for different licensees considering their respective peculiarities. It is observed that the loss level of Jharkhand State Electricity Board has been fixed at a much higher level considering its specific position since it is catering to domestic & rural areas and the fact that the distribution licensees are not comparable. The loss level fixed in the above regulations is normative. There is no provision in the Regulations providing for adjustment of loss level from normative to the actual one. In the circumstances, the State Commission was required to follow its applicable Regulations and not to have adjusted the normative loss to actual loss. The concern expressed by the State Commission on the Appellant not extending the supply of electricity in various areas including domestic and rural for which the distribution license has been given and that the Appellant maintains the better consumer mix need to be addressed separately in an independent proceeding and the State Commission is at its liberty to act appropriately in accordance with the law. However, the same cannot be a ground for not allowing the benefit of incentive to the Appellant on achieving lower loss level as compared to that of normative as per the applicable Regulations.*

***“20 In view of the above, loss level to be considered should be the normative one and not actual and should be strictly in accordance with the relevant provisions contained in the Tariff Regulations, 2010 as notified by the State Commission.”***

- 9.11 The Petitioner in Appeal No 29 of 2016 had again appealed to the Hon'ble Tribunal that the Commission has not allowed incentives on achievement of lower Distribution Losses for the year FY 2013-14 than the normative target of 6%.

- 9.12 The Hon'ble Tribunal in paragraph no 12 (iii) of the judgement in Appeal No 29 of 2016 dated 7th September 2016 observed as under:

*“12 (iii) The learned Counsel for the parties agreed before us on the issues relating to the allowance of the Distribution losses and Income tax pass through as raised in the present Appeal are already covered by our judgment dated 19.02.2016 in Appeal No. 203 of 2014 and the same may be disposed of in terms thereof.”*

- 9.13 The Petitioner on account of the judgments of the APTEL in the aforementioned appeals submitted its incentives on Distribution Losses as Rs 6.32 Cr, Rs 10.22 Cr and Rs 7.77 Cr for FY 2011-12, FY 2012-13 and FY 2013-14 respectively. Later, as an additional submission to the Commission, the Petitioner recomputed its distribution losses to be Rs 5.75 Cr, Rs 9.16 Cr and Rs 7.97 Cr for FY 2011-12, FY 2012-13 and FY 2013-14 respectively.

- 9.14 As per the directions of APTEL to decide the issue afresh in accordance with the law and after considering the submissions of the Petitioner, the Commission after the overall scrutiny of the matter would like to provide the relevant provisions of the Distribution Tariff Regulations, 2010 below

***“Controllable and Uncontrollable elements of ARR***

*5.28 For the purpose of MYT Framework contained in these Regulations, the elements of ARR shall be identified as 'controllable' and 'uncontrollable';*

*5.32 The variation, from targets specified by the Commission, on account of controllable elements shall be subject to incentive-penalty framework, as detailed in the subsequent section*

***Incentive and Penalty Framework***

*5.33 Various elements of the ARR of the Licensees' will be subject to incentive and penalty framework as per the terms specified in this section. The overall aim shall be to incentivise better performance and penalise poor performance, compared to the norms/benchmarks specified by the Commission;*

***Multi Year Tariff Framework for the Control Period (FY 2013-14, FY 2014-15 and FY 2015-16)***

*4.6 Each licensee shall file MYT Application and other documents with the Commission as per timelines specified in Section 12 of these Regulations;*

*The application shall include statements containing Aggregate Revenue Requirement (ARR) for the Previous Year, Base Year and projections for the Control Period. Information for the Previous Year should be based on audited accounts;*

*4.7 The guiding principles for MYT framework are described in Section 5 of these Regulations;”*

- 9.15 The provisions of the Distribution Tariff Regulations, 2010 states that the incentive penalty framework is applicable to variation from targets specified by the Commission on account of controllable parameters. Further, provision 5.28 of the Regulation states that the elements of the ARR shall be treated 'controllable' and 'uncontrollable' for the purpose of MYT Framework. **Provision 4.6 of the Regulation clearly defines the MYT Framework for the Control Period (FY 2013-14, FY 2014-15 and FY 2015-16) and not for the transition period (FY 2011-12 and FY 2012-13).**
- 9.16 **Hence, the Distribution Tariff Regulations, 2010 clearly defines that incentive penalty framework is only applicable to the Control Period and not for the Transition Period.** Therefore, in compliance of directives of the Hon'ble Tribunal, the Commission approves the incentives on achievement of lower Distribution losses than the normative as per Distribution Tariff Regulations, 2010 for the year FY 2013-14. The incentives on reduction in distribution losses is as under:

**Table 71: Incentives on Achievement of Lower Distribution Losses for FY 2013-14 approved by the Commission (Rs Cr.)**

Particulars	FY 2013-14
Energy Sales	2191
Loss Target as per Distribution Regulations, 2010	6%
Energy Req.	2330.85
Actual Achieved Loss	4.72%
Actual Energy Purchased	2299.54
Average Power Purchase Cost	4.24
Reduction in Power Purchase	31.31
Savings in Power Cost	13.28
TSL' Share (60%)	7.97

### **Determination of Carrying Cost on Regulatory Assets and Determination of Revenue upto FY 2012-13**

- 9.17 The Petitioner in Appeal No 203 of 2014 had appealed before the Hon'ble Appellate Tribunal of Electricity that the Commission in its Tariff Order dated 04.06.2014 had restricted the carrying cost on revenue gaps of Rs 6.05 Cr and Rs 223.75 Cr for FY 2011-12 and FY 2012-13 respectively from 01.06.2014 and the carrying cost for the prior periods has not been allowed.
- 9.18 The Hon'ble Tribunal in paragraph no 27 of the judgement in Appeal No 203 of 2014 dated 19th February 2016 observed:

*“27 After examining the relevant portion of the Impugned Order dated 04.06.2014 and the Appellant’s claims, we find that the carrying cost should have been allowed for the prior period also as claimed by the Appellant. In the reply filed by the Learned Counsel of the State Commission, it has been stated that more or less this issue is under review of the State Commission. However, the Appellant stated that there is no proceeding pending before the State Commission on this issue. In view of the fact that carrying cost is in regard to deferment of the amount determined as admissible to the utility and this being due from FY 2011-12 and FY 2012-13 and further in view of the stand fairly taken by the State Commission in its reply in the present Appeal and during arguments, we find it appropriate to direct the State Commission to allow the Appellant the carrying cost for the prior period as claimed by the Appellant.”*

9.19 Further, Petitioner in Appeal No 29 of 2016 had appealed to the Hon’ble Tribunal that the Commission has re-determined the gap upto FY 2012-13 in the Tariff Order dated 31.05.2015 despite the same having been determined, approved and trued up in the Tariff Order dated 04.06.2014.

9.20 The Hon’ble Tribunal in paragraph no 12 (v) of the judgement in Appeal No 29 of 2016 dated 7th September 2016 observed as under:

*“ 12 (v) Accordingly, as far as the revenue gap for the period upto FY 2012-13 is concerned, in terms of the judgment dated 19.02.2016 of this Tribunal in Appeal No. 203 of 2014, the matter merits remanding to the State Commission for fresh determination with liberty to the Appellant to urge the grounds raised in the present Appeal.”*

9.21 In compliance of directives of the Hon’ble Tribunal, the Commission has re-determined the revenue gap as follows:

**Table 72: Cumulative Revenue Gap upto FY 2013-14 submitted by the Petitioner (Cr.)**

Particulars	FY 2011-12	FY 2012-13	FY 2013-14
Opening Revenue Gap as on 1 <sup>st</sup> April 2011	19.03	34.94	306.98
Revenue Gap created during the year	12.61	249.26	356.37
Rate of Interest ( as per prevailing SBI PLR)	13.00%	14.28%	14.45%
Carrying Cost on Opening Balance	2.47	4.99	44.36
Carrying Cost on Additional Gap	0.82	17.80	25.75
Total Carrying Cost	3.29	22.79	70.11
Total Gap incl. Carrying Cost	<b>34.94</b>	<b>306.98</b>	<b>733.46</b>

**Table 73: Cumulative Revenue Gap upto FY 2013-14 approved by the Commission ( Cr.)**

Particulars	FY 2011-12	FY 2012-13	FY 2013-14
Opening Revenue Gap as on 1 <sup>st</sup> April 2011	19.03	27.95	280.15
Revenue Gap created during the year	6.05	231.04	348.6
Add: Incentives on T&D Losses	-	-	7.97
Closing Gap	<b>25.08</b>	<b>258.99</b>	<b>636.71</b>

Particulars	FY 2011-12	FY 2012-13	FY 2013-14
Rate of Interest ( as per prevailing SBI PLR)	13.00%	14.75%	14.45%
Carrying Cost on Opening Balance	2.47	4.12	40.48
Carrying Cost on Additional Gap	0.39	17.04	25.76
Total Carrying Cost	2.87	21.16	66.24
Total Gap incl. Carrying Cost	<b>27.95</b>	<b>280.15</b>	<b>702.96</b>



## A10: TREATMENT OF REVENUE GAP

### *Petitioner's Submission*

- 10.1 The Petitioner proposed revenue from existing tariff to be Rs 1466.65 Cr for FY 2015-16 and has estimated cumulative revenue gap including carrying cost upto FY 2015-16 as Rs 1353.61 Cr.
- 10.2 The Petitioner proposed that the entire revenue gap along with carrying cost for relevant years should be met by FY 2020-21. Accordingly, the Petitioner has proposed an average increase of 40% for FY 2016-17.

### *Commission's Analysis*

- 10.3 As discussed in Para 9.21 above, the Commission in light of the judgement of Appellate Tribunal of Electricity in Appeal No 2013 of 2014 and Appeal No 29 of 2016 has re-determined the revenue gap upto FY 2013-14 as Rs 702.96 Cr.
- 10.4 Based on the True up of FY 2014-15, the gap for the year has been revised to Rs 277.67 Cr instead of Rs 123.46 Cr approved provisionally in the Tariff Order 31st May 2015. Further, the provisional gap for the year FY 2015-16 has been approved as Rs 5.46 while provisional surplus for the year FY 2016-17 at the existing tariff is Rs 77.38 Cr.
- 10.5 Further, in accordance with the Distribution Tariff Regulations, 2010, Distribution Tariff Regulations 2015, National Tariff Policy and as per the methodology approved by the Commission in the previous Tariff Orders, the Commission has allowed carrying cost on the gaps approved as per SBI PLR rates for FY 2011-12 to FY 2015-16 and SBI Base Rate + 3.5% for FY 2016-17.
- 10.6 Accordingly, the Commission has estimated the cumulative revenue gap up to FY 2016-17 along with carrying cost as Rs 1359.26 Cr.

**Table 74: Cumulative Revenue Gap upto FY 2016-17 approved by the Commission ( Cr.)**

Particulars	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
Opening Revenue Gap as on 1 <sup>st</sup> April 2011	19.03	27.95	280.15	702.96	1,104.79	1273.61
Revenue Gap/ (Surplus) created during the	6.05	231.04	348.6	277.67	5.46	(77.38)
Add: Incentives on T&D Losses	-	-	7.97			
Closing Gap	<b>25.08</b>	<b>258.99</b>	<b>636.71</b>	<b>980.63</b>	<b>1110.25</b>	<b>1196.23</b>
Rate of Interest	13.00%	14.75%	14.45%	14.75%	14.75%	12.80%
Carrying Cost on Opening Balance	2.47	4.12	40.48	103.69	162.96	163.02
Carrying Cost on Additional Gap	0.39	17.04	25.76	20.48	0.40	-
Total Carrying Cost	2.87	21.16	66.24	124.16	163.36	163.02
Total Gap incl. Carrying Cost	<b>27.95</b>	<b>280.15</b>	<b>702.96</b>	<b>1,104.79</b>	<b>1,273.61</b>	<b>1,359.26</b>

10.7 The Commission is of the view that passing on the tariff hike of 40% as proposed by the Petitioner will result in a tariff shock to consumers. Accordingly, in order to safeguard the interest of consumers, the Commission approved an average tariff hike of 17.87% during FY 2016-17 which is expected to generate additional revenue of Rs 275.70 Cr in FY 2016-17.

10.8 The applicable tariff schedule for the Petitioner as proposed by the Petitioner and as approved by the Commission is shown below in the table:

**Table 75: Category Wise Tariff Existing, Proposed and Approved by the Commission for FY 2016-17**

Consumer Category	Fixed Charges (Rs)				Energy Charges (Rs/kWh)			
	Slab	Existing	Proposed	Approved	Slab	Existing	Proposed	Approved
<i>Domestic</i>								
<i>Domestic DS-I</i>	220 V single phase upto 5 kW	12 Rs/Month	25 Rs/Month	13 Rs/Month	0-100	2.10	3.00	2.30
<i>Domestic DS-II</i>					101-400*	3.50	5.00	3.95
<i>Domestic DS-III</i>	415 V three phase upto 5 kW	24 Rs/Month	50 Rs/Month	26 Rs/Month	Above 400**	3.90	5.50	4.55
<i>Bulk Domestic Supply LT</i>		-	100 Rs/ Consumer / Month	-	-	-	5.00	-
<i>Domestic DS HT</i>	For all units	375 Rs/ Consumer /Month	100 Rs /KVA/ Month	420 Rs/ Consumer /Month	For all units	4.25	4.60	4.50
<i>Commercial</i>	220 V single phase upto 5 kW	40 Rs/ Consumer /Month	60 Rs /kW/Month	50 Rs/ Consumer /Month	For all units	5.85	8.50	6.55
	415 V three phase upto 5 kW	100 Rs/ Consumer /Month	100 Rs /kW/Month	120 Rs/ Consumer /Month	For all units			
<i>High Tension -I</i>	For all units	270 Rs/kVA/ Month	425 Rs/kVA/ Month	320 Rs/kVA/ Month	For all units	5.25	7.40	6.30
<i>High Tension -II</i>	For all units	270 Rs/kVA/ Month	425 Rs/kVA/ Month	320 Rs/kVA/ Month	For all units	5.20	7.35	6.25
<i>High Tension -III</i>	For all units	265 Rs/kVA/ Month	415 Rs/kVA/ Month	315 Rs/kVA/ Month	For all units	5.15	7.30	6.20
<i>High Tension -IV</i>	For all units	265 Rs/kVA/ Month	415 Rs/kVA/ Month	315 Rs/kVA/ Month	For all units	5.15	7.30	6.20

Consumer Category	Fixed Charges (Rs)				Energy Charges (Rs/kWh)			
	Slab	Existing	Proposed	Approved	Slab	Existing	Proposed	Approved
<i>Utilities / Street Light</i>	For all units	30 Rs/Month	100 Rs/Month	35 Rs/Month	For all units	4.10	5.50	4.90
<i>Temporary supply</i>	For all units	40 Rs/Month	100 Rs/Month	1.5 times of the applicable fixed charges	For all units	6.60	9.00	1.5 times of the applicable fixed charges
<i>Temporary supply HT</i>	-	-	425 Rs/kVA/ Month	-	-	-	7.50	-

*\*Proposed slab is 101-200 units, \*\* Proposed slab is Above 200 Units*

10.9 Although, the additional revenue on account of tariff revision works out to Rs 275.70 Cr for the Petitioner on yearly basis (i.e. twelve months), since the tariff revision approved by the Commission would be effective for a lesser period (i.e. one month) , the additional revenue on account of tariff revision would not be available for the full year. The following table summarises the unmet revenue gap at the end of FY 2016-17 post tariff revision:

**Table 76: Unmet revenue gap after tariff revision (in Rs Cr)**

Particulars	Tariff Revision applicable for full year	Tariff revision applicable for remaining part of the year
Cumulative revenue gap (at existing tariffs)*	1,359.26	1,359.26
Additional revenue generated due to tariff revision	275.70	22.97
Net revenue gap/ (surplus)	<b>1,083.56</b>	<b>1,336.28</b>

*\*As per Table 74 of this Order*

## A11: WHEELING TARIFF FOR FY 2016-17

### *Petitioner's Submission*

- 11.1 The allocation statement submitted by the Petitioner for apportionment of costs and revenues between the respective business is as under:

**Table 77: Cost Allocation to Wheeling and Supply as submitted (%)**

Sno	Cost Elements	Wheeling %	Retail Supply
1	Power Purchase Cost and Transmission Charges	0%	100%
2	Employee Expenses	65%	35%
3	A&G Expenses	65%	35%
4	R&M Expenses	65%	35%
5	Depreciation	90%	10%
6	Interest on Loan	90%	10%
7	Return on Equity	90%	10%
8	CGRF and DSM Expenses	0%	100%
9	Interest on Security Deposit	10%	90%
10	Non Tariff Income	10%	90%

### *Commission's Analysis*

- 11.2 According to Regulation 5.4 and Regulation 5.5 of JSERC 'Distribution Tariff Regulations, 2015', the Petitioner is required to segregate the accounts of the Licensed Business into Wheeling Business and Retail Supply Business. In absence of segregated accounts, the Petitioner is required to submit an allocation statement duly approved by the Board of Directors accompanied with an explanation of the basis and methodology used for segregation.
- 11.3 The relevant extract of the Regulations has been reproduced hereunder:
- “5.4 The Licensee shall segregate the accounts of the Licensed Business into Wheeling Business and Retail Supply Business. The ARR for Wheeling Business shall be used to determine Wheeling Tariff and the ARR for Retail Supply Business to determine Retail Supply Tariff;*
- 5.5 For such period until accounts are segregated, the Licensees shall prepare an Allocation Statement to apportion costs and revenues to respective business. The Allocation Statement, approved by the Board of Directors of the Licensee, shall be accompanied with an explanation of the basis and methodology used for segregation which should be consistent over the Control Period.”*
- 11.4 The Petitioner has not submitted duly approved allocation statement. Moreover, the Petitioner has submitted a generic approach towards allocation of costs but has not provided appropriate basis and methodology used for segregation.

- 11.5 In absence of the above, the Commission has approved the allocation ratios in accordance with JSERC (Power Regulatory Accounting) Regulations, 2015. The allocation statement approved by the Commission is as under:

**Table 78: Cost Allocation to Wheeling and Supply approved by the Commission (%)**

Sno	Cost Elements	Wheeling %	Retail Supply
1	Power Purchase Cost and Transmission Charges	0%	100%
2	Employee Expenses	60%	40%
3	A&G Expenses	50%	50%
4	R&M Expenses	90%	10%
5	Depreciation	90%	10%
6	Interest on Loan	90%	10%
7	Interest on Working Capital	10%	90%
9	Return on Equity	90%	10%
10	Interest on Security Deposit	0%	100%
11	Non Tariff Income	10%	90%
12	Income Tax	90%	10%

- 11.6 Therefore, the ARR for wheeling and supply business submitted by the Petitioner and approved by the Commission for the Control Period FY 2016-17 to FY 2020-21 is as under:

**Table 79: Wheeling Business ARR as submitted by Petitioner (Cr)**

Particulars	Submitted by Petitioner				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Power Purchase Cost	-	-	-	-	-
O&M Expenses	48.88	50.54	56.20	58.63	61.67
Interest & Other Finance Charges					
Interest on Loan	14.10	11.96	10.11	8.26	7.51
Interest on consumer security deposit	0.15	0.16	0.17	0.18	0.19
Interest on Working Capital	4.64	3.82	4.05	4.16	4.37
Depreciation	27.32	27.77	29.06	30.05	32.02
CGRF Expenses	-	-	-	-	-
DSM Expenses	-	-	-	-	-
<b>Total Costs</b>	<b>95.10</b>	<b>94.24</b>	<b>99.58</b>	<b>101.28</b>	<b>105.77</b>
Add: Return on Equity	20.26	20.82	21.62	22.50	24.12
Less: Non-tariff income	0.50	0.50	0.50	0.50	0.50
Add: Income Tax on Sharing of Gains	29.78	-	-	-	-
Income Tax on ROE	20.52	10.72	11.13	11.59	12.42
<b>Net ARR</b>	<b>165.15</b>	<b>125.29</b>	<b>131.84</b>	<b>134.87</b>	<b>141.82</b>

**Table 80: Retail Business ARR as submitted by Petitioner (Cr)**

Particulars	Submitted by Petitioner				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Power Purchase Cost	1421.17	1532.18	1682.23	1818.99	1952.94
O&M Expenses	26.32	27.21	30.26	31.57	33.21
Interest & Other Finance Charges					
Interest on Loan	1.57	1.33	1.12	0.92	0.83
Interest on consumer security deposit	1.34	1.44	1.54	1.64	1.74
Interest on Working Capital	14.99	15.69	17.28	18.65	20.02
Depreciation	3.04	3.09	3.23	3.34	3.56
CGRF Expenses	0.30	0.30	0.30	0.30	0.30
DSM Expenses	0.30	0.50	0.50	0.50	0.50
<b>Total Costs</b>	<b>1469.03</b>	<b>1581.73</b>	<b>1736.46</b>	<b>1875.91</b>	<b>2013.10</b>
Add: Return on Equity	2.25	2.31	2.40	2.50	2.68
Less: Non-tariff income	4.50	4.50	4.50	4.50	4.50
Add: Income Tax on Sharing of Gains	16.04	-	-	-	-
Income Tax on ROE	2.28	1.19	1.24	1.29	1.38
<b>Net ARR</b>	<b>1,485.40</b>	<b>1,580.74</b>	<b>1,735.60</b>	<b>1,875.20</b>	<b>2,012.66</b>

**Table 81: Wheeling Business ARR as approved by Commission (Cr.)**

Particulars	Approved by Commission				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Power Purchase Cost	-	-	-	-	-
O&M Expenses	45.28	46.56	48.52	50.82	53.32
Interest & Other Finance Charges					
Interest on Loan	14.42	11.81	9.83	8.17	6.70
Interest on consumer security deposit	-	-	-	-	-
Interest on Working Capital	3.42	3.43	3.50	3.62	3.77
Depreciation	27.38	27.84	28.87	30.26	31.96
CGRF Expenses	-	-	-	-	-
DSM Expenses	-	-	-	-	-
<b>Total Costs</b>	<b>90.50</b>	<b>89.64</b>	<b>90.73</b>	<b>92.88</b>	<b>95.75</b>
Add: Return on Equity	19.63	19.93	20.65	21.64	22.84
Less: Non-tariff income	0.59	0.59	0.59	0.59	0.59
Add: Income Tax on Sharing of Gains	-	-	-	-	-
Income Tax on ROE	-	-	-	-	-
<b>Net ARR</b>	<b>109.54</b>	<b>108.98</b>	<b>110.79</b>	<b>113.93</b>	<b>118.00</b>

**Table 82: Retail Business ARR as approved by Commission (Cr.)**

Particulars	Approved by Commission				
	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Power Purchase Cost	1318.54	1331.56	1408.81	1464.11	1507.02
O&M Expenses	21.23	22.16	23.27	24.41	25.59
Interest & Other Finance Charges					
Interest on Loan	1.60	1.31	1.09	0.91	0.74
Interest on consumer security deposit	1.49	1.60	1.71	1.83	1.93
Interest on Working Capital	13.11	13.12	13.84	14.33	14.70
Depreciation	3.04	3.09	3.21	3.36	3.55
CGRF Expenses	-	-	-	-	-
DSM Expenses	-	-	-	-	-
<b>Total Costs</b>	<b>1,359.02</b>	<b>1,372.85</b>	<b>1,451.93</b>	<b>1,508.95</b>	<b>1,553.54</b>
Add: Return on Equity	2.18	2.21	2.29	2.40	2.54
Less: Non-tariff income	5.27	5.27	5.27	5.27	5.27
Add: Income Tax on Sharing of Gains	-	-	-	-	-
Income Tax on ROE	-	-	-	-	-
<b>Net ARR</b>	<b>1,355.93</b>	<b>1,369.79</b>	<b>1,448.96</b>	<b>1,506.08</b>	<b>1,550.80</b>

11.7 Therefore, the wheeling Tariff for FY 2016-17 for the Petitioner is Rs 0.36 per kWh.

## A12: TARIFF RELATED OTHER ISSUES

### Tariff Rationalization

#### *Petitioner's submission*

12.1 The Petitioner has proposed following changes in tariff slabs:

- (a) The Petitioner has proposed a change in existing slab of 101-400 unit consumption in Domestic LT to include consumption only upto 200 units i.e. 101-200 unit slab and change in slab for above 400 units to above 200 units.
- (b) The Petitioner also proposed a change in the tariff structure for commercial supply category for fixed charge component from Rs./consumer/month to Rs/kW/Month.
- (c) The Petitioner proposed a change in the tariff structure for DS-HT supply category for fixed charge component from Rs./consumer/month to Rs/kVA/Month.
- (d) The Petitioner has proposed introduction of two new consumer categories
  - 1) **Temporary HT Supply:** The Petitioner has proposed to introduce this category considering the latest developments in the license area and in anticipation of new commercial/ industrial enterprises which may require temporary HT Supply.
  - 2) **Bulk Domestic Supply LT:** The Petitioner has proposed this category for group housing complexes societies.
- (e) Change in character of service for utilities/street lights category as AC 50 Hz three phase at 415 V or 6.6kV or 220V within the specified variation limits as far as practicable.
- (f) The Petitioner has also proposed changes in meter hire charges for the various consumer categories as well as charges for Disconnection and Reconnection for Single Phase, Three Phase, Low Tension Industrial Supply and HT Supply.
- (g) The Petitioner has also proposed a minimum amount of delayed payment surcharge of Rs 100 for LT single phase and Rs 300 for LT three phase or HT category consumers.



*Views of the Commission*

- 12.2 The Commission has scrutinized the proposals submitted by the Petitioner for changes in the categorization /tariff structure. The Commission observes that the proposals of the Petitioner with respect to change in categorization/ tariff structure of Domestic Category, Commercial and DS-HT Category and introduction of bulk domestic supply LT category is not supported by suitable justification. For the proposed changes in the categorization/ tariff structure and introduction of new consumer category, the Petitioner has to furnish adequate slab wise information of sales, connected load and consumers, reasons for proposed changes, financial impact analysis of change in tariff structure on the consumer, revenue forecast in existing and proposed scenario, overall impact of revenue on the Petitioner, anticipated change in consumption pattern /load profile etc. for proper scrutiny of the Commission.
- 12.3 The Commission finds that the Petitioner, despite multiple requests of the Commission, has failed to submit complete and correct information on slab wise consumers and sales of Domestic Category. In the absence of correct slab wise information on consumers, connected load, sales, surcharges and rebates any proposal for change in tariff structure cannot be accepted by the Commission. Further, the Commission directs the Petitioner to maintain data authenticity while submitting the same to the Commission in future.
- 12.4 Further, in order to adequately assess the impact of the change in Tariff structure from Rs /Consumer/month to Rs /kW/month and Rs /kVA/month for Commercial and DS-HT Consumers respectively, the Petitioner is directed to undertake parallel billing for all the consumers in this category and assess the impact on the bill of each consumer from change in the tariff structure for a period of 3 months. The Petitioner should submit a report on the total impact on the consumers and the overall revenue impact on the Petitioner due to change in the tariff structure along with the bills for the proper scrutiny of the Commission within one month of the completion of the study.
- 12.5 In view of the above, the Commission does not consider it appropriate to accept the proposal of changes in the categorization/ structuring of tariff for Domestic, DS-HT and Commercial Categories or the introduction of Bulk Domestic Supply LT Category.
- 12.6 However, in respect of the Petitioner's proposal on introduction of new category for Temporary Supply HT, the Commission has modified the energy charges and fixed charges for existing Temporary Supply category to 1.5 times the tariff of applicable category
- 12.7 Further, in respect to the proposal of change in character of service for Utilities/Street Lights Category, the Commission accepts the proposal of the Petitioner since the Petitioner has submitted that it supplies power to the utilities at higher voltages and also the proposal is in compliance to the JSERC (Electricity Supply Code) Regulations, 2015.
- 12.8 In respect to the Petitioner's submission for revision of meter hire charges for consumer categories as well as charges for reconnection and disconnection, the Commission has provided an inflationary increase in these charges since they have not been revised after FY 2010-11.

- 12.9 Further, the Commission has rejected the Petitioner's proposal for a minimum amount of delayed payment surcharge of Rs 100 for LT single phase and Rs 300 for LT three phase or HT category consumers in absence of any justification/ reasoning by the Petitioner, despite requests for this data by the Commission.

## A13: TARIFF SCHEDULE

### APPLICABLE FROM 1<sup>ST</sup> MARCH, 2017<sup>1</sup>

**This tariff will come into effect from 1<sup>st</sup> March, 2017 and apply to all consumers availing power supply from Tata Steel within its licensed area.**

The consumers classified under different categories will be charged different tariff for energy supplied to them as given below, based on the nature of use of energy, supply voltage and demand of power.

#### Domestic and Commercial Supply:

The tariff for Domestic and Commercial Supply will be charged under following categories:

Demand in kVA	Voltage of supply to be provided by Tata Steel	Consumer Category	Nature of use of energy
Upto 100 kVA	415 V or 220 V as per availability and discretion of Tata Steel	DS Domestic Category	Domestic & Households, Educational Institutions and Hostels, Charitable & Social Welfare Institutions, Hospitals, municipal Services etc.
Upto 100 kVA	415 V or 220 V as per availability and discretion of Tata Steel	CS Commercial Category	Trade, Business, Shops, Cinemas, Clubs, Hotels, Public Offices, Private Hospital. Business establishments in the premises of Educational Institutions, Hostels, Religious Institutions & Other Commercial or business establishments.

#### High Tension (HT) Supply:

The tariff for HT Supply will be charged under following categories:

Demand in kVA	Voltage of supply to be provided by Tata Steel	Consumer Category
For Demand more than 100 kVA for DS-HT Consumers	6.6 kV/11 kV as per availability and discretion of Tata Steel	DS-HT
For demand more than 100 kVA upto 500 kVA	6.6 kV/11kV/33kV as per availability and discretion of Tata Steel	HT-1

<sup>1</sup> This schedule shall remain in force till the next tariff schedule is issued by the Commission.

Demand in kVA	Voltage of supply to be provided by Tata Steel	Consumer Category
For demand more than 500 kVA but less than 5000 kVA	6.6 kV/11kV/33kV as per availability and discretion of Tata Steel	HT-2
For demand 5000 kVA or more	33kV/132kV	HT-3
For power supplied to Steel Works of the Tata Steel	For power supplied to Steel Works of the Tata Steel	HT-4

#### A. Domestic Supply, (DS Category)

##### 1. Applicability:

This schedule is applicable to Domestic & Households, Educational Institutions and Hostels, Charitable & Social Welfare Institutions and Govt & Industrial Hospitals.

##### 2. Character of Service:

AC 50 Hz three phase at 415V or 220V at single phase within the specified variation limits as far as practicable.

##### 3. Tariff

##### Energy Charge

Description (Units/month)	Energy Charges
	<i>Rs/unit</i>
0-100	2.30
101-400	3.95
Above 400	4.55

##### Fixed Charges

Description	Fixed Charges
	<i>(Rs/month or part thereof)</i>
220V single phase up to 5 kW	13
415 V three phase above 5 kW	26

#### 4. Meter Hire Charges

Description	Meter Hire Charge
	<i>Rs/month</i>
220 V single phase upto 5 kW	20
415 V three phase above 5 kW	50

Note: The meter hire charge is applicable only in case the meter is purchased and installed by the licensee. No meter hire charges applicable in case of consumer purchased meters.

5. **Interest on delayed payment:** In accordance with Clause IV as provided in section on Terms and Conditions of Supply of the present Tariff Order.

#### B. Domestic Supply, HT category (DSHT Category)

##### 1. Applicability:

This schedule is applicable to Domestic & Households and Housing Co-operative societies.

##### 2. Character of Service:

AC 50 Hz three phase at 6.6 KV/11KV within the specified variation limits as far as practicable in line with the IE Rules 1956 and grid constraints.

##### 3. Tariff

##### Energy Charge:

Description (Units/month)	<i>Rs/unit</i>
Energy Charge	4.50

##### Fixed Charge

Description	<i>Rs/consumer/month</i>
Fixed Charge	420

##### 4. Meter Hire Charges per month: Rs 50

Note: The meter hire charge is applicable only in case the meter is purchased and installed by the licensee. No meter hire charges applicable in case of consumer purchased meters.

5. **Interest on delayed payment:** In accordance with Clause IV as provided in section on Terms and Conditions of Supply of the present Tariff Order.

### C. Commercial Supply (CS category)

#### 1. Applicability:

This schedule applicable for Trade, Business, Shops, Cinemas, Clubs, Hotels, Public Offices, Private Nursing Homes and Hospitals, Business establishments in the premises of Educational Institutions, Hostels, Religious Institutions, and any other Commercial or business establishments

#### 2. Character of Service:

AC 50 Hz three phase at 415V or 220V at single phase within the specified variation limits as far as practicable in line with the IE Rules 1956 and grid constraints.

#### 3. Tariff

##### Energy Charge

Description (units/month)	Rs/unit
Energy Charges	6.55

##### Fixed Charge

Description	Fixed Charges
220 V single phase upto 5kW	Rs 50/consumer/Month
415 V three phase above 5kW	Rs 120 /consumer/Month

#### 4. Meter Hire Charges

Description	Meter Hire Charge
	Rs/consumer/month
220 V single phase upto 5kW	20
415 V three phase above 5kW	105

Note: The meter hire charge is applicable only in case the meter is purchased and installed by the licensee. No meter hire charges applicable in case of consumer purchased meters.

#### 5. Interest on delayed payment: In accordance with Clause IV as provided in section on Terms and Conditions of Supply of the present Tariff Order.

## **D. High Tension Supply, (HT category)**

### **I. HT-1 Category**

#### **1. Applicability:**

This schedule is applicable to Industrial and Commercial establishments and where contract demand agreement is more than 100 kVA but less than 500 kVA.

#### **2. Character of Service:**

AC 50 Hz three phase at 6.6 kV/11 kV within the specified variation limits as far as practicable, in line with IE rules 1956 and grid constraints.

#### **3. Tariff**

##### **Energy charge**

Description (Units/month)	Rs/unit
Energy Charges	6.30

##### **Demand charge**

Description	Rs/kVA/month
Demand Charge	320

Note: The billing demand shall be as per Clause I, as provided in section on Terms and Conditions of Supply of the present Tariff Order.

#### **4. Meter Hire Charges:** Rs 700 per month

Note: The meter hire charge is applicable only in case the meter is purchased and installed by the licensee. No meter hire charges applicable in case of consumer purchased meters.

#### **5. Power Factor Penalty/Rebate:** In accordance with Clause II as provided in section on Terms and Conditions of Supply of the present Tariff Order.

#### **6. Electricity Duty:** In accordance with Clause III as provided in section on Terms and Conditions of Supply of the present Tariff Order.

#### **7. Interest on delayed payment:** In accordance with Clause IV as provided in section on Terms and Conditions of Supply of the present Tariff Order.

#### **8. Voltage Rebate:** In accordance with Clause VI as provided in section on Terms and Conditions of Supply of the present Tariff Order.

## II. HT-2 Category

### 1. Applicability

This schedule is applicable to Industrial and Commercial establishments and where contract demand agreement is more than 500 kVA but less than 5000 kVA.

### 2. Character of Service

AC 50 Hz three phase at 6.6KV/11kV/33kV within the specified variation limits as far as practicable, in line with IE rules 1956 and grid constraints.

### 3. Tariff

#### Energy charge

Description (Units/month)	Rs/unit
Energy Charges	6.25

#### Demand charge

Description	Rs/kVA/Month
Demand charge	320

Note: The billing demand shall be as per Clause I, as provided in section on Terms and Conditions of Supply of the present Tariff Order.

### 4. Load factor Rebate

Description	Rebate %
For all Energy consumption above 65% and upto 70% load factor	5%
For all Energy consumption above 70% load factor	7.5%

Note: The above rebate will be applicable only on energy charges on monthly basis and consumer with arrears shall not be eligible for the above rebate. However, the applicable rebates shall be allowed to consumers with outstanding dues, wherein such dues have been stayed by the appropriate authority/Courts.

### 5. Meter Hire Charges: Rs 700 per month

Note: The meter hire charge is applicable only in case the meter is purchased and installed by the licensee. No meter hire charges applicable in case of consumer purchased meters.

### 6. Power Factor Penalty/Rebate: In accordance with Clause II as provided in section on Terms and Conditions of Supply of the present Tariff Order.

### 7. Electricity Duty: In accordance with Clause III as provided in section on Terms and Conditions of Supply of the present Tariff Order.



8. **Interest on delayed payment:** In accordance with Clause IV as provided in section on Terms and Conditions of Supply of the present Tariff Order.
9. **Voltage Rebate:** In accordance with Clause VI as provided in section on Terms and Conditions of Supply of the present Tariff Order.

### III. HT-3 Category

#### 1. Applicability

This schedule is applicable to Industrial establishments and where contract demand agreement is more than 5000 kVA or more.

#### 2. Character of Service

AC 50 Hz three phase at 33kV / 132kV within the specified variation limits as far as practicable.

#### 3. Tariff

##### Energy charge

Description (Units/month)	Rs/unit
Energy Charges	6.20

##### Demand charge

Description	Rs/kVA/month
Maximum demand charge	315

Note: The billing demand shall be as per Clause I, as provided in section on Terms and Conditions of Supply of the present Tariff Order.

#### 4. Load factor Rebate

Description	Rebate
For all Energy consumption above 70% load factor	7.5%

NOTE: The above rebate will be applicable only on energy charges on monthly basis and consumer with arrears shall not be eligible for the above rebate. However, the applicable rebates shall be allowed to consumers with outstanding dues, wherein such dues have been stayed by the appropriate authority/Courts.

#### 5. Meter Hire Charges: Rs 700 per month

Note: The meter hire charge is applicable only in case the meter is purchased and installed by the licensee. No meter hire charges applicable in case of consumer purchased meters.

6. **Power Factor Penalty/Rebate:** In accordance with Clause II as provided in section on Terms and Conditions of Supply of the present Tariff Order.

7. **Electricity Duty:** In accordance with Clause III as provided in section on Terms and Conditions of Supply of the present Tariff Order.
8. **Interest on delayed payment:** In accordance with Clause IV as provided in section on Terms and Conditions of Supply of the present Tariff Order.
9. **Voltage Rebate:** In accordance with Clause VI as provided in section on Terms and Conditions of Supply of the present Tariff Order.

#### IV. HT-4 Category

##### 1. Applicability

This schedule is applicable for consumption of Steel Works of Tata Steel.

##### 2. Character of Service

AC 50 Hz three phase at 132kV/220kV/ 400kV within the specified variation limits as far as practicable.

##### 3. Tariff

###### Energy charge

Description (Units/month)	Rs/unit
Energy Charges	6.20

###### Demand charge

Description	Rs/kVA/month
Maximum demand charge	315

The billing demand shall be as per Clause I, as provided in section on Terms and Conditions of Supply of the present Tariff Order.

##### 4. Load factor Rebate

Description	Rebate
For all Energy consumption above 70% load factor	7.5%

NOTE: The above rebate will be applicable only on energy charges on monthly basis and consumer with arrears shall not be eligible for the above rebate. However, the applicable rebates shall be allowed to consumers with outstanding dues, wherein such dues have been stayed by the appropriate authority/Courts.

##### 5. Meter Hire Charges: Rs 700 per month

Note: The meter hire charge is applicable only in case the meter is purchased and installed by the licensee. No meter hire charges applicable in case of consumer purchased meters.

6. **Power Factor Penalty/Rebate:** In accordance with Clause II as provided in section on Terms and Conditions of Supply of the present Tariff Order.
7. **Electricity Duty:** In accordance with Clause III as provided in section on Terms and Conditions of Supply of the present Tariff Order.
8. **Interest on delayed payment:** In accordance with Clause IV as provided in section on Terms and Conditions of Supply of the present Tariff Order.
9. **Voltage Rebate:** In accordance with Clause VI as provided in section on Terms and Conditions of Supply of the present Tariff Order.

#### E. Utilities/Street Light Category

##### 1. Applicability:

The schedule is applicable to all utilities and municipal services like water and waste water, sewage treatment, street lights etc.

##### 2. Character of Service

AC 50 Hz three phase at 415V or 220V or 6.6 kV within the specified variation limits as far as practicable.

##### 3. Tariff

##### Energy charge

Description (Units/month)	Rs/unit
Energy Charges	4.90

##### Fixed charge

Description (Units/month)	Rs/month or part thereof
Fixed Charge	35

##### Meter Hire charge

Description (Units/month)	Meter Hire Charges Rs/month
220V Single phase upto 5kW	20
415V three phase above 5 kW	50

Note: The meter hire charge is applicable only in case the meter is purchased and installed by the licensee. No meter hire charges applicable in case of consumer purchased meters.

4. **Interest on delayed payment:** In accordance with Clause IV as provided in section on Terms and Conditions of Supply of the present Tariff Order.

## F. Temporary Supply

### 1. Applicability

Temporary supply connections are to be provided on request for an initial period of 3 (three) months maximum from the date of payment of estimated amount in advance and thereafter on discretion of the Petitioner.

### 2. Tariff Rates

#### Fixed Charge

Description	<i>Rs/month</i>
Fixed Charges	1.5 times of the applicable fixed charges

#### Energy Charge

Description (Units/month)	<i>Rs/unit</i>
Energy Charges	1.5 times of the applicable fixed charges

### Schedule for Miscellaneous Charges

S.No	Purpose	Charges (In Rs.)	Manner in which payment will be realized
<b>1</b>	<b>Application fee</b>		
	Agriculture	10	Application should be given in standard requisition form of the Board which will be provided free of cost. Payable in cash in advance along with the intimation
	Street light	20	
	Domestic	15 (Kutir Jyoti) 20 (Others)	
	Commercial	20	
	Other LT categories	50	
	HTS	100	
	HTSS, EHTS, RTS	100	
<b>2</b>	<b>Revision of estimate when a consumer intimates changes in his requirement subsequent to the preparation of service connection estimate based on his original application</b>		
	Agriculture	10	Payable in cash in advance along with the intimation for revision
	Domestic	30	
	Commercial	30	
	Other LT categories	50	
	HT Supply	150	
<b>3</b>	<b>Testing of consumers Installation</b>		
	First test and inspection free of charge but should any further test and inspection be necessitated by faults in the installation or by not compliance with the conditions of supply for each extra test or inspection	100	(Payable in cash in advance along with the request for testing )
<b>4</b>	<b>Meter test when accuracy disputed by consumer</b>		
	Single phase	40	To be deposited in cash in advance. If the meter is found defective within the meaning of the Indian Electricity Rules 1956, the amount of advance will be refunded and if it is proved to be correct within the permissible limits laid down in the Rules, the amount will not be refunded.
	Three phase	100	
	Trivector of special type meter	650	
<b>5</b>	<b>Removing/ Refixing of meter</b>		
	Single phase	50	Payable in cash in advance along with the intimation for revision
	Three phase	100	
	Trivector of special type meter	300	
<b>6</b>	<b>Changing of meter /meter equipment/fixing of sub meter on the request of the consumer/fixing of sub meter</b>		
	Single phase	50	Payable in cash in advance along with the intimation for revision
	Three phase	100	

S.No .	Purpose	Charges (In Rs.)	Manner in which payment will be realized
	Trivector of special type meter	300	
<b>7</b>	<b>Resealing of meter when seals are found broken</b>		
	Single phase	25	Payable with energy bill
	Three phase	50	
	Trivector of special type meter	100	
<b>8</b>	<b>Replacement of meter card, if lost or damaged by consumer</b>	<b>10</b>	Payable with energy bill
<b>9</b>	<b>Fuse call – Replacement</b>		
	Board fuse due to fault of consumer	15	Payable with energy bill
	Consumer fuse	15	
<b>10</b>	<b>Disconnection/ Reconnection</b>		
	Single phase	40	Payable in cash in advance along with the request by the consumer. If the same consumer is reconnected/ disconnected within 12 months of the last disconnection/ reconnection, 50% will be added to the charges
	Three phase	100	
	LT Industrial Supply	400	
	HT Supply	700	
<b>11</b>	<b>Security Deposit</b>		<b>As per clause 8.2.8 -8.2.20 of the JSERC (Electricity Supply code) Regulations, 2015</b>

## **A14: TERMS AND CONDITIONS OF SUPPLY**

Besides the terms & conditions provided in the JSERC (Electricity Supply Code) Regulations, 2015, the Commission approves the following additional terms & conditions of supply:

### **Clause I: Billing Demand**

The billing demand shall be the maximum demand recorded during the month or 75% of contract demand whichever is higher. In case of the actual demand exceeding 110% of the contract demand, the consumer shall pay penal charges for the exceeded demand. The penal charges would be charged as follows:

If the recorded demand exceeds 110% of Contract Demand, then the demand charge upto 110% of contract demand will be charged as per the normal tariff rate. The remaining recorded demand over and above 110% will be charged @ 1.5 times the normal tariff rate.

In case actual demand is higher than the contract demand for three continuous months, the same shall be treated as the new contract demand for the purpose of billing of future months and the consumer will have to get into a new agreement for the revised contract demand with the licensee.

Once the actual demand is recorded to be higher than contract demand for two continuous months, the licensee would serve notice to the consumer after the end of the second month for enhancement of the contract demand. The consumer would be liable to respond within 15 days of receipt of such notice and submit application for enhancement of contract demand to the licensee. The licensee would, within 15 days of receipt of response from the consumer, finalise the new agreement after making necessary changes at consumer's installations.

In case the consumer fails to respond within 15 days, the licensee would have the right to initiate enhancement of load as per the last recorded contract demand. While, in case the consumer provides an undertaking that the actual demand shall not exceed the contract demand again for a period of atleast six months from the last billing, the licensee shall continue to bill the consumer as per the existing contract demand and billing demand.

Provided that if the consumer fails to adhere to the undertaking and the actual demand exceeds the contract demand within the subsequent six months of the undertaking, the consumer shall have to pay a penal charge of 2 times the normal tariff for a period of three consecutive months and the licensee shall, after serving 7 days notice to the consumer, enhance the contract demand of the consumer as per the last recorded actual demand.

### **Clause II: Power factor Penalty/Rebate**

#### **Power Factor Penalty:**

Power Factor Penalty will be applicable in case of maximum demand meters.

In case average power factor in a month for a consumer falls below 0.85, a penalty @ 1% for every 0.01 fall in power factor from 0.85 to 0.60; plus 2% for every 0.01 fall below 0.60 to 0.30 (up to and including 0.30) shall be levied on demand and energy charges; plus 3% for every 0.01 fall below 0.30.

Further, all consumers having aggregate inductive load greater than 3 HP (2.2 kW) and above (except domestic and street lights), shall install capacitors of required KVAR rating provided in the following table:

Rating of individual Inductive Load in HP	kVAR rating of LT capacitors
3 to 5	1
5 to 7.5	2
7.5 to 10	3
10 to 15	4
15 to 20	6
20 to 30	7
30 to 40	10
40 to 50	10 – 15
50 to 100	20 – 30

For existing consumer, the Petitioner should first serve one month's notice to all such consumers who do not have or have defective shunt capacitors. In case the consumers does not get the capacitor installed/replaced within the notice period, the consumer shall be levied a surcharge at 5% on the total billed amount charge (metered or flat), till they have installed the required capacitors.

No connection shall be released for any consumer having aggregate inductive load greater than 3 HP (2.2 kW) unless the capacitors of suitable rating are installed.

#### **Power Factor Rebate:**

Power Factor rebate will be applicable in case of maximum demand meters.

In case average power factor as maintained by the consumer is more than 85%, a rebate of 1% and if power factor is more than 95%, a rebate of 2% on demand and energy charges shall be applicable.

#### **Clause III: Jharkhand Electricity Duty**

The charges in this tariff schedule do not include charges on account of Electricity Duty/ Surcharge to the consumers under the Bihar Electricity Duty Act, 1948 as adopted in Jharkhand vide S.O No. 117 dated 15.12.2000 and the rules framed there under as amended from time to time and any other Statutory levy which may take effect from time to time after making corrections for the loss in the distribution system.

#### **Clause IV: Interest on Delayed payment**

The Delayed Payment Surcharge will be levied for all consumers at the rate of 1.5% per month and part thereof for all consumer categories. The due date for making payment of energy bills or other charges shall be fifteen days from the date of serving of bill. The bill should be generated and delivered on monthly basis. In case, the licensee defaults in generating and delivering bills on monthly basis, DPS will not be charged for the period of default by licensee.

#### **Clause V: Electricity Supply Code**

The Jharkhand State Electricity Regulatory Commission (Electricity Supply Code) Regulation 2015 as amended from time to time will be followed wherever applicable.

#### **Clause VI: Voltage Rebate**

Voltage rebate to the High Tension consumers will be applicable as given below:



Consumer Category	Voltage Rebate
HTS - 33 kV	3.00%
HTS - 132 kV	5.00%
HTS - 220 kV	5.50%
HTS - 400 kV	6.00%

The above rebate will be available only on monthly basis and consumer with arrears shall not be eligible for the above rebates. However, the applicable rebates shall be allowed to consumers with outstanding dues, wherein such dues have been stayed by the appropriate authority/Courts.

## **Clause VII: Other Terms & Conditions**

### **Point of Supply**

The Power supply shall normally be provided at a single point for the entire premises. In certain categories like coal mines power may be supplied at more than one point on request of consumer subject to technical feasibility. But in such cases metering and billing shall be done separately for each point.

### **Dishonoured Cheques**

In the event of dishonored cheque for payment against a particular bill, the Licensee shall charge a minimum of 300 Rs or 0.5% of the billed amount, whichever is higher. The DPS shall be levied extra as per the applicable terms and conditions of DPS for the respective category.

### **Stopped/ defective meters**

In case of existing consumers with previous consumption pattern, the provisional average bill shall be issued on the basis of average of previous twelve months consumption.

In case of meter being out of order from the period before which no pattern of consumption is available, the provisional average bill shall be issued on the basis of sanctioned/ contract load on following load factor applicable to respective categories, as shown below:

Category	Load Factor
Domestic Supply	0.10
Commercial Supply	0.20
Domestic Supply HT	0.15
High Tension Supply	
11 KV	0.25
33 KV	0.30
132/220/400 KV	0.50

### **Sale of energy**

No consumer shall be allowed to sell the electricity purchased from the Licensee to any other person/ entity.

**Release of new connections**

No new connections shall be provided without appropriate meter. The tariff for un-metered connections shall be applicable only to the existing un-metered connections, until they are metered.

**Conversion factors**

The following shall be the conversion factors, as and where applicable

(PF=0.85):

1 Kilowatt (KW) = 1.176 Kilovolt ampere (kVA)

1 Kilowatt (KW) = 1 / 0.746 Horse Power (HP)

1 Horse Power (1 HP) = 0.878 Kilovolt ampere (KVA)

**Fuel Price & Power Purchase Adjustment (FPPPA)**

Applicable as per the Clause 6.59 to 6.65 of the Distribution Tariff Regulations, 2010 and Clause 6.60 to 6.68 of the Distribution Tariff Regulations, 2015 and as amended by the Commission from time to time

## A15: STATUS FOR EARLIER DIRECTIVES

15.1 The following table summarizes the status of compliance of earlier directives by the Commission and the views of the Commission:

Directives as per MYT order dated June 4, 2014	Status submitted by the Petitioner	Views of the Commission
<p><u>Separation of Accounts:</u></p> <p>The Commission directed the Petitioner to segregate its accounts in full and submit the same along with the auditor's report specifying any anomaly in practice of booking expenses etc. with the next tariff petition.</p>	The Petitioner submitted that it has separated the accounts to the extent possible in the true up/APR Petition for FY 2014-15.	The Commission notes that the Petitioner has complied with this directive. The Petitioner is now directed to comply with the applicable provisions of JSERC (Power Regulatory Accounting) Regulations, 2015.
<p><u>Sales Estimation and Projections:</u></p> <p>The Commission directed the Petitioner to submit a detailed report for load research and demand forecast study within 30 days from the date of the issue of the Order.</p>	The Petitioner submitted that it has submitted the detailed report on increase in load with the replies to the discrepancies.	<p>The Commission observes that the Petitioner in compliance to directives of Tariff Order dated 31<sup>st</sup> May 2015 had submitted that it shall submit the final reports on technical study shortly</p> <p>However, the Petitioner has now submitted that it submitted the report on technical study along with its Tariff Petition dated November 2014.</p> <p>Hence, the Commission finds discrepancy in the Petitioner's submission and directs the Petitioner to submit the final and updated report on Technical study within 6 months of the issue of this Tariff Order.</p>
<p><u>Status of CGRF &amp; DSM Initiatives:</u></p> <p>The Commission directed the Petitioner to continue to submit the quarterly reports on status of CGRF and DSM Initiatives</p>	Petitioner submitted that it is regularly submitting the status of CGRF and DSM initiatives to the Hon'ble Commission.	The Commission directs the Petitioner to continue submitting the quarterly reports to the Hon'ble Commission.
<p><u>Adjustment of Bills</u></p> <p>The Commission directed the Petitioner to submit status of reconciliation of bills of TPCL to the Hon'ble Commission.</p>	Petitioner submitted that it has made the submissions for true up/APR for FY 2014-15 and FY 2015-16 based on actual bills raised by TPCL in which the latest tariffs are reflected.	The Commission notes the compliance of the directive by the Petitioner. However, since it is a recurring process, the Petitioner is again directed to submit status of

Directives as per MYT order dated June 4, 2014	Status submitted by the Petitioner	Views of the Commission
		adjustment of bills for future period.
<p><b>O&amp;M expenses</b></p> <p>The Commission directed the Petitioner to clearly segregate O&amp;M expenses so that such expenses may be clearly identifiable from books of accounts itself.</p>	<p>The Petitioner submitted that it carries out maintenance of its Distribution network through its subsidiary JUSCO. The segregated cost of A&amp;G cost, R&amp;M cost and Employee cost are separately shown under Audited Accounts of FY 2014-15 and hence, segregated O&amp;M expenses shall be clearly identifiable from the books of accounts.</p>	<p>The Commission notes the compliance of this directive by the Petitioner.</p>
<p><b>Technical Study for Service Area</b></p> <p>The Commission directed the Petitioner to submit a timeframe for releasing all pending connections as per the relevant provisions of JSERC (Distribution Licensees' Standards of Performance), Regulations 2005. The Petitioner also directed the Petitioner to submit quarterly report to the Commission on the status of consumer applications pending and the reasons thereof.</p>	<p>The Petitioner submitted that it has taken due care to ensure that all pending connections are released within the due date. Further, the quarterly reports have also been submitted to the Hon'ble Commission.</p>	<p>The Commission directs the Petitioner to continue submitting the quarterly reports to the Hon'ble Commission.</p>
<p><b>Data Adequacy :</b></p> <p>The Commission directed the Petitioner to submit the complete formats along with the next Tariff Petition in absence of which its Tariff Petition may not be accepted by the Commission.</p>	<p>The Petitioner submits that it has submitted all the Tariff Formats applicable to Tata Steel to the Hon'ble Commission.</p>	<p>The Petitioner should ensure in all the subsequent filings to the Commission that all the applicable regulatory formats are provided with the Petition in a timely manner.</p>
<p><b>Typographical mistakes in the Petition:</b></p> <p>The Commission directed the Petitioner to ensure that typographical mistakes are avoided in the Tariff Petition.</p>	<p>The Petitioner submits that utmost care has been taken with the Petition to avoid such mistakes</p>	<p>Commission notes compliance of the Petitioner and <b>directs the Petitioner to take extreme care in future too in order to avoid mistakes.</b></p>

Directives as per MYT order dated June 4, 2014	Status submitted by the Petitioner	Views of the Commission
<p><b>Report on Distribution Loss</b></p> <p>The Petitioner is directed to proactively take measures for reduction of distribution losses and controlling theft in its licensed area and submit quarterly reports on the same to the Commission. The Petitioner should also report the distribution losses to the Commission on a quarterly basis.</p>	<p>Petitioner submitted that it has been taking measures for reducing distribution losses and controlling theft in its licensed area and has been submitting quarterly reports to the Hon'ble Commission on the same.</p>	<p>The Commission directs the <b>Petitioner to continue submitting the quarterly reports to the Hon'ble Commission.</b></p>
<p><b>Power Purchase Cost</b></p> <p>The Commission directed the Petitioner to evaluate options for reduction of its power purchase costs through short term and long term options and submit same to the Commission for approval within 3 months of issue of this Tariff Order.</p>	<p>The Petitioner submitted that it had evaluated options for reducing its power purchase cost earlier and has sourced power from DVC 400 kV from June 2012 which has resulted in overall reduction in per unit power purchase cost of the licensee. For short term options, the Petitioner submitted that it shall evaluate it and submit the results to the Commission on the same.</p>	<p>The Petitioner has not adequately complied with the directive of the Commission. In view of favourable rates in the short term power market, the Petitioner should evaluate procurement from such sources if the same is feasible.</p> <p>The Petitioner should submit its findings in the form of a detailed note to the Commission within 1 month of the issue of this Tariff Order.</p>
Directives as per Tariff Order dated 31 <sup>st</sup> May 2015	Status submitted by the Petitioner	Views of the Commission
<p><b>RPO Compliance</b></p> <p>The Commission directed the Petitioner to comply with the renewable purchase obligation as stipulated for FY 2015-16 along with shortfall for FY 2014-15. The Commission stated that it shall not allow for any carry forward of RPO beyond the control period and failure to comply with it shall attract penalty.</p>	<p>The Petitioner submitted that despite financial constraints it has made all the efforts to meet its RPO in FY 2014-15 through purchase of REC's. However, there was a shortfall in FY 2014-15. The Petitioner further stated that it will make all efforts to comply with the cumulative RPO (RPO of FY 2015-16 and shortfall of previous years) in FY 2015-16.</p>	<p>The Commission noted with concern that the Petitioner has not been able to meet its RPO for FY 2014-15 due to financial constraints. The Petitioner should ensure compliance to RPO stipulated for FY 2015-16 along with shortfall of FY 2014-15 while submitting true up for FY 2015-16.</p> <p><b>The Commission shall not allow any carry forward of RPO beyond the Control Period and failure to comply shall attract strict penalty for the Petitioner.</b></p>

Directives as per MYT order dated June 4, 2014	Status submitted by the Petitioner	Views of the Commission
<b>Details of Depreciation</b>  <b>The Commission directed the Petitioner to submit report on reasons for amount of depreciation claimed under various heads specially related to foreign exchange variation within 1 month of issue of the Tariff Order.</b>	The Petitioner submitted that it has provided details of asset class wise value of assets and the depreciation during the financial year in the Petition. For the capital equipment purchased from foreign, exchange fluctuation had come in one of the previous years which was accounted in the asset cost. The Depreciation in that asset was computed inclusive of variation in foreign exchange.	The Petitioner should continue to follow relevant provisions of the applicable regulations while recording depreciation in its accounts.

## A16: NEW DIRECTIVES

- 16.1 In addition to the compliance of existing directives as mentioned in the status of earlier directives, the Commission directs the Petitioner to comply with following new directives.

### Board Approved Allocation Statement

- 16.2 The Commission directs the Petitioner to submit a **board approved allocation statement to apportion costs and revenue between wheeling and retail supply business clearly describing the basis and methodology used for segregation within 3 months of issue of this Tariff Order.**

### Board Approval for Capital Expenditure Schemes

- 16.3 The Commission directs the Petitioner to submit board approvals of its capital expenditure schemes proposed for the Control Period FY 2016-17 to FY 2020-21 within 3 months of the issue of this Tariff Order. **The Commission shall not allow any capital expenditure on schemes without prior submission of board approvals to the Commission.**

### Quality of Supply and Services

- 16.4 The Commission directs the Petitioner to propose the baseline and performance trajectory for all the quality parameters specified in the JSERC (Distribution Licensee's Standard of Performance) Regulations, 2015 and submit to the Hon'ble Commission within 3 months of issue of this Tariff Order.

**Change in Tariff Structure for Commercial and DS-HT Consumer Categories**

- 16.5 In order to adequately assess the impact of the change in Tariff structure from Rs /Consumer/month to Rs /kW/month and Rs /kVA/month for Commercial and DS-HT Consumers respectively, the Petitioner is directed to undertake parallel billing for all the consumers in this category and assess the impact on the bill of each consumer from change in the tariff structure for a period of 3 months. The Petitioner is directed to submit a report on the total impact on the consumers and the overall revenue impact on the Petitioner due to change in the tariff structure along with the bills for the proper scrutiny of the Commission within one month of the completion of the study

**This Order is signed and issued by the Jharkhand State Electricity Regulatory Commission on this the 28<sup>th</sup> day of February, 2017.**

**This Order shall come into effect from 1<sup>st</sup> March, 2017 and shall remain in force till the next Tariff Order is issued by the Commission.**

Date: 28.02.2017

Place: Ranchi

Sd/-  
(Mr. R. N Singh)  
MEMBER (T)

Sd/-  
(N.N. TIWARI, J)  
CHAIRPERSON

## A17: ANNEXURE

### Annexure-I

#### List of participating members of public in the public hearing

Sl. No.	Name	Address / Organization if any
1	A. K. Choudhary	Adarsh Nagar
2	S. Chakraborty	Adarsh Nagar
3	Rajeev Kumar	Adarsh Nagar
4	Alfred Arland	Adarsh Nagar
5	A. K. Singh	Adarsh Nagar
6	B. Ramnath	Adarsh Nagar
7	A. K. Bhattacharji	Adarsh Nagar
8	B. N. Mallick	Adarsh Nagar
9	S. Prasad	Adarsh Nagar
10	S. K. Roy	Adarsh Nagar
11	Nand Kumar	Adarsh Nagar
12	R. M. Dubey	Adarsh Nagar
13	Abhay Sharma	Adarsh Nagar
14	B. G. Mishra	Adarsh Nagar
15	A. Banarji	Adarsh Nagar
16	Ashok Kumar Jha	Adarsh Nagar
17	S. Kumar Singh	SCCI
18	Ashok Bihani	SCCI
19	R. N. Roniseria	SCCI
20	Subhas Sharma	Sonari
21	A. K. Madak	Sonari
22	A. Bhattacharji	New Sitaram Dera
23	Umesh Thakur	Bistupur
24	Naresh Thakur	Kadma
25	M. K. panda	JUSCO
26	S. K. Mousib	Kadma
27	Sanjay Goutam	JUSCO
28	Suman Mandal	JUSCO
29	Madan Kishore	JUSCO
30	V. N. Singh	Vidyapati Nagar
31	Nirmal Kr. Singh	Kadma
32	A. K. Tripathi	Sakchi
33	R. Mallick	Sonari
34	Sudipta Chatterjee	Sonari
35	S. Nandi	Sonari
36	Rajesh Kumar	Sonari
37	B. K. Singh	Bendih F/B
38	V. P. Singh	Fauza Baridih
39	Deepak Sharma	Fauza Baridih
40	Ram Gopal Sharma	Fauza Baridih



Sl. No.	Name	Address / Organization if any
41	K. D. Mishra	Fauza Baridih
42	S. Anand	Fauza Baridih
43	B. Prasad	Fauza Baridih
44	A. K. Sharma	Fauza Baridih
45	B. K. Singh	Fauza Baridih
46	T. P. Appanna	TSL
47	Arun Sharma	Adarsh Nagar
48	A. Karthikayan	Sonari
49	SJS Rosha	Sonari
50	Sarit Singh	Adarsh Nagar
51	Sandip	Bistupur
52	Tarkeshwar Sharma	JUSCO
53	S. C. Jha	CGRF (TSL)
54	Pintu Mukhi	CGRF (TSL)
55	Umashankar Dube	Prabhat Khabar
56	Nirmal Kr. Singh	Hindustan News Paper
57	Bijendra Kumar	Dinik Bhaskar
58	P. M. dan	Press
59	B. Prasad	The Tlegraph
60	Piyush Jain	TSL
61	Samir Chosal	TSL
62	Sudhir Pandey	Dainik Jagran
63	Dhananjay	Adarsh Nagar
64	Abhay Kr. Singh	Adarsh Nagar
65	O.P. Singh	Adarsh Nagar
66	Surjit Roy	Adarsh Nagar
67	D. Ghose	Adarsh Nagar
68	Brejesh Singh	Prabhat Khabar
69	D. K. Pathak	Sakchi
70	S. Kant Pandey	Golmuri
71	Samir Bose	Adarsh Nagar
72	S.S. Dubey	Sonari
73	A. K. Roy	Sonari
74	Izhar	Press
75	R.R. Pandey	Nildih
76	Chandra Shekhar	Sainik Bhaskar