Jharkhand State Electricity Regulatory Commission

Order on
True up for FY 2015-16,
And
Annual Performance Review of FY 2016-17,
And
ARR and Tariff for FY 2017-18
for
Tata Steel Limited (TSL)

Ranchi

18 May, 2018

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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.: 11 of 2017

In the matter of:

Petition for Truing up for FY 2015-16;

And

Annual Performance Review for FY 2016-17;

And

Annual Revenue Requirement for FY 2017-18

And

Tariff Determination for FY 2017-18

In the matter:

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

PRESENT

Hon'ble Dr. Arbind Prasad - Chairperson

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

Order dated 18 May, 2018

In these Petition, Tata Steel Limited (hereinafter referred to as TSL) has prayed for Order of True up for FY 2015-16, Annual Performance Review of FY 2016-17, Determination of Annual Revenue Requirement and Tariff for FY 2017-18.

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 sub-section (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 has been 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 2015-16.

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 the Review of the ARR for FY 2016-17, determination of ARR and Tariff for FY 2017-18.

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 2015-16, Annual Performance Review for FY 2016-17, ARR and Tariff for FY 2017-18.

A2: PROCEDURAL HISTORY

Background

2.1 The Commission had issued the MYT Order for the Petitioner on 4th 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. The Petitioner filed review petition against the MYT Order dated 4th 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 31st March, 2015.

2.2 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 31st May, 2015.

2.3 The Petitioner filed the tariff petitions for True-Up for FY 2014-15 and Annual Performance Review for FY 2015-16 on 1st January, 2016. Further, as per the provisions of the 'Distribution Tariff Regulations, 2015', the Petitioner also filed the Business Plan for MYT Control Period from FY 2016-17 to FY 2020-21 on 12th 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 28th July, 2016. The Commission issued the Tariff Order in this regard on 28th February, 2017.

2.4 The Petitioner has now filed the tariff petitions for True-Up for FY 2015-16, Annual Performance Review for FY 2016-17, ARR for FY 2017-18 and Tariff Determination for FY 2017-18.

Information Gaps

2.5 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 11 of 2017/529 dated 14th November, 2017.

2.6 The Petitioner submitted its response to the aforesaid letters and provided the requisite additional data/information vide letter no. PBD/1015/59-T/2017 dated 22nd December, 2017.

Inviting Public Response

2.7 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	16th & 17th Feb 2018
Dainik Bhaskar	16th & 17th Feb 2018
The Telegraph	16th & 17th Feb 2018
The Poineer	16th & 17th Feb 2018

2.8 The last date for submitting the comments/ suggestions was 09th March, 2018. The Commission subsequently issued advertisement on its website www.jserc.org and in various newspapers for conducting the public hearing on the Petition for Truing up of FY 2015-16, APR for FY 2016-17, ARR and Tariff determination for FY 2017-18. 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	24.03.2018
Dainik Jagran	24.03.2018
The Times of India	24.03.2018
Prabhat Khabar	25.03.2018
Dainik Bhaskar	25.03.2018
Pioneer	25.03.2018

2.9 The public hearing was held on 3rd April, 2018, 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 The Petitioner in the present petitions has requested for :

(a) Truing up of costs and revenue for FY 2015-16 on basis of audited annual accounts for FY 2015-16;

(b) Annual Performance Review of ARR for FY 2016-17 based on revised estimates;

(c) Approval of ARR and Tariff for FY 2017-18

3.2 A summary of the Petition as submitted by the Petitioner has been summarized in the following sub-sections:

Energy Sales, Losses and Energy Balance

3.3 The details of actual sales for the FY 2015-16, provisional sales for the FY 2016-17 and projected sales for FY 2017-18 as submitted by the Petitioner have been tabulated below:

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

S.No	Consumer Category	FY 2015-16 (Actuals)		FY 2016-17 (Provisional)		FY 2017-18 (Projections)	
		Approved vide APR dated 28.02.2017	Actual Sales in (MUs)	Approved vide T.O dated 28.02.2017	Provisional Sales (MUs)	Approved vide T.O dated 28.02.2017	Revised Projection (MUs)
1	Domestic	221.75	185.98	232.09	197.25	244.38	209.19
2	Domestic - DSHT	107.81	89.19	111.65	91.98	115.49	96.78
3	Commercial	73.19	59.81	73.82	64.26	75.08	65.40
4	High Tension I	33.28	29.11	35.25	29.71	37.22	30.84
5	High Tension II	153.41	129.79	156.48	111.83	159.61	114.96
6	High Tension III	1,810.00	1821.90	1864.30	1,883.33	1920.23	1939.26
7	High Tension IV	91.75	144.77	100	130.82	100.00	130.82
8	Utilities/Street Light	90.00	85.28	90.00	86.54	89.00	85.39
9	Temporary Supply	4.55	1.55	2.00	2.34	2.00	2.84
10	Sale to Other Licensee	337.95	339.55	337.95	279.29	337.95	337.95
	Total	**2,923.68**	**2,886.93**	**3003.54**	**2,877.34**	**3080.96**	**3,013.42**

3.4 The distribution losses and energy balance for TSL for have been summarized below in the following table:

Table 4 Energy Balance submitted by the Petitioner (MU)

S. No	Particulars	FY 2015-16 (Actuals)		FY 2016-17 (Provisional)		FY 2017-18 (Projections)	
		Approved vide APR dated 28.02.2017	Actuals	Approved vide T.O dated 28.02.2017	Provisional	Approved vide T.O dated 28.02.2017	Revised Projection
A	**ENERGY REQUIREMENT**						
1	Sales to Other Licensees	337.95	339.55	337.95	279.29	337.95	337.95
2	Distribution Losses on Sales to Other Licensees (%)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
3	Unit Lost on Sales to Other Licensees	-	-	-	-	-	-
4	Energy Requirement for Sales to Other Licensees	337.95	339.55	337.95	279.29	337.95	337.95
5	Sales to HT - IV Category	91.75	144.77	100.00	130.82	100.00	130.82
6	Distribution Losses to HT - IV (%)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7	Unit lost on Sales to HT - IV	-	-	-	-	-	-
8	Energy Requirement for HT - IV Category	91.75	144.77	100.00	130.82	100.00	130.82
9	Sales to LT Consumers (Dom + Comm + Street light + Temp)	389.49	332.62	397.91	350.38	410.47	362.81
10	Sales to HT Consumers (Other than HT - IV) (DSHT + HT-I + HT-II + HT-III)	2,104.49	2,069.99	2,167.68	2,116.84	2,232.55	2,181.84
11	**Total Sales to Consumers other than HT-IV & JUSCO (9 + 10)**	**2,493.98**	**2,402.61**	**2,565.59**	**2,467.23**	**2,643.02**	**2,544.65**
12	Distribution Losses on Sales to Consumers other than HT-IV & JUSCO (%)	4.65%	4.20%	4.00%	3.54%	4.00%	4.06%
13	Unit Lost on Sales to Consumers other than HT-IV & JUSCO	121.71	105.25	106.90	90.44	110.13	107.68
14	**Energy Requirement for Sales to Consumers other than HT-IV & JUSCO**	**2,615.69**	**2,507.86**	**2,672.49**	**2,557.67**	**2,753.14**	**2,652.33**
15	**Overall Sales (4 + 8 +11)**	**2,923.68**	**2,886.93**	**3,003.54**	**2,877.34**	3,080.97	**3,013.42**
16	Overall Distribution Losses (%)	4.00%	3.52%	3.44%	3.05%	3.45%	3.45%
17	Overall Distribution Losses	121.71	105.25	106.90	90.44	110.13	107.68
18	**Total Energy Requirement**	**3,045.39**	**2,992.18**	**3,110.44**	**2,967.78**	**3,191.09**	**3,121.10**
B	**ENERGY AVAILABILITY**						
1	Tata Power Company Limited	1,534.30	1,489.21	1,608.34	1,423.92	1608.34	1541.85
a	*Unit - II*		770.91		716.98		
b	*Unit - III*		718.31		706.94		
2	Damodar Valley Corporation	1,487.49	1,484.92	1,482.10	1,459.20		1504.25
a	*132 kV*	275.00	297.86	82.25	308.09	162.91	345.87
b	*400 kV*	1,212.49	1,187.06	1,399.85	1,151.11	1399.85	1158.38
3	*TSW Captive*	20.00	17.17	20.00	76.51	20.00	40.00
4	*RPO*	-	-	-	-	-	0.00

S. No	Particulars	FY 2015-16 (Actuals)		FY 2016-17 (Provisional)		FY 2017-18 (Projections)	
		Approved vide APR dated 28.02.2017	Actuals	Approved vide T.O dated 28.02.2017	Provisional	Approved vide T.O dated 28.02.2017	Revised Projection
5	Open access / Other Sources	3.61	0.87	-	8.15		35.00
3	**Total Pooled Energy Availability**	**3,045.39**	**2,992.18**	**3,110.44**	**2,967.78**	**3,191.09**	**3121.10**

3.5 The Annual revenue requirement and Revenue Gap/(Surplus) as submitted by the Petitioner for the period FY 2015-16 to FY 2017-18 has been tabulated below:

Table 5 ARR (in Rs Cr) and Revenue Gap/ (Surplus)

S No	Particulars	FY 2015-16 (Actuals)		FY 2016-17 (Provisional)		FY 2017-18 (Projections)	
		Approved vide APR dated 28.02.2017	Actuals	Approved vide T.O dated 28.02.2017	Provisional	Approved vide T.O dated 28.02.2017	Revised Projection
1	Power Purchase Cost	1,276.97	1,246.23	1,318.54	1,227.67	1331.56	1,455.51
2	Operation & Maintenance Expenses	105.09	79.43	66.51	71.11	68.72	75.67
3	Depreciation	28.46	28.89	30.43	33.73	30.93	30.93
4	Interest and Finance Charges	45.64	45.03	34.04	31.92	31.27	31.27
5	**Sub Total (1 to 4)**	**1,456.16**	**1,399.58**	**1,449.52**	**1,364.43**	**1462.48**	**1593.38**
6	Add: Return on Equity	21.46	21.49	21.81	33.08	22.14	22.14
7	Less: Non-Tariff Income	4.37	5.32	5.86	5.38	5.86	5.86
8	Add: Income tax on RoE for past periods and FY 2015-16	-	24.17				
9	**Aggregate Revenue Requirement (5+6-7+8)**	**1,473.26**	**1,439.92**	**1,465.47**	**1,392.13**	**1478.76**	**1609.66**
10	**Less: Revenue from Sale of Power @ Existing Tariff**	**1,467.79**	**1,466.65**	**1,542.85**	**1,502.55**		**1804.09**
11	Add: Sharing of Gains - O&M Expenses		15.40				
12	Add: Sharing of Gains - Distribution Loss	-	8.64				
13	**Total Revenue Gap / (Surplus) (9-10+11+12)**	**5.47**	**(2.70)**	**(77.39)**	**(110.41)**		**(194.43)**

Cumulative Gap/ (Surplus) till FY 2017-18

3.6 The Petitioner submitted that the cumulative revenue gap at the end of FY 2017-18 comes as Rs.1293.55 Cr which has been tabulated below:

Table 6 Cumulative Gap/(Surplus) in Rs Cr as submitted by the Petitioner till FY 2017-18

Particulars	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
Opening Revenue Gap as on 1st April	19.03	27.95	280.15	706.32	1108.58	1269.40	1321.47
Revenue Gap/(Surplus) created during the year	6.05	231.04	348.6	277.67	(2.70)	(110.41)	(194.43)
Add: Incentives on T&D Losses			7.97				
Add: true of controllable expenses at the end of the control period			3.36	(0.08)			
Closing Gap	25.08	258.99	640.08	983.92	1105.88	1158.99	1127.05

Particulars	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
Rate of Interest (SBI PLR rates for FY 12 to FY 16); (SBI base rates + 3.50%) for FY 17,FY 18	13.00%	14.75%	14.45%	14.75%	14.75%	12.80%	12.60%
Carrying Cost on Opening Balance	2.47	4.12	40.48	104.18	163.52	162.48	166.51
Carrying Cost on Additional Gap	0.39	17.04	25.76	20.48			
Total Carrying Cost	2.87	21.16	66.24	124.66	163.52	162.48	166.51
Total Gap / (surplus) incl. Carrying Cost	**27.95**	**280.15**	**706.32**	**1108.58**	**1269.40**	**1321.47**	**1293.55**

Tariff Proposal for the FY 2017-18:

3.7 The petitioner submitted that it has proposed for an average increase of only 2% currently, to avoid the tariff shock to consumers. In addition to the proposed tariff hike, the Petitioner has proposed changes in tariff structure which have been listed below

Changes in Tariff Structure

- **Analysis of Fixed and Variable component of costs, tariff and recovery:** The Petitioner submitted that revenue realization from fixed/demand component of tariff is very low compared to the cost structure and the proposed tariff aims to rationalize the same.
- **Changes in Miscellaneous charges:** The Petitioner proposed increase in miscellaneous charges as the current charges neither recovers the full cost of disconnection, nor provide adequate pressure on defaulting consumers to pay on time
- **Creation of a New Category:** The Petitioner proposed to create a separate Category for Provisional power supply at single point on sharing basis for Temporary Stalls/Tin sheds in market area.

3.8 The Tariff Proposal by the Petitioner for the FY 2017-18 has been tabulated below:

Table 7 Tariff Proposal as submitted by the Petitioner*

Category of consumers	EXISTING TARIFF			PROPOSED TARIFF		
	Fixed Charges	Energy Charges (Rs./unit)	Meter Hire Charges	Fixed Charges	Energy Charges (Rs./unit)	Meter Hire Charges
Low Tension Domestic Supply						
0-5 KW	Rs./Month	Rs/KWh	Rs./Month	Rs/Month	Rs/KWh	Rs/ Month
0-100 Units	13	2.3	20	65	2.30	25
101-400 Units	13	3.95		65	3.95	
401 and Above	13	4.55		65	5.00	
5.01 kW and Above	Rs./Month	Rs/KWh	Rs./Month	Rs/Month	Rs/KWh	Rs/ Month
0-100 Units	26	2.3	50	65.00	2.30	60.00
101-400 Units	26	3.95		65.00	3.95	
401 and Above	26	4.55		65.00	5.00	
	Rs/Consumer/ Month	Rs/KWh	Rs./Month	Rs/KVA/Month	Rs/KWh	Rs/ Month
High Tension Domestic Supply	420	4.5	50	60	4.50	60
Commercial Supply	Rs/Consumer/ Month	Rs/KWh	Rs./Month	Rs/kw /Month	Rs/KWh	Rs/ Month
0-5 KW	50	6.55	20	60	6.55	25
5.01 kW and Above	120	6.55	105	60	6.55	125

Category of consumers	EXISTING TARIFF			PROPOSED TARIFF		
	Fixed Charges	Energy Charges (Rs./unit)	Meter Hire Charges	Fixed Charges	Energy Charges (Rs./unit)	Meter Hire Charges
High Tension Supply	Rs/KVA/Month	Rs/KWh	Rs./Month	Rs/KVA/Month	Rs/KWh	Rs/ Month
HT-I	320	6.3	700	387	6.30	840
HT-II	320	6.25	700	387	6.25	840
HT-III	315	6.2	700	381	6.20	840
HT-IV	315	6.2	700	381	6.20	840
Utility/Street Light	Rs/Month	Rs/KWh	Rs./Month	Rs / Month	Rs/KWh	Rs./ Month
220V single phase upto 5 KW	35	4.9	20	42	4.90	24
415V three phase above 5 KW	35	4.9	50	42	4.90	60
				Rs/Month	Rs/kWh	
New Category: **Provisional power supply at single point on sharing basis for Temporary Stalls/Tinsheds in market area.**				200	6.55	
Temporary Supply LT	1.5 times of applicable charges	1.5 times of applicable charges		1.5 times of applicable charges	1.5 times of applicable charges	

**As submitted in the reply to 1st Discrepancy Note*

A4: PUBLIC CONSULTATION PROCESS

4.1 The tariff petition evoked response from several consumers. A public hearing was held on 3rd April, 2018, 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. One hundred three 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 The objector submitted that the energy charges being charged to the consumers are considerably higher than the corresponding energy charges paid by the Discom for power procurement. Thus, the energy charges charged to the consumers should be reduced.

4.6 The stakeholders have also raised questions on the analysis of fixed cost recovery of the Petitioner and have thus opposed the proposed hike in fixed cost component of the tariff charged to consumers.

Petitioners' Response

4.7 The Petitioner submitted that the difference in power purchase cost and energy rate being charged is due to the distribution functions, which include cost of capital, O&M and other costs, and past recoveries, which is required to cover the gap due to lower than required tariff.

4.8 The Petitioner has submitted that it has submitted the detailed reasons for fixed cost escalation in its Tariff Petition and the same is necessary in order to be commensurate with the cost structure of the Petitioner.

Views of the Commission

4.9 The Commission has thoroughly dealt with this issue in Section A11: of this Order.

Meter Rent

Public Comments/Suggestions

4.10 The Objectors pointed out that the petitioner has proposed a hike in Meter Rent but has failed to provide sufficient justification for such a hike.

Petitioners' Response

4.11 The Petitioner submitted that the Meter Rent has not been increased in the past 10 years and therefore a hike has been proposed to recover the costs associated with it.

Views of the Commission

4.12 The Commission has dealt with this matter in detail in Section A10 of this Order.

Interest on security deposit

Public Comments/Suggestions

4.13 The Stakeholder has requested that in case the security deposit amount exceeds Rs 1 lakh, a provision to submit the same in the form of Bank Guarantee should be available to the consumers.

Petitioners' Response

4.14 The Petitioner submitted that the Bank Guarantee format has already been shared with stakeholders and further action shall be taken to close this issue.

Views of the Commission

4.15 The Commission has directed the Licensee to allow security deposit in the form of Bank Guarantee for deposits exceeding Rs 10 Lakh.

Open Access

Public Comments/Suggestions

4.16 The Stakeholder has requested for clarity on Open Access charges including Cross Subsidy Surcharge, Additional Surcharge and Wheeling charges for proper utilisation of this facility as per the Open Access Regulations 2016.

Petitioners' Response

4.17 The Petitioner has pointed out that the consumers who wish to opt for Open Access also choose maintain their contracted demand with the Discom. The Petitioner has thus argued that there is a need to make the fixed cost charged against the contracted demand more cost reflective so that other consumers are not impacted due to movement of consumers to Open Access mode.

Views of the Commission

4.18 The Commission has approved the relevant charges for Open Access in this Order.

A5: TRUE- UP FOR FY 2015-16

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. The Commission later undertook the Annual Performance Review for FY 2015-16 in its Tariff Order dated 28th February 2017.

5.2 The Petitioner has now sought approval from the Commission for True-Up of variation in ARR for FY 2015-16, based on audited annual accounts.

5.3 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".

5.4 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 8 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
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

5.5 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.

5.6 In addition to above, while undertaking the truing up for FY 2015-16, 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"

5.7 Accordingly, the Commission has analysed the submission of the Petitioner with respect to the truing up of ARR for FY 2015-16, and has undertaken the true up exercise of various components based on the principles specified in the Distribution Tariff Regulations, 2010.

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

Sales Forecast

Petitioner's Submission

5.9 The Petitioner has submitted the sales for FY 2015-16 as 2,886.93 MUs, in line with the audited accounts.

Commission's Analysis

5.10 The Commission has approved the total energy sales for FY 2015-16 as 2,886.93 MU which have been verified from the audited accounts of FY 2015-16. These sales also include 339.55 MU of sales to other licensee/ JUSCO. The Commission also verified sales to JUSCO from power purchase bills of TSL to JUSCO for FY 2015-16.

5.11 The category wise sales submitted by the Petitioner for FY 2015-16 and those approved by the Commission is as under:

Table 9: Category wise Sales for FY 2015-16 (MU)

Category	Submitted by the Petitioner	Approved by the Commission
Domestic-LT	190.53	190.53
Domestic-DSHT	90.42	90.42
Commercial	64.11	64.11
Temporary Supply	3.05	3.05
High Tension I	30.05	30.05
High Tension II	114.69	114.69
High Tension III	1,821.98	1,821.98
High Tension IV	144.77	144.77
Utilities/Street Light	87.78	87.78
Sale to other Licensee	339.55	339.55
Total	**2,886.93**	**2,886.93**

Energy Balance

Petitioner's Submission

5.12 The Petitioner submitted the actual energy sales, distribution losses and power purchase as per its audited annual accounts for FY 2015-16.

5.13 Accordingly, the Petitioner submitted the actual energy availability and energy sales (including sales to steel works) for FY 2015-16 as 2992.18 MU and 2886.93 MU respectively. The Petitioner also submitted that the actual distribution losses achieved by the Petitioner for FY 2015-16 are 3.52%.

Commission's Analysis

5.14 During FY 2015-16, 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).

5.15 For power procured from Unit –2 and Unit – 3 of TPCL, the Commission has approved the quantum of 1,489.21 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 297.86 MU from DVC 132 kV and 1,187.06 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 17.17 MU in accordance with the audited accounts and details submitted by the Petitioner. Further, the Commission has also approved the quantum of 0.87 MU from open access sources.

5.16 Based on the approved energy sales and power purchase quantum for FY 2015-16, the Commission estimated the distribution losses as 3.52% and the same has been approved for FY 2015-16.

5.17 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 28th April 2017, actuals submitted by the Petitioner and approved now by the Commission for FY 2015-16.

Table 10 Energy Balance approved for FY 2015-16

Particulars	Approved in MYT	As approved in APR	Petitioners submission	Approved now
A. ENERGY REQUIREMENT (MUs)				
Sales to Other Licensee	35	337.95	339.55	339.55
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	0.00	0.00
Energy Req. for Sales to Other Licensee	35	**337.95**	**339.55**	**339.55**
Sales to Steel Works (HT IV)	113	91.75	144.77	144.77
Dist. Losses on Steel Works	0.00%	0.00%	0.00%	0.00%
Units Lost on Sales to Steel Works	0.00	0.00	0.00	0.00
Energy Req. for Steel Works	113	**91.75**	**144.77**	**144.77**
Sale to other consumers				
Sales to LT consumers	416	389.49	332.62	345.47
Sales to HT consumers	2,340	2104.49	2069.99	2057.15
Total Sales to Other Consumers	2,756	2493.98	2402.61	2402.61
Dist. Losses on Sales to Other Consumers	5.50%	4.65%	4.20%	4.20%
Units Lost on Sales to Other Consumers	160	121.71	105.25	105.25
Energy Req. for Sales to Other Consumers	**2,916**	**2615.69**	**2507.87**	**2507.86**
Overall Sales	2,904	2923.68	2886.93	2886.93
Overall Distribution Losses %	5.27%	4.00%	3.52%	3.52%
Overall Distribution Losses	160	121.71	105.25	105.25
TOTAL ENERGY REQUIREMENT	**3,064**	**3,045.39**	**2,992.18**	**2.992.18**
B. ENERGY AVAILABILITY				
TPCL	1,612	1534.30	1489.21	1489.21
TPCL Unit II			770.91	770.91
TPCL Unit III			718.31	718.31
Damodar Valley Corporation	1,160	1487.49	1484.92	1484.92
Damodar Valley Corporation 132kV	438	275.00	297.86	297.86

Particulars	Approved in MYT	As approved in APR	Petitioners submission	Approved now
Damodar Valley Corporation 400kV	722	1212.49	1187.06	1187.06
TSW - Captive	169	20.00	17.17	17.17
Open access/ other sources		3.61	0.87	0.87
RPO	123	-	-	-
Total Pooled Energy Availability	**3,064**	**3,045.39**	**2,992.18**	**2,992.18**

Power Purchase Cost

Petitioner's Submission

5.18 As mentioned above, the Petitioner is procuring power from TPCL, DVC, TSW-Captive, Open Access Sources and mandatory procurement of REC's for RPO.

5.19 The Petitioner submitted the actual power purchase cost for FY 2015-16 as Rs 1246.23Cr. The rate of power purchase for Unit 2 of TPCL was Rs. 3.95 per unit, for Unit 3 of TPCL was Rs 3.94 per unit, for DVC 132 kV was Rs 5.12 per unit, for DVC 400 kV was Rs 3.91 per unit, for TSL Captive was Rs 3.95 per unit and was Rs 3.98 per unit for power purchased from Open Access Sources.

5.20 The Petitioner further submitted that during the year FY 2015-16, the Petitioner, despite financial constraints has made all efforts to meet a part of its RPO for FY 2015-16. It has procured 48.89 MU equivalent solar RECs and 116.61 MU 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

5.21 The Commission scrutinised the actual power purchase bills from all sources as submitted by the Petitioner for FY 2015-16, the audited accounts for the year and the information submitted as part of the Tariff Petition.

5.22 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.

5.23 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 28.04.2017 and accordingly, has estimated the RPO on total energy requirement for FY 2015-16 net of power purchase from DVC at 132 kV. Accordingly, the Commission estimates the revised RPO of the Petitioner for FY 2015-16 as 108 MU out of which 27 MU is solar obligation 81 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 2014-15 while estimating the RPO targets for FY 2015-16. After adjusting past shortfall/excess in RPO targets, the revised target for solar obligation during FY 2015-16 is 49 MU and that for non-solar obligation is 117 MU.

5.24 The Petitioner submitted that it has only procured 49 MU equivalent RECs to fulfil its solar obligation and 117 equivalent REC's to fulfil its non-solar obligation at a cost of Rs. 35.08 Crore and same has been verified from the IEX bills submitted by the Petitioner. The Commission appreciates the Petitioner's efforts to comply with its RPO.

5.25 The following table summarises the Power Purchase cost for FY 2015-16 as approved by the Commission in the MYT Order dated June 2014, approved by the Commission in the APR Order dated 28th February 2017, 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 2015-16.

Table 11 Power Purchase Cost approved for truing up of FY 2015-16 (Rs Cr)

Sl. No.	Particulars	Approved in APR	Petitioner's submission	Approved Now
A	**Tata Power Co. Ltd. - Regulated**			
	Units Purchased (MU's)			
	Unit II	784.30	770.91	770.91
	Unit III	750.00	718.31	718.31
	Total	**1534.30**	**1489.21**	**1489.21**
	Per Unit Price (Rs. / kWh)			
	Unit II	3.95	3.95	3.95
	Unit III	3.94	3.94	3.94
	Total	3.95	3.95	3.95
	Power Purchase Cost (Rs. Crs)			
	Unit II	310.08	316.04	316.04
	Unit II (Credit from previous years)		-11.28	-11.28
	Total Unit II	310.08	304.76	304.76
	Unit III	295.39	288.53	288.53
	Unit III (Credit from previous years)		-5.64	-5.64
	Total Unit III	295.40	282.90	282.90
	Total	**605.48**	**587.66**	**587.66**
B	**Damodar Valley Corporation - 132 kV**			
	Units Purchased (MU's)	275.00	297.86	297.86

Sl. No.	Particulars	Approved in APR	Petitioner's submission	Approved Now
	Per Unit Price (Rs. / kWh)	5.10	5.12	5.12
	Power Purchase Cost (Rs. Crs)	**140.13**	**152.54**	**152.54**
C	**Damodar Valley Corporation - 400 kV**			
	Units Purchased (MU's)	1212.00	1187.06	1187.06
	Per Unit Price (Rs. / kWh)	4.02	3.91	3.91
	Power Purchase Cost (Rs. Crs)	**487.83**	**463.83**	**463.83**
D	**TSL Captive**			
	Units Purchased (MU's)	20.00	17.17	17.17
	Per Unit Price (Rs. / kWh)	3.95	3.95	3.88
	Power Purchase Cost (Rs. Crs)	**7.89**	**6.77**	**6.66**
E	**RPO**			
	RECs purchased (MU's)	-		
	Power Purchase Cost (Rs. Crs)	**34.77**	**35.08**	**35.08**
F	**Other Sources/Open Access**			
	Units Purchased (MU's)	3.61	0.87	0.87
	Per Unit Price (Rs. / kWh)	2.47	4.02	4.02
	Power Purchase Cost (Rs. Crs)	0.89	0.35	0.35
G	**Net Power Purchase**			
	Units Purchased (MU's)	3045.40	2992.18	2992.18
	Per Unit Price (Rs. / kWh)	4.19	4.16	4.16
	Net Power Purchase Cost (Rs. Crs)	**1276.97**	**1246.23**	**1246.12**

Operation and Maintenance Expenses

Petitioner's Submission

5.26 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 2015-16. The Petitioner submitted that it has incurred employee costs, A&G costs and R&M costs of Rs. 25.04 Crore, Rs 24.05 Crore and Rs 30.33 Crore respectively in FY 2015-16. The employee expenses also include Rs 6.53 Crore paid as arrears on account of wage revision as per the order of Conciliation Officer or District Labour Commissioner for wage dispute settlement for private companies.

5.27 The Petitioner stated that as per the audited accounts, the employee costs incurred are Rs 2.59 Cr which are 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 22.45 Cr (including areas) 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 79.43 Cr which is lower than the approved costs in the Tariff Order dated 28th February 2017 due to efficiency improvements made by the Petitioner during the year.

Commission's Analysis

5.28 The Commission in its Tariff Order dated 28th February 2017 had estimated the norm for O&M costs as Rs. 105.09 Crore.

5.29 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.

5.30 Accordingly, the Commission has approved the actual O&M costs incurred during FY 2015-16 of Rs. 79.43 Crore and pass through the share of Petitioner in aggregate savings in reduction of O&M cost which is dealt in in Paras 5.71 and 5.72 of this Order.

5.31 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 28th February 2017, 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 2015-16:

Table 12 O&M expenses for FY 2015-16 trued up by the Commission (Rs Cr)

Particulars	Approved in APR	Submitted by TSL	Approved Now
Employee Costs- TSL	19.18	2.59	2.59
Employee Costs-JUSCO		15.92	15.92
Arrears		6.53	6.53
Employee Expenses	19.18	25.04	25.04
R&M costs	65.52	30.33	30.33
A&G costs	20.39	24.05	24.05
Total O & M Expenses	**105.09**	**79.43**	**79.43**

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

Petitioner's Submission

5.32 The Petitioner submitted that the CWIP, GFA have been arrived on the basis of audited annual accounts of FY 2015-16. The closing CWIP submitted by the Petitioner was to the tune of Rs 5.37 Cr and additions to GFA were to the tune of Rs. 16.34 Cr.

Commission's Analysis

5.33 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.

5.34 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 2015-16 based on the provisions specified in the above mentioned Regulations and the information submitted by the Petitioner.

5.35 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 28th February 2017, the actual submitted by the Petitioner in present petition and now approved by the Commission for FY 2015-16.

Table 13 CWIP and GFA trued up for FY 2015-16 by the Commission (Rs Cr)

Particulars	Approved In APR	Submitted by TSL	Approved Now
A. Capital Works in Progress (CWIP)			
Opening CWIP	12.87	12.87	12.87
Add: Additions (Capex during FY)	8.85	8.84	8.84
Sub-total	**21.72**	**21.71**	**21.71**
Less: Capitalization (T/fed to GFA during FY)	16.34	16.34	16.34
Closing CWIP	**5.38**	**5.37**	**5.37**
B. Gross Fixed Assets(GFA)			
Opening GFA	503.99	503.99	503.99
Add: Additions during FY	16.34	16.34	16.34
Closing GFA	**520.33**	**520.32**	**520.33**

Depreciation

Petitioner's Submission

5.36 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. 3.12 Cr has been deducted from the total depreciation in order to arrive at the net depreciation of Rs.28.89 Cr for FY 2015-16.

Commission's Analysis

5.37 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 trued up depreciation expense for FY 2013-14 and FY 2014-15 as per the actual expenditure incurred as follows:

Table 14: Impact of True-up on Depreciation

Financial year	Approved	Audited	Difference
FY 2013-14	26.83	30.92	4.09
FY 2014-15	27.6	29.05	1.45

5.38 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 28th February 2017, actual submitted by the Petitioner in present petition and now approved by the Commission for FY 2015-16, including the impact of True-up of previous years of the control period.

Table 15 Depreciation for FY 2015-16 by the Commission (Rs Cr)

Particulars	Approved in MYT Order	Approved in APR	Submitted by TSL	Approved Now
Depreciation during the year	25.00	31.62	32.01	32.01
Less: Dep. on A/c of CC	3.24	3.17	3.12	3.12
Net Depreciation during the year	**21.76**	28.46	28.89	28.89

Interest and Other Finance Charges

Interest on Loan

Petitioner's Submission

5.39 The Petitioner while determining the deemed additions to loan for FY 2015-16 has considered 70% of the fixed asset addition after reducing assets funded from Consumer Contribution.

5.40 The Petitioner submitted normative interest on loan at Rs. 23.56 Cr for FY 2015-16 as per the methodology prescribed by the Commission in previous Tariff Orders.

Commission's Analysis

5.41 Regulation 5.28 read with Regulation 11.3 of the Distribution Tariff Regulations, 2010 specifies that interest on loan is a controllable element of the ARR and any truing up under this head shall be carried out at end of control period.

Table 16: Impact of True-up on Interest on Loan

Financial year	Approved	Audited	Difference
FY 2013-14	29.29	28.62	(0.67)
FY 2014-15	1.27	1.21	(0.06)

5.42 In accordance with the Distribution Tariff Regulations, 2010, the Commission has computed the normative loan for the year equal to 70% of the GFA addition. 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.

5.43 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 1st April 2015.

5.44 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 28th February 2017, actuals now submitted by the Petitioner and approved by the Commission for truing up of FY 2015-16.

Table 17 Interest on loan trued up for FY 2015-16 (Rs Cr)

Particulars	Approved in the MYT order	Approved in APR	Submitted by the Petitioner	Approved now
Opening Balance of Normative Loan	115.98	175.59	169.04	169.04
Deemed Addition during the year	10.18	9.34	10.28	10.28
Deemed Repayments	21.76	28.46	28.89	28.89
Closing Balance of Deemed Loan	104.40	156.47	150.43	150.43
Average balance during the Year	**110.19**	**166.03**	**159.74**	**159.74**
Interest Rate (%)	14.75%	14.75%	14.75%	14.75%
Interest Payment	**16.25**	**24.49**	**23.56**	**23.56**

Interest on Security Deposits

Petitioner's Submission

5.45 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 2015-16.

Commission's Analysis

5.46 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 at end of control period.

Table 18: Impact of True-up on Interest on Security Deposit

Financial year	Approved	Audited	Difference
FY 2013-14	27.34	29.05	1.71
FY 2014-15	1.61	1.17	(0.44)

5.47 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 28th March 2017, actuals now submitted by the Petitioner and approved now by the Commission for FY 2015-16.

Table 19 Interest on Security Deposits for FY 2015-16 (Rs Cr)

Particulars	Approved in the MYT order	Approved in APR	Submitted by the Petitioner	Approved now
Opening Security Deposit		19.86	13.97	13.97

Particulars	Approved in the MYT order	Approved in APR	Submitted by the Petitioner	Approved now
Security Deposit received during FY		4.32	1.36	1.36
Closing Security Deposit		24.18	15.32	15.32
Average Security Deposit (Rs. cr)		22.02	14.65	14.65
Interest rate (%)		9.00%	7.99%	7.99%
Interest on Security Deposit	**1.98**	**1.98**	**1.17**	**1.17**

Interest on Working Capital

Petitioner's Submission

5.48 The Petitioner submitted normative interest on working capital at Rs 20.30 Cr for FY 2015-16 as per the methodology prescribed by the Commission and considering an interest rate of 14.75%.

Commission's Analysis

5.49 The Commission has allowed interest on working capital for FY 2015-16 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 1st April 2015 has been considered for the purposes of estimating interest on normative working capital.

5.50 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 28th February 2017, actual now submitted by the Petitioner and approved by the Commission for FY 2015-16:

Table 20 Interest on Working Capital for FY 2015-16 (Rs Crore)

Particulars	Approved in APR	Submitted by the Petitioner	Approved in True up order
Receivables for 2 months' sale @ existing tariff	244.63	244.44	244.44
O&M expenses for 1 month	8.76	6.62	6.62
Maintenance spares @ 1% of Op. GFA	5.04	5.04	5.04
Sub-total	**258.43**	**256.10**	**256.10**
Less: Security deposit	22.02	14.65	14.65
Less: Power purchase cost for 1 month	106.41	103.85	103.85
Total Working Capital	**130.00**	**137.60**	**137.60**
Interest Rate (%)	14.75%	14.75%	14.75%
Interest on Working Capital	**19.17**	**20.30**	**20.30**

Return on Equity (RoE)

Petitioner's Submission

5.51 The Petitioner submitted that, the normative equity has been taken at 30% of the total fixed asset addition during the FY 2015-16 net of Consumer Contribution being transferred to Capital Reserve. Accordingly, Petitioner submitted RoE for FY 2015-16 as Rs 21.49 Cr

5.52 Further, the Petitioner has grossed up ROE for tax in accordance with Distribution Tariff Regulations, 2010 and claimed Rs 27.19 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

5.53 Regulation 5.28 read with Regulation 11.3 of the Distribution Tariff Regulations, 2010 specifies that interest on loan is a controllable element of the ARR and any truing up under this head shall be carried out at end of control period.

Table 21: Impact of True-up on RoE

Financial year	Approved	Audited	Difference
FY 2013-14	20.23	20.23	0.00
FY 2014-15	20.88	20.88	0.00
Total impact of True-up			**0.00**

5.54 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.

5.55 The Commission has allowed a rate of return of 15.5% (post tax) on equity for FY 2015-16, which is as specified in the Clause 6.21 of the above mentioned regulations. Further, as per the audited accounts for FY 2015-16 the Power Business Division of the Petitioner has reported a positive Profit before tax (PBT), the Commission has thus allowed the income tax paid to the extent of Minimum Alternate Tax rate applicable for the year.

5.56 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 28th April 2008, actual now submitted by the Petitioner and approved by the Commission for FY 2015-16:

Table 22 RoE computed by the Commission for FY 2015-16 (Rs Cr)

Particulars	Approved in APR	Submitted by the Petitioner	Approved in True up order
Opening Balance of Normative Equity	136.46	136.46	136.46

Particulars	Approved in APR	Submitted by the Petitioner	Approved in True up order
Deemed Additions	4.00	4.41	4.41
Closing Balance of Normative Equity	140.46	140.87	140.87
Average Equity	138.46	138.67	138.67
RoE (%)	15.50%	15.50%	15.50%
RoE	**21.46**	**21.49**	**21.49**

5.57 In the past years i.e FY 2010-11 to FY 2013-14, the annual accounts submitted by the petitioner have shown negative Profit before Tax (PBT) and the Commission on the same premise had rejected TSL's claim on Income Tax on RoE. But in FY 2015-16, the petitioner has reported a profit. The petitioner further submitted that such losses presented in the Annual Accounts of the petitioner for FY 2010-11 to FY 2013-14 were more of the nature of unrecovered gap as can be observed from the creation of Regulatory Asset. Since, such Regulatory Assets were to be liquidated in future, any tax liability arising out to of such liquidation of regulatory asset ought to be allowed.

5.58 The Commission observes that, during the finalisation of Tariff Orders in the recent past, the Commission had approved increase in tariffs primarily to liquidate some part of the Regulatory Assets. Hence, the Commission finds merit in the submission of the Petitioner. Further, the Distribution Tariff Regulations, 2010 mention that during the Control period, tax on income, if any, on the Licensed business of the Licensee shall be limited to tax on the allowed return on equity and consumer's share in the incentive earned by the Licensee. Accordingly, the Commission has approves the income tax on the allowed return on equity for the past period as summarised in the following table:

Table 23 Cumulative RoE approved by the Commission FY 2015-16 (Rs Cr)

Particulars	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
RoE approved by Commission in the Tariff Order	5.08	5.70	10.53	20.23	20.88	21.49
Income Tax on RoE	2.53	2.74	2.63	10.42	5.54	5.83

5.59 The Commission has allowed Rs 24.17 Cr (out of Rs 29.68 Cr) to be recovered during FY 2015-16, as prayed for by the Petitioner. The remaining amount shall be recovered in subsequent years.

Non-Tariff Income (NTI)

Petitioner's Submission

5.60 The Petitioner submitted Non-tariff income for FY 2015-16 to be Rs. 5.32 Cr which includes delayed payment surcharge, miscellaneous expenses and supervision charges, etc.

Commission's Analysis

5.61 The Non-tariff income includes meter rent, equipment charges, hire charges from electrical installations and supervision charges.

5.62 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 truing up for each year of variation on account of uncontrollable items based on actual/ audited information subject to prudence check by the Commission.

5.63 In the audited accounts, for FY 2015-16, the revenue from sale of power and other non-tariff income has been provided as Rs 1466.65 Cr and Rs 5.32 Cr respectively and the same has been approved by the Commission.

Sharing of aggregate gains/losses on account of controllable parameters

Petitioner's submission

5.64 The Petitioner submitted that its actual distribution loss of 3.52% is below the target of 5.50% 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.

5.65 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. 8.64 Crore as its entitlement on account of savings in distribution loss for FY 2015-16.

5.66 The Petitioner has also claimed efficiency gains on accounts of lower O&M expenditure for FY 2015-16. 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.

5.67 Accordingly, the Petitioner has claimed 60% of total savings on account of lower O&M expenditure which is Rs 15.40 Cr for FY 2015-16.

Commission's Analysis

5.68 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"

5.69 Thus, in view of above, the Commission allows the sharing of gains on account of lower T&D loss of 4.20% on sales to other consumers achieved by the Petitioner against the target of 5.50% for FY 2015-16. 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.

5.70 Based on the above methodology, the total savings in power purchase cost due to reduction in T&D losses for FY 2015-16 is Rs 14.41 Cr considering the Average Power Purchase Cost of 4.16 Rs/kWh and energy sales of 2402.61 MU to other consumers. The entitlement of the Petitioner towards savings on account of lower T&D losses is approved as 8.64 Cr for FY 2015-16.

5.71 In case of O&M expenses, the Commission observes that the Petitioner has incurred an actual O&M expense of Rs 79.43 Cr as against the revised O&M expenses of Rs 105.09 Cr approved in the Tariff Order dated 28th April 2018.

5.72 The aggregate gain on account of savings in O&M expenses is estimated at Rs 25.66 Cr for FY 2015-16. The entitlement of the Petitioner towards savings in O&M Cost is approved as 15.40 Cr for FY 2015-16.

Revenue from Existing Tariff

Petitioner's Submission

5.73 The Petitioner submitted the total revenue from sales during FY 2015-16 as Rs 1466.65 Cr. The Petitioner has included the income of 5.32 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 1471.98 Cr.

Commission's Analysis

5.74 The Commission scrutinised the accounts for verification of revenue from sale of power and approves the total revenue from energy sales as Rs. 1466.65 Cr during FY 2015-16.

Summary of ARR for FY 2015-16 and Revenue Gap

5.75 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 2015-16.

Table 24 Summary of True up for FY 2015-16 (Rs Cr)

	Particulars	Approved in APR	Petitioner's submission	Approved Now
1	Power Purchase Cost	1,276.97	1,246.23	1,246.12
2	Operation & Maintenance Expenses	105.09	79.43	79.43
3	Depreciation	28.46	28.89	28.89
4	Interest and Finance Charges	45.65	45.03	45.03
a	*Interest on Loan*	*24.49*	*23.56*	*23.56*
b	*Interest on Security Deposits*	*1.98*	*1.17*	*1.17*
c	*Interest on Working Capital*	*19.17*	*20.30*	*20.30*
5	**Sub Total (1 to 4)**	**1,456.16**	**1,399.57**	**1,399.46**
6	Add: Return on Equity	21.46	21.49	21.49
7	Less: Non-Tariff Income	4.37	5.32	5.32
8	Add: Income tax on RoE for past periods and FY 2015-16	-	24.17	24.17
9	**Aggregate Revenue Requirement (5+6-7+8)**	**1473.26**	**1439.92**	**1439.80**
10	**Less: Revenue from Sale of Power @ Existing Tariff**	**1,467.79**	**1,466.65**	**1466.65**
11	Add: Sharing of Gains - O&M Expenses	-	15.40	15.40
12	Add: Sharing of Gains - Distribution Loss	-	8.64	8.64
13	Add: Income Tax on Sharings of Gains	-	-	-
14	**Revenue Gap / (Surplus) (9-10+11+12+ 13)**	**5.46**	**(2.70)**	**(2.81)**

A6: ANNUAL PERFORMANCE REVIEW FOR FY 2016-17

6.1 The Petitioner, in its Petition submitted estimates for FY 2016-17 based on the provisional actuals for the FY 2016-17.

6.2 Regulation 9.1 to 9.4 of the JSERC Multi Year Distribution Tariff Regulations 2015 specify the principles for annual review of performance of the licensee during the control period:

"9.1 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;

9.2 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 11 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 audited/authenticated accounts and the tariff worked out in accordance with these Regulations;

9.3 The Licensee shall also submit the True up of Aggregate Revenue Requirement and corresponding tariff adjustments as per the timelines specified in the Section 11 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;

9.4 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."

6.3 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 2016-17 and has undertaken the Annual Performance Review exercise of various components after a prudence check.

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

Sales Forecast

Petitioner's Submission

6.5 The Petitioner has projected the sales for FY 2016-17 as 2877.34 MU which also includes 279.29 MU sales to other licensee/ JUSCO.

Commission's Analysis

6.6 The Commission has approved the energy sales for FY 2016-17 based on data submitted by the Petitioner for FY 2016-17. Accordingly, energy sales approved now by the Commission is 2877.34 MU for FY 2016-17.

Table 25: Category wise Sales for FY 2016-17 (MU)

Category	Approved in MYT Order	Revised Estimates submitted by the Petitioner	Approved by the Commission
Domestic-LT	232.09	197.25	197.25
Domestic-DSHT	111.65	91.98	91.98
Commercial	73.82	64.26	64.26
Temporary Supply	2.00	2.34	2.34
High Tension I	35.25	29.71	29.71
High Tension II	156.48	111.83	111.83
High Tension III	1864.30	1,883.33	1,883.33
High Tension IV	100	130.82	130.82
Utilities/Street Light	90.00	86.54	86.54
Sale to other Licensee	337.95	279.29	279.29
Total	**3003.54**	**2,877.34**	**2,877.34**

Energy Balance

Petitioner's Submission

6.7 The Petitioner has submitted the energy sales for FY 2016-17 as 2877.34 MUs and overall distribution loss as 3.05%. Accordingly, the Petitioner submitted that the energy available from all sources during FY 2016-17 as 2967.78 MU.

Commission's Analysis

6.8 The Commission has approved the energy sales of the Petitioner for FY 2016-17 as 2877.34 MU as discussed in Para 6.6 above.

6.9 During FY 2016-17, 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 2016-17 at 2967.78 MU.

6.10 Based on approved energy sales and energy availability, the approved distribution losses for FY 2016-17 are estimated at 3.05%.

6.11 The following table details the energy sales, distribution losses and power purchase as approved by Commission in Tariff Order dated 28th February 2017, estimated submitted by the Petitioner in APR Petition, revised estimates submitted by the Petitioner and approved now by the Commission for FY 2016-17.

Table 26 Energy Balance approved for FY 2016-17 (MU)

Particulars	As approved in MYT	Revised Petitioners submission	Approved now
A. ENERGY REQUIREMENT (MUs)			
Sales to Other Licensee	337.95	279.29	279.29
Dist. Losses on Sales to Other Licensee	0.00%	0.00%	0.00%
Units Lost on Sales to Other Licensee	0.00	0.00	0.00
Energy Req. for Sales to Other Licensee	**337.95**	**279.29**	**279.29**
Sales to Steel Works (HT IV)	100.00	130.82	130.82
Dist. Losses on Steel Works	0.00%	0.00%	0.00%
Units Lost on Sales to Steel Works	0.00	0.00	0.00
Energy Req. for Steel Works	**100.00**	**130.82**	**130.82**
Sale to other consumers			
Sales to LT consumers	397.91	350.26	350.38
Sales to HT consumers	2167.68	2116.97	2116.84
Total Sales to Other Consumers	2565.59	2467.23	2467.23
Dist. Losses on Sales to Other Consumers	4.00%	3.54%	3.54%
Units Lost on Sales to Other Consumers	106.90	90.44	90.42
Energy Req. for Sales to Other Consumers	**2672.49**	**2557.67**	**2557.65**
Overall Sales	3003.54	2877.34	2877.34
Overall Distribution Losses %	3.44%	3.05%	3.05%
Overall Distribution Losses	106.90	90.44	90.42
TOTAL ENERGY REQUIREMENT	**3110.44**	**2967.78**	**2967.77**
B. ENERGY AVAILABILITY			

Particulars	As approved in MYT	Revised Petitioners submission	Approved now
TPCL (Unit II and Unit III)	1608.34	1423.92	1423.92
Damodar Valley Corporation 132kV	82.25	308.09	308.07
Damodar Valley Corporation 400kV	1399.85	1151.11	1151.11
TSW - Captive	20.00	76.51	76.51
RPO	-	-	-
Open access/ other sources	0.00	8.15	8.15
Total Pooled Energy Availability	**3110.44**	**2967.78**	**2967.77**

Power Purchase Cost

Petitioner's Submission

6.12 The Petitioner has submitted the rate of power purchase from different sources based on the provisional actual power purchase for FY 2016-17. The rate of power purchase from Unit 2 and Unit 3 of TPCL has been submitted as Rs. 3.72 per unit and Rs. 3.61 per unit respectively, from DVC 132 kV at Rs. 5.14 per unit, from DVC 400 kV at 4.43 per unit and from TSL Captive at Rs. 3.67 per unit. In addition, Petitioner has submitted rate of power purchase from open access and short term sources at Rs. 2.20 per unit.

6.13 The Petitioner has also procured 50 MU of equivalent non-solar RECs at a total cost of Rs 7.64 Cr towards its RPO for FY 2016-17.

Commission's Analysis

6.14 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 2016-17. Accordingly, the Commission has approved the rate of power purchase from Unit 2 and Unit 3 of TPCL as Rs. 3.72 per unit and Rs. 3.61 per unit respectively.

6.15 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 2016-17.

6.16 Further, the rate of purchase of power from TSL Captive has been considered the same as the average rate for TPCL and the rate of purchase of power from other sources/ open access has been approved as per the provisional actual purchase submitted by the Petitioner.

6.17 The total RPO for FY 2016-17 has been estimated by the Commission as 141 MU (which includes 48 MU towards solar obligation and 93 MU towards non-solar obligation). However, the Petitioner has only purchased non-solar RECs equivalent of 50 MU in FY 2016-17. The Commission accordingly approved the compliance and the cost of RPO as Rs 7.64 Cr.

6.18 The following table summarises Power Purchase cost for FY 2016-17 approved by the Commission in the Tariff Order dated 28th February 2017, actual Power Purchase Cost submitted by the Petitioner and now approved by the Commission for FY 2016-17:

Table 27 Power Purchase Cost approved for FY 2016-17 (Rs Cr)

Sl. No.	Particulars	Approved in MYT	Revised Petitioner's submission	Approved Now
A	**Tata Power Co. Ltd. - Regulated**			
	Units Purchased (MU's)			
	Unit II	804.17	716.98	716.98
	Unit III	804.17	706.94	706.94
	Total	**1608.34**	**1423.92**	**1423.92**
	Per Unit Price (Rs. / kWh)	**4.19**	**3.67**	**3.67**
	Unit II	3.93	3.72	3.72
	Unit III	3.83	3.61	3.61
	Power Purchase Cost (Rs. Crs)			
	Unit II	316.07	263.58	263.58
	Unit II (Credit from previous years)		3.17	3.17
	Total Unit II	316.07	266.74	266.74
	Unit III	307.87	251.80	251.80
	Unit III (Credit from previous years)		3.73	3.73
	Total Unit III	307.87	255.53	255.53
	Total	**673.93**	**522.27**	**522.27**
B	**Damodar Valley Corporation - 132 kV**			
	Units Purchased (MU's)	**82.00**	**308.09**	**308.09**
	Per Unit Price (Rs. / kWh)	**9.38**	**5.14**	**5.14**
	Power Purchase Cost (Rs. Crs)	**77.17**	**158.26**	**158.26**
C	**Damodar Valley Corporation - 400 kV**			
	Units Purchased (MU's)	**1399.85**	**1151.11**	**1151.11**
	Per Unit Price (Rs. / kWh)	**3.75**	**4.43**	**4.43**
	Power Purchase Cost (Rs. Crs)	**524.91**	**509.64**	**509.64**
D	**TSL Captive**			
	Units Purchased (MU's)	**20.00**	**76.51**	**76.51**
	Per Unit Price (Rs. / kWh)	**3.75**	**3.67**	**3.67**
	Power Purchase Cost (Rs. Crs)	**7.50**	**28.06**	**28.06**
E	**RPO**			
	RECs purchased (MU's)	-	-	-

Sl. No.	Particulars	Approved in MYT	Revised Petitioner's submission	Approved Now
	Power Purchase Cost (Rs. Crs)	34.98	7.64	7.64
F	**Other Sources/Open Access**			
	Units Purchased (MU's)	-	8.15	8.15
	Per Unit Price (Rs. / kWh)	-	2.20	2.20
	Power Purchase Cost (Rs. Crs)	-	1.79	1.79
G	**Net Power Purchase**			
	Units Purchased (MU's)	**3110.44**	**2967.78**	**2967.79**
	Per Unit Price (Rs. / kWh)	**4.24**	**4.14**	**4.14**
	Net Power Purchase Cost (Rs. Crs)	**1318.54**	**1227.67**	**1227.67**

Operation and Maintenance Expenses

Petitioner's Submission

6.19 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, 2015 and as per provisional actuals of the FY 2016-17.

6.20 The Petitioner has claimed Rs 18.92 Crore for employee expenses, Rs 23.41 Crore for A&G costs and Rs 28.71 Cr for R&M costs during FY 2016-17. Thus, the total O&M expenses as submitted by the Petitioner for FY 2016-17 is Rs 71.11 Crore.

Commission's Analysis

6.21 Note 1 under Regulation 6.6 of the Distribution Tariff Regulations, 2015 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.

6.22 Accordingly, as per the provisions of the Distribution Tariff Regulations 2015 and the methodology followed by the Commission in the previous Tariff Orders, the Commission has revised the projections for employee expenses and A&G expenses on the basis of actual value of inflation factor for FY 2016-17 only.

6.23 Accordingly, the employee expenses and A&G expenses approved by the Commission is Rs 19.07 Cr and Rs 24.79 Cr respectively. The projections for employee expenses have been made after excluding payment of arrears during FY 2015-16.

6.24 For purpose of projecting R&M expenses, the Commission has considered the actual opening value of Gross Fixed Assets for FY 2016-17 and the 'K' factor as per the MYT Order.

6.25 The following table summarises the O&M expenses as approved by the Commission in the MYT order dated 28th February 2017, the actual O&M expenses submitted by the Petitioner in the present petition and now approved by the Commission for FY 2016-17:

Table 28 O&M expenses for FY 2016-17 approved by the Commission (Rs Cr)

Particulars	Approved in the MYT	Revised Estimates Submitted by TSL	Approved Now
Employee Expenses	20.23	18.98	19.07
R&M Expenses	25.00	28.71	24.98
A&G Expenses	21.28	23.41	24.79
Total O & M Expenses	**66.51**	**71.11**	**68.84**

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

Petitioner's Submission

6.26 The Petitioner has proposed a reduction in capital expenditure and capitalisation for FY 2016-17 in comparison to approved in Tariff Order dated 28th February 2017. Accordingly, Petitioner has projected capital expenditure during the year at Rs 8.46 Cr and additions to GFA at Rs 4.91 Cr.

Commission's Analysis

6.27 Note 1 under Regulation 6.16 of the Distribution Tariff Regulations, 2015 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.

6.28 The Commission has approved the GFA, CWIP and capital expenditure projected for FY 2016-17 in line with the revised estimates submitted by the Petitioner.

6.29 The following table summarises the GFA & CWIP as approved by the Commission in the MYT Order dated 28th February 2017, the revised estimates submitted by the Petitioner in present petition and now approved by the Commission for FY 2016-17.

Table 29 CWIP and GFA for FY 2016-17 approved by the Commission (Rs Cr)

Particulars	Approved in the MYT order	Revised Estimates Submitted by the Petitioner	Approved Now
Capital Works in Progress (CWIP)			
Opening CWIP	5.38	5.37	5.37
Add: Additions (Capex during FY)	**23.07**	**8.46**	**8.46**
Sub-total	28.45	13.83	13.83
Less: Capitalization (T/fed to GFA during FY)	3.50	4.91	4.91
Closing CWIP	24.95	8.92	8.92
Gross Fixed Assets(GFA)			

Particulars	Approved in the MYT order	Revised Estimates Submitted by the Petitioner	Approved Now
Opening GFA	520.33	520.32	520.33
Add: Additions during FY	**3.50**	**4.91**	**4.91**
Less: Assets obsoleted	-	0.04	0.04
Net Addition	3.50	4.87	4.87
Closing GFA	523.83	525.19	525.20

Depreciation

Petitioner's Submission

6.30 The Petitioner submitted that it has computed depreciation by applying the rates as provided in Appendix I to the JSERC MYT Distribution Tariff Regulations 2015 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 33.73 Cr for FY 2016-17.

Commission's Analysis

6.31 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 2015. 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 31st May 2015.

6.32 The following table summarizes the depreciation as approved by the Commission in the MYT Order dated 28th February 2017, revised estimates submitted by the Petitioner and approved by the Commission for review of FY 2016-17.

Table 30 Depreciation for FY 2016-17 (Rs Cr)

Particulars	Approved in the MYT order	Revised Estimates Submitted by the Petitioner	Approved Now
Depreciation during the year	33.93	37.80	37.80
Less: Dep. on A/c of CC	3.50	4.07	4.00
Net Depreciation during the year	30.43	33.73	33.80

Interest and Other Finance Charges

Interest on Loan

Petitioner's Submission

6.33 The Petitioner has projected the normative interest on loan at Rs. 14.92 Cr for FY 2016-17 considering the rate of interest of 11.30% per annum on the basis of the methodology prescribed by the Commission in Distribution Tariff Regulations, 2015.

Commission's Analysis

6.34 In accordance with the Distribution Tariff Regulations, 2015 and the principles adopted in the previous tariff order, the Commission has computed the normative loan for the year equal to 70% of the GFA addition. 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.

6.35 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 11.30% p.a. for FY 2016-17.

6.36 The following table summarises interest on loan as approved by the Commission in the MYT order dated 28th February 2017, revised estimates submitted by the Petitioner and approved by the Commission for FY 2016-17.

Table 31 Interest on loan for FY 2016-17 approved by the Commission (Rs Cr)

Particulars	Approved in the MYT order	Revised Estimates Submitted by the Petitioner	Approved now
Opening Balance of Normative Loan	156.47	148.87	150.43
Deemed Addition during the year	1.05	-	-
Deemed Repayments	30.42	33.73	33.80
Closing Balance of Deemed Loan	127.10	115.13	116.64
Average balance during the Year	141.79	132.00	133.54
Interest Rate (%)	11.30%	11.30%	11.30%
Interest Payment	**16.02**	**14.92**	**15.09**

Interest on Security Deposits

Petitioner's Submission

6.37 The Petitioner has submitted the interest on security deposits as per provisional actuals at Rs.1.26 Cr. for FY 2016-17.

Commission's Analysis

6.38 Since the Petitioner has already prepared the provisional annual accounts for the FY 2016-17, the Commission has relied on the provisional actual interest on security deposit for FY 2016-17. The same shall finalised at the time of True-up of FY 2016-17.

6.39 The following table summarizes interest on security deposits as approved in MYT order, revised Petitioner's submission and approved now by the Commission for FY 2016-17.

Table 32 Interest on Security Deposits for FY 2016-17 (Rs Cr)

Particulars	Approved in the MYT order	Revised Estimates Submitted by the Petitioner	Approved now
Interest on Security Deposit	1.49	1.26	1.26

Interest on Working Capital

Petitioner's Submission

6.40 The Petitioner submitted that interest on working capital has been projected on the basis of the methodology specified in the Distribution Tariff Regulations, 2015. Accordingly, the normative interest on working capital projected by Petitioner for FY 2016-17 is Rs 15.75 Crore.

Commission's Analysis

6.41 The Commission has approved the normative working capital for FY 2016-17 on the basis of the methodology specified in the Distribution Tariff Regulations, 2015. The interest rate of SBI Base Rate as on 1st April 2016 plus 350 basis points i.e. 12.80% has been considered for determining the interest on working capital in line with Regulation 6.29 and 6.30 of Distribution Tariff Regulations, 2015. The following table summarises the total interest on working capital as approved in the MYT Order dated 28th February 2017, revised Petitioners submission and approval by the Commission for FY 2016-17:

Table 33 Interest on Working Capital approved for FY 2016-17

Particulars	Approved in the MYT order	Revised Estimates Submitted by the Petitioner	Approved Now
Receivables for 2 months' sale @ existing tariff		231.98	230.94
O&M expenses for 1 month		5.93	5.93
Maintenance spares @ 1% of Op. GFA		5.20	5.20
Sub-total		243.11	242.07
Less: Security deposit		17.81	17.81
Less: Power purchase cost for 1 month		102.31	102.31
Total Working Capital		122.99	121.95

Particulars	Approved in the MYT order	Revised Estimates Submitted by the Petitioner	Approved Now
Interest Rate (%)		12.80%	*12.80%*
Interest on Working Capital	**16.53**	**15.74**	**15.61**

Return on Equity (RoE)

Petitioner's Submission

6.42 The Petitioner submitted that, the normative equity had been considered at 30% of the total capitalisation projected during the FY 2016-17 net of Consumer Contribution being transferred to Capital Reserve. Accordingly, The Petitioner has submitted that it has submitted a Return on Equity as Rs 21.83 Cr for FY 2016-17.

6.43 Further, the Petitioner has grossed up ROE for tax and claimed Rs 33.08 Cr RoE with Income tax.

Commission's Analysis

6.44 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.

6.45 The Commission has allowed a rate of return of 15.5% (post tax) on equity for FY 2016-17, which is as specified in the Clause 6.17 of Distribution Tariff Regulations, 2015. The Commission has not allowed any tax on ROE at the moment. The same shall be allowed at the time of True-up for FY 2016-17 based on actual tax liability as per the audited annual accounts and the relevant Regulations.

6.46 The following table summarizes the return on equity as approved in the MYT Tariff Order dated 28th February 2017, revised estimates now submitted by the Petitioner and approved by the Commission for FY 2016-17.

Table 34 RoE approved by the Commission FY 2016-17 (Rs Cr)

Particulars	Approved in the MYT order	Revised Estimates Submitted by the Petitioner	Approved Now
Opening Balance of Normative Equity	140.47	140.87	140.87
Deemed Additions	0.45	-	-
Closing Balance of Normative Equity	140.92	140.87	140.87
Average Equity	140.70	140.87	140.87
RoE (%)	15.50%	15.50%	15.50%
RoE	21.81	21.83	21.83
Tax rate		**33.99%**	**-**

Particulars	Approved in the MYT order	Revised Estimates Submitted by the Petitioner	Approved Now
Effective RoE		**33.08**	**21.83**

Non-Tariff Income (NTI)

Petitioner's Submission

6.47 The Petitioner has considered Non-tariff income for FY 2016-17 at Rs. 5.38 Cr.

Commission's Analysis

6.48 The Commission has approved Rs. 5.86 Cr as NTI as per the approval granted in its last MYT Order. The same shall be Trued up based on the audited accounts.

Revenue from Existing Tariff

Petitioner's Submission

6.49 The Petitioner submitted the total revenue from sales during FY 2016-17 at Rs 1502.55 Crore.

Commission's Analysis

6.50 The Commission has projected revenue from existing tariff for FY 2016-17 based on projected number of consumers, connected load and energy sales as per the provisional actuals and the tariff applicable as per the Tariff Order for FY 2016-17 dated 28 February 2017.

6.51 In case of revenue from sale of power to JUSCO, the Commission has considered the revenue as booked by the Petitioner in the provisional accounts for FY 2016-17. Accordingly, the Commission approves the total revenue from sale of power in FY 2016-17 as Rs. 1582.09 Crore subject to True-up based on audited accounts.

Summary of ARR for FY 2016-17 and Revenue Gap

6.52 The following table details the ARR for FY 2016-17 as approved in the MYT Order dated 28th February 2017, projections submitted by the Petitioner now and approved now by the Commission:

Table 35 Summary of ARR and Revenue Gap for FY 2016-17 (Rs Cr)

	Particulars	Approved in MYT Order	Revised Estimates submitted by the Petitioner	Approved Now
1	Power Purchase Cost	1318.54	1227.67	1227.67
2	Operation & Maintenance Expenses	66.51	71.11	68.84
3	Depreciation	30.43	33.73	33.80
4	Interest and Finance Charges	34.04	31.92	34.97
a	*Interest on Loan*	*16.02*	*14.92*	*15.09*
b	*Interest on Security Deposits*	*1.49*	*1.26*	*1.26*
c	*Interest on Working Capital*	*16.53*	*15.74*	*18.62*
5	**Sub Total (1 to 4)**	**1449.52**	**1364.43**	**1365.28**
6	Add: Return on Equity	21.81	33.08	21.83
7	Less: Non-Tariff Income	5.86	5.38	5.86
9	**Aggregate Revenue Requirement (5+6-7+8)**	**1465.47**	**1392.13**	**1381.25**
10	**Less: Revenue from Sale of Power @ Existing Tariff**	**1,542.85**	**1,502.55**	**1528.09**
11	**Revenue Gap / (Surplus) (9-10)**	**(77.38)**	**(110.41)**	**(146.83)**

A7: ARR FOR FY 2017-18

7.1 This section contains a summary of the projections for various cost components of the ARR for the FY 2017-18 as submitted by the Petitioner and approved by the Commission.

Energy Sales

Petitioner's Submission

7.2 The Petitioner has projected the sales based on the actual trend of sales over the past years adjusted with specific information available to TSL. The Petitioner has submitted that it expects that category wise sales in FY 2017-18 shall be lower than the approved sales of FY 2017-18.

7.3 Accordingly, the Petitioner has submitted total sales as 3,013.42 MU for FY 2017-18.

Commission's Analysis

7.4 The Commission has considered the actual trend of yearly sales during the past years and other category specific information submitted by the Petitioner.

7.5 The following table summarizes the energy sales submitted by the Petitioner and approved by Commission for FY 2017-18:

Table 36: Energy Sales for approved for FY 2017-18 (MUs)

Particulars	Approved in MYT Order	Submitted by Petitioner	Now Approved
Domestic LT	244.38	209.19	204.77
Domestic - DS HT	115.49	96.78	94.60
Commercial	75.08	65.40	67.18
Temporary supply	2.00	2.84	2.34
High Tension I	37.22	30.84	30.85
High Tension II	159.61	114.96	114.02
High Tension III	1920.23	1939.26	1961.94
High Tension IV	100	130.82	133.74
Street Lights/ Utilities	89.00	85.39	87.54
Sale to other Licensee	337.95	337.95	302.64
Total	**3080.97**	**3,013.42**	**2,999.62**

Energy Balance and Distribution Losses

Petitioner's Submission

7.6 The Petitioner projected the net energy requirement based on the energy sales projected for FY 2017-18.

7.7 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 FY 2017-18.

Commission's Analysis

7.8 The Commission has projected the energy requirement for FY 2017-18 after grossing up the approved energy sales to other consumers by the projected distribution loss of 4.06%. Further, distribution losses on sales to JUSCO and HT- IV are considered as 0%.

7.9 In order to determine the energy availability for TPCL Unit 2 and Unit 3, DVC 132 kV, TSW Captive and Open Access for FY 2017-18, the Commission has relied on actual power purchase bills submitted by the Petitioner for FY 2017-18 (till February). For the month of March 2018, the Commission has relied on the average power purchase for the month in the past two financial years.

7.10 For DVC 400 kV, the Commission has relied on the actual reconciled power purchase bills submitted by the Petitioner for FY 2017-18 (till September). For the remaining months, the Commission has relied on the average power purchase for the relevant months in the past two financial years

7.11 In case of TPCL, the Commission approves 1469.45 MU to be available from Unit 2 & 3 for FY 2017-18. In case of DVC 132 kV and 400 kV, the Commission has approved 394.09 MU and 1176.78 MU, respectively to be available during FY 2017-18. In addition, the Commission approves 23.77 MU to be available from TSL Captive.

7.12 In case of RPO, the Commission approves total obligation for FY 2017-18 at 7.75% of approved energy requirement net of power purchase from DVC 132 kV which works out to 210 MU. In addition, the Petitioner is also required to meet the shortfall in RPO during FY 2016-17 as discussed in chapter 6 of this Order during FY 2017-18. Thus, revised targets for FY 2017-18 works out to 149 MU towards solar obligation and 151 MU towards non-solar obligation.

7.13 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 37: Energy Balance for approved for FY 2017-18 (MUs)

Particulars	Approved in MYT Order	Submitted by Petitioner	Now Approved
A. ENERGY REQUIREMENT			
Sales to Other Licensee	337.95	337.95	302.64
Dist. Losses on Sales to Other Licensee	0.00%	0.00%	0.00%
Units Lost on Sales to Other Licensee	0.00	0.00	0.00
Energy Req. for Sales to Other Licensee	**337.95**	**337.95**	**302.64**
Sales to Steel Works (HT IV)	100.00	130.82	133.15
Dist. Losses on Steel Works	0.00%	0.00%	0.00%
Units Lost on Sales to Steel Works	0.00	0.00	0.00

Particulars	Approved in MYT Order	Submitted by Petitioner	Now Approved
Energy Req. for Steel Works	**100.00**	**130.82**	**133.15**
Sales to LT consumers	410.47	362.81	361.83
Sales to HT consumers (other than HT-IV)	2,232.55	2181.84	2201.40
Sales to Other Consumers	2,643.02	2544.65	2563.23
Dist. Losses on Sales to Other Consumers	4.00%	4.06%	4.06%
Units Lost on Sales to Other Consumers	110.13	107.68	104.07
Energy Req. for Sales to Other Consumers	**2,753.14**	**2652.33**	**2667.30**
Overall Sales	3,080.97	3013.42	2999.62
Overall Distribution Losses %	3.45%	3.45%	3.35%
Overall Distribution Losses (MU)	110.13	107.68	104.07
TOTAL ENERGY REQUIREMENT	**3,191.09**	**3121.10**	**3103.69**
B. ENERGY AVAILABILITY			
- TPCL – Unit II & III	1608.34	1541.85	1469.45
- Damodar Valley Corporation 132 kV	162.91	345.87	394.09
- Damodar Valley Corporation 400 kV	1399.85	1158.38	1176.78
- TSW – Captive	20.00	40.00	23.77
- RPO	-	-	-
- Others/ Open access	0	35.00	128.93
TOTAL ENERGY AVAILABILITY	**3,191.09**	**3121.10**	**3193.02**
Surplus/(Deficit)	**0.00**	**0.00**	**89.33**

Power Purchase Cost

Petitioner's Submission

7.14 The Petitioner has projected the power purchase cost for FY 2017-18 based on the revised energy requirement in line with revised sales projections. 5.3.2 The power purchase rates has been considered as per the rates approved by the Hon'ble Commission in Tariff order dated 28th February, 2017 for all the plants except for DVC 400kV and Open access. An additional Rs. 52.12 Cr have been added as Fixed cost component of DVC 400 kV power source, which is equal to the actual transmission charges paid during FY 2016-17 to PGCIL (Power Grid company of India Limited), and ERLDC (Eastern Region Load Dispatch Centre). While the rate for open access has been considered equal to FY 2016-17 provisional actual rate for open access.

7.15 The Petitioner has thus requested the approval of Rs 1455.51 Cr as power purchase cost for purchase of 3121.10 MUs at the average rate of Rs. 4.66/unit.

Commission's Analysis

7.16 In order to determine the power purchase cost for TPCL Unit 2 and Unit 3, DVC 132 kV, TSW Captive and Open Access for FY 2017-18, the Commission has relied on actual power purchase bills submitted by the Petitioner for FY 2017-18 (till February). For the month of March 2018, the Commission has relied on the average power purchase cost for FY 2017-18 (till February) for the respective sources, and the energy availability approved for the month in the previous section of this Order.

7.17 For DVC 400 kV, the Commission has relied on the actual reconciled power purchase bills submitted by the Petitioner for FY 2017-18 (till September). For the remaining months, the Commission has relied on the average power purchase cost for FY 2017-18 (till September), and the energy availability approved for the remaining months in the previous section of this Order.

7.18 The cost of purchase RECs to meet the RPO for FY 2017-18 has been considered as Rs 14 Cr, equal to the cost of RECs purchased by the Petitioner till February 2018.

7.19 The following table summarises the power purchase cost as submitted by the Petitioner and approved by the Commission for MYT period.

Table 38: Power Purchase Cost approved for FY 2017-18 (Rs Cr)

Particulars		Approved in MYT Order	Submitted by Petitioner	Now Approved
A.				
Units Purchased (MU's)	Unit II	804.17	760.00	724.00
	Unit III	804.17	781.85	745.45
	Total	**1608.34**	**1541.85**	**1469.45**
Per Unit Price (Rs. / kWh)	Unit II		4.04	3.92
	Unit III		3.90	3.77
	Total		**3.97**	**3.84**
Power Purchase Cost (Rs. Cr)	Unit II	318.69	307.20	283.85
	Unit III	310.27	304.70	281.06
	Total	**628.96**	**611.90**	**564.91**
B. DVC at 132 kV				
Units Purchased (MU's)		162.91	**345.87**	**394.09**
Per Unit Price (Rs. / kWh)			**6.55**	**4.90**
Power Purchase Cost (Rs. Cr)		**530.40**	**226.47**	**193.21**
C. DVC at 400 kV				
Units Purchased (MU's)		1,399.85	**1158.38**	**1176.78**
Per Unit Price (Rs. / kWh)			**4.57**	**4.00**
Power Purchase Cost (Rs. Cr)		**530.40**	**529.60**	**470.86**

Particulars		Approved in MYT Order	Submitted by Petitioner	Now Approved
D. TSW - Captive				
Units Purchased (MU's)		20.00	**40.00**	**23.77**
Per Unit Price (Rs. / kWh)		*3.79*	**3.91**	**3.79**
Power Purchase Cost (Rs. Cr)		**7.58**	**15.64**	**9.01**
E. RPO / RECs				
Units Purchased (MU's)		-	-	-
Power Purchase Cost (Rs. Cr)		**57.91**	57.91	14.00
F. Others/ Open access				
Units Purchased (MU's)		-	35.00	128.93
Per Unit Price (Rs. / kWh)		-	4.00	3.88
Power Purchase Cost (Rs. Cr)		**-**	14.00	49.98
G. Total Power Purchased				
Units Purchased (MU's)		**3191.09**	**3121.10**	**3193.02**
Per Unit Price (Rs. / kWh)		**4.17**	**4.66**	**4.08**
Power Purchase Cost (Rs. Cr)		**1331.56**	**1455.51**	**1301.98**
Revenue from sale of surplus power at average power purchase cost (Rs Cr)				36.42
Net Power Purchase Cost (Rs. Crs)		**1331.56**	**1455.51**	**1265.55**

Operation and Maintenance Expenses

Petitioner's Submission

7.20 The Petitioner has projected the O&M expenses for FY 2017-18 based on the O&M expenses submitted for FY 2016-17. Thus the Petitioner has submitted the employee cost of Rs 23.57 Cr, A&G expenses of Rs 23.18 Cr and R&M expenses of Rs 28.92 Cr, for a total O&M expense of 75.67 Cr.

Commission's Analysis

7.21 For FY 2017-18, 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.

7.22 For determination of R&M expenses the Commission has used a K factor of 4.80%, same as that approved in the MYT Order dated 28th February, 2017.

7.23 The Commission has provisionally approved the A&G as well as employee cost for FY 2017-18 by escalating the costs for FY 2016-17 by the weighted average inflation factor of 3.05% p.a in accordance with the methodology followed in the previous Tariff Orders.

7.24 The following table summarises the O&M expenses as submitted by the Petitioner and approved by the Commission for MYT Period.

Table 39: O&M Expenses approved for FY 2017-18 (Rs Cr)

Particulars	Approved in MYT Order	Submitted by Petitioner	Now Approved
A. A&G Costs	21.35	23.57	19.65
B. R&M Costs	22.21	23.18	25.21
C. Employee costs	25.16	28.92	25.54
Total O&M Expenses (A + B + C)	**68.72**	**75.67**	**70.41**

Gross Fixed Asset

Petitioner's Submission

7.25 The Petitioner has not made any new submission and has maintained the projections as approved in the MYT Order.

Commission's Analysis

7.26 The following table summarises the GFA as submitted by the Petitioner and approved by the Commission for FY 2017-18.

Table 40: GFA approved for FY 2017-18 (Rs Cr)

Particulars	Approved in MYT Order	Submitted by Petitioner	Now Approved
Gross Fixed Assets (GFA)			
Opening GFA	523.83	-	525.20
Addition in GFA	14.89	-	14.89
Closing GFA	**538.72**	**-**	**540.08**

Depreciation

Petitioner's Submission

7.27 The Petitioner has not made any new submission and has maintained the projections as approved in the MYT Order.

Commission's Analysis

7.28 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.

7.29 Following table summarizes the gross and net depreciation as submitted by the Petitioner and approved by the Commission for FY 2017-18.

Table 41: Depreciation approved for FY 2017-18 (Rs Cr)

Particulars	Approved in MYT Order	Submitted by Petitioner	Now Approved
Gross Depreciation	34.53	-	33.29
Depreciation on Account of Consumer Contribution	3.60	-	3.46
Net Depreciation	**30.93**	**30.93**	**29.83**

Interest and Other Finance Charges

Interest on Loan

Petitioner's Submission

7.30 The Petitioner has not made any new submission and has maintained the projections as approved in the MYT Order.

Commission's Analysis

7.31 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 GFA addition. 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 1st, 2017 i.e. 11.10%.

7.32 The following table summarises the interest on loan as submitted by the Petitioner and approved by the Commission for FY 2017-18:

Table 42: Interest on Loan approved for FY 2017-18 (Rs Cr)

Particulars	Approved in MYT Order	Submitted by Petitioner	Now Approved
Opening Balance of Normative Loan	127.10		116.64
Deemed Addition during the year	9.02		10.42
Deemed Repayments	30.93		29.83

Particulars	Approved in MYT Order	Submitted by Petitioner	Now Approved
Closing Balance of Deemed Loan	105.19		97.23
Average balance during the Year	116.14		106.93
Interest Rate (%)	11.30%		11.10%
Interest Payment	**13.12**	**13.12**	**11.87**

Interest on Security Deposits

Petitioner's Submission

7.33 The Petitioner has not made any new submission and has maintained the projections as approved in the MYT Order.

Commission's Analysis

7.34 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 1st of April for the year. Thus the Commission has approved the interest on security deposit at 9.10% p.a. for FY 2017-18; however the same is subject to true up based on the prevailing SBI Base Rate and the actual audited accounts.

7.35 The following tables summarise the interest on security deposits as submitted by the Petitioner and approved by the Commission for FY 2017-18:

Table 43: Interest on Security Deposits for approved for FY 2017-18 (Rs Cr)

Particulars	Approved in MYT Order	Submitted by Petitioner	Now Approved
Opening security deposit	16.54		20.30
Security deposit received during FY	1.27		-
Closing security deposit	17.81		20.30
Average security deposit	**17.17**		**20.30**
Interest Rate (%)	*9.30%*		9.10%
Interest on security deposit	**1.60**	**1.60**	**1.85**

Interest on Working Capital

Petitioner's Submission

7.36 The Petitioner has not made any new submission and has maintained the projections as approved in the MYT Order.

Commission's Analysis

7.37 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:

(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.

7.38 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.

7.39 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 1st April 2017 plus 350 basis points i.e. 12.60%. The following tables summarise the calculation of working capital as submitted by the petitioner and as approved by the Commission for FY 2017-18.

Table 44: Interest on Working Capital approved for Wheeling business for FY 2017-18 (Rs Cr)

Particulars	Approved in MYT Order	Submitted by Petitioner	Now Approved
Receivables for 2 months' Revenue @ existing tariff from wheeling charges	18.16		17.61
O&M expenses for 1 month for Wheeling Business	3.88		3.94
Maintenance spares @ 1% of Op. GFA of wheeling business	4.71		4.73
Sub-total	**26.76**		**26.27**
Less: Security deposit	**-**		-
Total Working Capital	**26.76**		**26.27**
Interest Rate (%)	12.80%		12.60%
Interest on Working Capital	**3.43**		**3.31**

Table 45: Interest on Working Capital approved for Retail business for FY 2017-18 (Rs Cr)

Particulars	Approved in MYT Order	Submitted by Petitioner	Now Approved
Receivables for 2 months' Revenue @ existing tariff from wheeling charges	228.30		217.50
O&M expenses for 1 month for Wheeling Business	1.85		1.93
Maintenance spares @ 1% of Op. GFA of wheeling business	0.52		0.53
Sub-total	**230.67**		**219.95**
Less: Security deposit	17.17		20.30
Less: Power Purchase Cost for 1 Month	110.96		108.50
Total Working Capital	102.53		91.16
Interest Rate (%)	12.80%		12.60%
Interest on Working Capital	**13.12**		**11.49**

Return on Equity (RoE)

Petitioner's Submission

7.40 The Petitioner has not made any new submission and has maintained the projections as approved in the MYT Order.

Commission's Analysis

7.41 As per the Distribution Tariff Regulations, 2015, the equity base has been considered equal to 30% of GFA net of consumer contribution.

7.42 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.

7.43 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 46: Return on Equity for MYT Period submitted by the Petitioner (Rs Cr)

Particulars	Approved in MYT Order	Submitted by Petitioner	Now Approved
Opening normative equity	140.92		140.87
Deemed additions during FY	3.87		4.47
Closing normative equity	144.78		145.34
Average normative equity	142.85		143.10
Rate of ROE (%)	15.50%		15.50%
Return on equity	**22.14**	**22.14**	**22.18**

Non-Tariff Income (NTI)

Petitioner's Submission

7.44 The Petitioner has not made any new submission and has maintained the projections as approved in the MYT Order.

Commission's Analysis

7.45 The Non-Tariff Income includes Meter Rent, Delayed Payment Surcharge and Supervision Charges etc. The Commission has approved a Non-Tariff Income of Rs 5.86 Cr for FY 2017-18, same as that approved in the MYT Order. The approved NTI shall be subject to true up based on actual/audited accounts of each year.

Summary of ARR for FY 2017-18

7.46 The following table summarises the ARR for FY 2017-18 as submitted by the Petitioner and approved by the Commission:

Table 47: Summary of ARR for approved for FY 2017-18 (Rs Cr)

	Particulars	Approved in MYT Order	Submitted by the Petitioner	Approved Now
1	Power Purchase Cost	1331.56	1455.51	1265.55
2	Operation & Maintenance Expenses	68.72	75.67	70.41
3	Depreciation	30.93	30.93	29.83
4	Interest and Finance Charges	31.27	31.27	28.51
a	*Interest on Loan*	*13.12*	*13.12*	*11.87*
b	*Interest on Security Deposits*	*1.60*	*1.60*	*1.85*
c	*Interest on Working Capital*	*16.55*	*16.55*	*14.80*
5	**Sub Total (1 to 4)**	**1462.48**	**1593.38**	**1394.30**
6	Add: Return on Equity	22.14	22.14	22.18
7	Less: Non-Tariff Income	5.86	5.86	5.86
8	**Aggregate Revenue Requirement (5+6-7)**	**1478.76**	**1609.66**	**1410.62**
9	**Less: Revenue from Sale of Power @ Existing Tariff**	**-**	**1,804.09**	**1872.52**
10	**Revenue Gap / (Surplus) (9-10)**	**-**	**(194.43)**	**(461.90)**

A8: TREATMENT OF REVENUE GAP

Petitioner's Submission

8.1 The Petitioner has proposed cumulative revenue gap of Rs 1293.55 Cr. till FY 2017-18. To realize the revenue gap, TSL has proposed to increase/ rationalise the tariff for FY 2017-18 to liquidate a part of the regulatory assets by FY 2020-21.

8.2 The Petitioner submitted that revenue realization from fixed/demand component of tariff is very low compared to the cost structure and the proposed tariff aims to rationalize the same. Principally, Licensee should be able to recover its fixed costs through fixed component of the tariff, and variable costs through variable components of the tariff. In current tariff structure, the recovery of fixed charges is only limited to 13% of total revenue, whereas the total fixed costs of the petitioner is approx. 43% of total ARR.

8.3 In view of the same, as per the Petitioner, there is a need to increase fixed / demand charges relatively more than the energy charges. Therefore, the petitioner has proposed to increase the fixed / demand charges of all categories by 20%, and few changes have also been proposed in tariff structure. The proposed increase shall have an overall impact of increase of only 2% of the average billing rate / yearly revenue.

Commission's Analysis

8.4 Based on the True up of FY 2015-16, APR of FY 2016-17 and determination of revised ARR for FY 2017-18, the Commission has estimated a cumulative gap with carrying cost of Rs 945.37 Cr as indicated in the following table:

Table 48: Cumulative Revenue Gap upto FY 2017-18 approved by the Commission (Cr.)

Particulars	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
Opening Revenue Gap as on 1st April of the year	19.03	27.95	280.15	706.56	1,108.84	1,269.38	1,275.63
Revenue Gap/ (Surplus) created during the year	6.05	231.04	348.6	277.67	(2.81)	(146.83)	(461.90)
Add: Incentives on T&D Losses	-	-	7.97				
Add: Impact of true-up of controllable parameters at the end of control period			3.36	(0.08)			
Rate of Interest	13.00%	14.75%	14.45%	14.75%	14.75%	12.80%	12.60%
Total Additions	6.05	231.04	359.93	277.59	(2.81)	(146.83)	(461.90)
Carrying Cost on Opening Balance	2.47	4.12	40.48	104.22	163.55	162.48	160.73
Carrying Cost on Additional Gap	0.39	17.04	26.00	20.47	(0.21)	(9.40)	(29.10)
Total Carrying Cost	2.87	21.16	66.49	124.69	163.35	153.08	131.63
Total Gap incl. Carrying Cost	**27.95**	**280.15**	**706.56**	**1,108.84**	**1,269.38**	**1,275.63**	**945.37**

8.5 As can be observed from the above table, the prevailing tariffs are sufficient to cover the annual costs of the Utility. The cumulative gap is only on account of past unrecovered gaps/ regulatory assets which shall get liquidated in the next 2-3 years owing to yearly revenue surplus being earned by the Utility at existing tariffs.

8.6 However, the Commission has undertaken a Tariff Simplification exercise in this Tariff Order. The prevailing tariff structure in the state is extremely elaborate with tariff categories and slabs defined for various segments of consumers. These have been developed over the years taking into account the socio-economic profile of the state, consumption patterns, etc. Multiple sub-categories and slabs in each tariff category make the tariff structure highly complex and difficult for the consumer to understand.

8.7 The Economic Survey of India, 2015-16 also observes some of the above issues and views that simplification of tariffs with no more than 4-5 categories, will improve transparency in setting tariffs and may well yield benefits including enhanced consumption, collection efficiency, along with bringing in governance and other administrative benefits.

8.8 The Ministry of Power, Government of India also constituted a committee under the Chairmanship of Ms. Jyoti Arora, Joint Secretary, Ministry of Power, for developing a design framework for creation of tariff categories across India, to enable uniform and homogenous electricity tariff categorization. PricewaterhouseCoopers assisted the Committee to carry out a study for reviewing of the existing scenario of electricity tariffs in India, identifying national/international best practices and developing a framework as well as a roadmap for implementation of the new simplified tariff categories.

8.9 In this background, the Commission approves the new simplified tariff schedule as discussed in section A11 of this Order. This simplified tariff schedule shall also eliminate manual/ human intervention in recording of load through inspection, if any.

A9: DETERMINATION OF OPEN ACCESS CHARGES FOR FY 2017-18

9.1 As per Clause 3.1 of the JSERC Distribution Tariff Regulations, 2015, the Commission shall determine wheeling tariff, cross-subsidy surcharge, additional surcharge and other open access related charges. The relevant extract of the regulations has been reproduced below:

"3.1

…

Provided further that where the Commission has permitted open access to any category of consumers under Section 42 of the Act, the Commission shall determine the wheeling tariff, cross-subsidy surcharge, additional surcharge and other open access related charges in accordance with these Regulations and JSERC (Open Access in Intra-State Transmission and Distribution) Regulations, 2005 and as amended from time to time;"

9.2 As per the Jharkhand State Electricity Regulatory Commission (Terms and Conditions for Intra-State Open Access) Regulations, 2016, the Open Access charges includes wheeling charges, wheeling losses, Cross subsidy charges and additional surcharge apportioned voltage wise at HT/ EHT and LT levels.

9.3 In line with the directions of the Commission, the Petitioner has submitted its proposal for the determination of wheeling charge, cross subsidy surcharge, additional surcharge and regulatory asset surcharge for the FY 2017-18.

Wheeling charges

Petitioner's Submission

9.4 The Petitioner has utilized the allocation matrix as approved by the Commission in the MYT Order in order to determine the ARR for wheeling business and the same has been used to calculate the per unit wheeling charges.

Commission's Analysis

9.5 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.

9.6 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."

9.7 The Petitioner has not submitted duly approved allocation statement.

9.8 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 49: 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%

9.9 Therefore, the ARR for wheeling and supply business approved by the Commission for FY 2017-18 is as under:

Table 50: Wheeling and Retail supply Business ARR approved for FY 2017-18 (Cr)

	Total ARR	Wheeling ARR	Retail ARR
Power Purchase Cost	1265.55	0.00	1265.55
O&M Expenses			
Employee Expenses	*19.65*	*11.79*	*7.86*
R&M Expenses	*25.21*	*22.69*	*2.52*
A&G Expenses	*25.54*	*12.77*	*12.77*
Interest & Other Finance Charges			
Interest on Loan	*11.87*	*10.68*	*1.19*
Interest on Security Deposits	*1.85*	*0.00*	*1.85*
Interest on Working Capital	*14.80*	*1.48*	*13.32*
Depreciation	29.83	26.85	2.98
Total Costs	**1394.30**	**86.26**	**1308.04**
Add: Return on Equity	22.18	19.96	2.22
Less: Non-tariff income	5.86	0.59	5.27
Annual Revenue Requirement	**1410.62**	**105.64**	**1304.98**

9.10 Therefore, the wheeling Tariff for FY 2017-18 for the Petitioner is Rs 0.35 per kWh.

9.11 The Commission directs the Petitioner to propose capacity based Wheeling tariff and specify the voltage-wise distribution losses as per clause 7.9 of the JSERC MYT Regulations, 2015 along with the next tariff petition.

Cross Subsidy Surcharge

Petitioner's Submission

9.12 The Petitioner has utilized the formula for Cross Subsidy Surcharge (CSS) as specified in the JSERC Tariff Regulations, 2015.

Commission's Analysis

9.13 As per Clause 21.5 of the Jharkhand State Electricity Regulatory Commission (Terms and Conditions for Intra-State Open Access) Regulations, 2016:

> *"The Cross subsidy surcharge shall be determined by the Commission in accordance with the principles and formula stipulated in the National Tariff Policy and shall be leviable at the rate as determined by the Commission from time to time."*

9.14 The National Tariff Policy, 2016 has stipulated the following formula for computation of Cross Subsidy Surcharge:

$S = T- [C/(1 – (L/ 100)) + D]$

Where,

S is the surcharge;

T is the Tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation;

C is the weighted average cost of power purchase by Licensee including meeting the renewable purchase obligation;

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

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

Provided that the surcharge shall not exceed 20% of the tariff applicable to the category of the consumers seeking open access.

9.15 The Petitioner has submitted loss levels of 3.00% for all voltage levels. The Commission has considered the same for HT level. The resultant losses have been loaded to the LT voltage level in order to maintain the overall T&D loss at 4.06% as approved in the ARR of the FY 2017-18 above. Accordingly, the loss level at LT level works out to 9.05%.

9.16 The weighted average power purchase cost at the Discom for CSS computation works out to Rs 4.08 per unit as determined in the ARR for FY 2017-18 in this Order.

The Tariff Policy suggests that the surcharge shall not exceed 20% of the tariff applicable to the category of the consumers seeking open access. Accordingly the cross subsidy surcharge approved by the Commission for FY 2017-18 is as follows:

Table 51: Retail Supply Business ARR approved for FY 2017-18 (Cr)

Consumer categories	Voltage level	T- Tariff payable (ABR)	C- Power Purchase cost	L- System losses for the applicable voltage	D- Wheeling charge	Cross subsidy surcharge (Rs/kWh)
Domestic	LT	4.21	4.08	9.05%	0.35	-
Commercial	LT	6.41	4.08	9.05%	0.35	1.28
Industrial- LTIS	LT	5.50	4.08	9.05%	0.35	1.06
Industrial- HTS 11 KV	HT	6.61	4.08	3.00%	0.35	1.32
Industrial- HTS 33 KV	HT	6.41	4.08	3.00%	0.35	1.28
Industrial- HTS 132 KV	HT	6.25	4.08	3.00%	0.35	1.25
Institutional	HT	6.50	4.08	3.00%	0.35	1.30

Additional Surcharge

Petitioner's Submission

9.17 The Petitioner has used the fixed power purchase costs as determined by the Commission in the MYT Order to determine the Additional Surcharge as follows:

Table 52: Additional surcharge as submitted by Petitioner

Additional Surcharge Calculation	Units	Amount
Approved total fixed power purchase cost	Crore	537.96
TPCL Unit 2 and 3 for FY 2017-18	Crore	205.61
DVC 132 kV for FY 2017-18	Crore	49.49
DVC 400 kV for FY 2017-18	Crore	224.95
RPO for FY 2017-18	Crore	57.91
Approved total sale volume of FY 2017-18	MU	3080.97
Additional Surcharge	**Rs/kWh**	**1.75**

Commission's Analysis

9.18 Clause 6.58 of the JSERC Tariff Regulations, 2015 states the following about Additional Surcharge:

"Additional Surcharge shall be determined on 'case to case' basis and shall be payable ***only if the licensee is able to conclusively demonstrate the incidence of any stranded capacity****"*

9.19 The Commission is of the view that the Utility may also surrender power due to other reasons like seasonal variations, purchases from Power Exchange, RTC short term power purchases of DISCOMs etc. In some cases, additional renewable capacity may have been added to ensure compliance to RPO and not to meet demand. The burden of surrender of power to that extent should be shared by all consumers.

9.20 To ensure only power surrendered due to open access is considered for computation of additional surcharge, only minimum of power backed down/ surrendered and open access quantum should be considered.

9.21 Based on the above argument and the information furnished by the Petitioner, the Commission is of the view that the Petitioner has failed to conclusively demonstrate the incidence of any stranded capacity due to Open Access. It is pertinent to note that the Ministry of Power has brought out a consultative paper on issues related to Open Access which, inter-alia, recommends a methodology for computation of Additional Surcharge. The Petitioner should re-compute the additional surcharge as per the recommended approach and conclusively demonstrate incidence of fixed charge burden due to Open Access.

9.22 **Accordingly, the Commission, at the moment has approved an additional surcharge of ZERO for the FY 2017-18.**

Regulatory Surcharge for Open Access Consumers

Petitioner's submission

9.23 The Petitioner has submitted that a Regulatory Asset Surcharge ought to be levied on Open Access consumers to protect the interest of other consumers who shall continue to take power from the Licensee.

9.24 The Petitioner has proposed the liquidation of regulatory assets in the next three years and has calculated the category wise regulatory asset surcharge based on the energy charges paid by each category.

Commission's analysis

9.25 As per the Consultation Paper on Issues pertaining to Open Access published by MoP in August 2017, the following has been said about regulatory asset surcharge for Open Access consumers:

"...Regulatory Asset was created when open access customer was part of the system. Such customers had enjoyed the benefit of suppressed tariff when Regulatory Asset was being created. Thus, when such customers leave the tariff base of the DISCOM, part of Regulatory Assets become stranded. Therefore, one of the component of additional surcharge should cover for Regulatory Asset.

...

Cost of carrying Regulatory Assets or amortization of Regulatory Assets, as the case may be, should be one of the component of additional surcharge. SERCs should calculate Regulatory Asset and surcharge to recover the same for each year separately. Surcharge for Regulatory Assets should be payable by Open Access consumers also based on year till they had availed supply from DISCOM. DISCOMs should maintain accounts against Regulatory Assets for each year *separately….”*

9.26 Based on the above mentioned principle, the Commission has determined the regulatory asset surcharge applicable to open access consumers.

9.27 The Commission has estimated a cumulative gap of Rs 935.47 Cr in this Order. Assuming liquidation of Regulatory Asset over a three year period, the Commission has considered liquidation of Regulatory asset worth Rs 350 Cr in the 1st year.

9.28 Accordingly, the category wise Regulatory asset surcharge approved by the Commission is as follows:

Table 53: Category wise regulatory asset surcharge approved

Consumer categories	Energy charges for FY 2017-18 (Rs Cr)	%	Allocation for FY 2017-18	Sales (MU)	Regulatory Surcharge (Rs/kWh)
Domestic	124.74	8.01%	28.05	299.37	0.94
Commercial	39.73	2.55%	8.93	67.18	1.33
HT	1347.59	86.58%	303.04	2240.55	1.35
IAS	0	0.00%	0.00	0.00	0.00
Institutional	42.9	2.76%	9.65	87.54	1.10
Temporary	1.46	0.09%	0.33	2.34	1.40
	1556.42	**100%**	**350**	**2696.98**	

A10: TARIFF RELATED OTHER ISSUES

Petitioner's submission

The Petitioner has proposed following changes in tariff slabs:

Tariff Rationalisation:

10.1 The Petitioner submitted that revenue realization from fixed/demand component of tariff is very low compared to the cost structure and the proposed tariff aims to rationalize the same. Principally, Licensee should be able to recover its fixed costs through fixed component of the tariff, and variable costs through variable components of the tariff. In current tariff structure, the recovery of fixed charges is only limited to 13% of total revenue, whereas the total fixed costs of the petitioner is approx. 43% of total ARR.

10.2 In view of the same, as per the Petitioner, there is a need to increase fixed / demand charges relatively more than the energy charges. Therefore, the petitioner has proposed to increase the fixed / demand charges of all categories by 20%, and few changes have also been proposed in tariff structure.

Changes in disconnection/ reconnection charges under miscellaneous charges:

10.3 TSL submitted that the prevailing charge of Rs. 30/- per disconnection neither recovers the full cost of disconnection, nor provide adequate pressure on defaulting consumers to pay on time. Few consumers have become habitual of paying late, getting disconnections and again reconnections. These habits of defaulting consumers puts additional burden of power tariff to the good consumers.

10.4 In view of the same, TSL has proposed disconnection / reconnection charges of Single phase, Three phase, Low Tension Industrial Supply, and HT supply, as Rs. 500/-, Rs. 700/-, Rs. 1000/-, and Rs. 1500/- per disconnection / reconnection respectively.

New Category: Provisional power supply at single point on sharing basis for Temporary Stalls/ Tin sheds in market area

10.5 TSL submitted that in market area, several vendors have made temporary stalls/Tin sheds etc., which need electricity to operate mostly during evening hours. A special tariff needs to be given, to these vendors as their requirement is only for part of the day and, also that their establishment is temporary. As these are temporary in nature, it is proposed to provide the same on sharing basis, to a group of such temporary stalls/Tin sheds.

Views of the Commission

10.6 The Commission has scrutinized the proposals submitted by the Petitioner for changes in the categorization /tariff structure. Since the Commission has undertaken tariff simplification exercise and has reduced the number of slabs, the Commission has not undertaken tariff rationalisation exercise separately. Based on the revised tariff structure, the Petitioner may re-work its analysis of the fixed and variable cost structure vis-à-vis tariff recovery.

10.7 Regarding changes in disconnection/ re-connection charges, the Commission is of the view that these charges were revised in the last Tariff Order only and hence no changes are warranted in the present Tariff Order.

10.8 The Commission rejects the proposal of the Petitioner to introduce a new category for provisional power supply at single point on sharing basis for Temporary Stalls/ Tin sheds in market area. Such consumers shall be charged the Temporary tariff approved in this Tariff Order.

A11: TARIFF SCHEDULE

APPLICABLE FROM 1ST MAY, 2018[1]

This tariff will come into effect from 1st May, 2018 and apply to all consumers availing power supply from Tata Steel within its licensed area.

I. DOMESTIC SERVICE

Applicability:

a) Domestic Service–Rural & Urban,

b) Domestic Service-HT

This schedule shall apply to private residential premises for domestic use for household electric appliances such as Radios, Fans, Televisions, Desert Coolers, Air Conditioner, etc. and including Motors pumps for lifting water for domestic purposes and other household electrical appliances not covered under any other schedule.

This rate is also applicable for supply to religious institutions such as Temples, Gurudwaras, Mosques, Church and Burial/ Crematorium grounds and other recognised charitable institutions, where no rental or fees are charged whatsoever. If any fee or rentals are charged, such institution will be charged under Commercial category.

Rural drinking water schemes are also included under this Category.

Category of Services:

Domestic Service – Rural: For rural areas (including rural drinking water schemes) not covered by area indicated under DS-Urban.

Domestic Service – Urban: For Urban areas covered by Nagar Nigam, Nagar Parishad, Nagar Panchayat.

Domestic service – HT: This Schedule shall apply for domestic connection in Housing Colonies / Housing Complex / Houses of multi storied buildings purely for residential use for single point metered supply, with power supply at 6.6 KV/ 11 KV/ 33 KV voltage level. Individual households in the housing colonies/ multi-storeyed buildings/ housing complexes would pay the same tariff as applicable for this category.

[1] This schedule shall remain in force till the next tariff schedule is issued by the Commission.

Service Character:

(i) AC, 50 Cycles, Single Phase at 230 Volts, Three Phase at 400 Volts.

(ii) For HT: AC, 50 Cycles, at 6.6 KV/11 KV/33 kV

Tariff:

Table 54: Approved Tariff for Domestic Category for FY 2017-18

Consumer Category Domestic	Fixed Charges Unit	Fixed Charges Rate	Energy Charges Rate (Rs./kWh)
0-100 units	Rs./Conn/Month	13	2.60
Above 100 units	Rs./Conn/Month	30	4.55
HT	Rs/KVA/month	40	4.20

Delayed Payment Surcharge: In accordance with Clause IV of Terms & Conditions of Supply as provided in Section A12 of this Tariff Order.

Prompt Payment Rebate/ Rebate for online payment: In accordance with Clause VII and Clause VIII of Terms & Conditions of Supply as provided in Section A12 of this Tariff Order.

II. IRRIGATION & AGRICULTURE SERVICE (IAS)

Applicability:

This schedule shall apply to all consumers for use of electrical energy for Agriculture purposes including tube wells and processing of the agricultural produce, confined to Chaff-Cutter, Thresher, Cane crusher and Rice-Hauler, when operated by the agriculturist in the field or farm and does not include Rice mills, Flour mills, Oil mills, Dal mills, Rice-Hauler or expellers.

Service Character:

AC 50 Cycles, Single Phase at 230 volts / 3 Phase at 400 volts

Tariff:

Table 55: Approved Tariff for IAS for FY 2017-18

Consumer Category	Fixed Charges		Energy Charges
	Unit	Rate	Rate (Rs./kWh)
All units	Rs./HP/Month	20	4.50

Delayed Payment Surcharge: In accordance with Clause IV of Terms & Conditions of Supply as provided in Section A12 of this Tariff Order.

Power Factor Penalty/Rebate: In accordance with Clause II of Terms & Conditions of Supply as provided in Section A12 of this Tariff Order.

Prompt Payment Rebate/ Rebate for online payment: In accordance with Clause VII and Clause VIII of Terms & Conditions of Supply as provided in Section A12 of this Tariff Order.

III. COMMERCIAL SERVICES (CS)

Applicability:

This schedule shall apply to all consumers, using electrical energy for light, fan and power loads for non-domestic purposes like shops, hospitals (govt. or private), nursing homes, clinics, dispensaries, restaurants, hotels, clubs, guest houses, marriage houses, public halls, show rooms, workshops, central air-conditioning units, offices (govt. or private), commercial establishments, cinemas, X-ray plants, schools and colleges (govt. or private), boarding/ lodging houses, libraries (govt. or private), research institutes (govt. or private), railway stations, fuel – oil stations, service stations (including vehicle service stations), All India Radio / T.V. installations, printing presses, commercial trusts / societies, Museums, poultry farms, banks, theatres, common facilities in multi-storied commercial office/buildings, Dharmshalas, public Electric Vehicles Charging stations and such other installations not covered under any other tariff schedule

This schedule shall also applicable to electricity supply availed through separate (independent) connections for the purpose of advertisements, hoardings and other conspicuous consumption such as external flood light, displays, neon signs at public places (roads, railway stations, airports etc.), departmental stores, commercial establishments, malls, multiplexes, theatres, clubs, hotels and other such entertainment/ leisure establishments.

Service Category:

Commercial Service Rural: For Rural Areas not covered by area indicated for CS- Urban.

Commercial Service Urban: For Urban areas covered by Nagar Nigam, Nagar Parishad, Nagar Panchayat.

Service Character:

AC 50 Cycles, Single phase at 230 Volts or Three Phase at 400 Volts.

Tariff:

Table 56: Approved Tariff for Commercial Category for FY 2017-18

Consumer Category	Fixed Charges		Energy Charges
	Unit	Rate	Rate (Rs./kWh)
All units	Rs./Connection/Month	100	6.25

Delayed Payment Surcharge: In accordance with Clause IV of Terms & Conditions of Supply as provided in Section A12 of this Tariff Order.

Installation of Shunt Capacitors: In accordance with Clause II of Terms & Conditions of Supply as provided in Section A12 of this Tariff Order.

Prompt Payment Rebate/ Rebate for online payment: In accordance with Clause VII and Clause VIII of Terms & Conditions of Supply as provided in Section A12 of this Tariff Order.

IV. INDUSTRIAL SERVICES

Applicability:

- Low Tension Industrial Service (LTIS)
- High Tension Industrial Service (HTIS)

Low Tension Industrial Service (LTIS): This schedule shall apply to all industrial units applying for a load of less than or equal to 100 kVA (or equivalent in terms of HP or kW). The equivalent HP for 100 kVA shall be 114 HP and the equivalent kW for 100 kVA shall be 85.044 kW.

High Tension Industrial Service (HTIS): The schedule shall apply for consumers having contract demand above 100 kVA.

Service Character:

Low Tension Industrial Service (LTIS): AC, 50 Cycles, Single Phase supply at 230 Volts or 3 Phase Supply at 400 volts

High Tension Industrial Service (HTIS): 50 Cycles, 3 Phase at 6.6 kV / 11 kV / 33 kV / 132 kV / 220 kV / 400 kV

Tariff:

Table 57: Approved Tariff for Industrial services for FY 2017-18

Consumer Category	Fixed Charges		Energy Charges
	Unit	Rate	Rate (Rs./kWh)
LTIS	Rs./KVA/Month	100	5.00
HTIS	Rs/KVA/Month	320	6.30

LTIS: The billing demand shall be the maximum demand recorded during the month or 50% of contract demand whichever is higher. In case actual demand is recorded at more than 100 kVA in any month, 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 under the HTS category for the revised contracted demand with the Petitioner as per the terms and conditions of HT supply.

HTIS: The billing demand shall be the maximum demand recorded during the month or 75% of contract demand whichever is higher. The penalty on exceeding billing demand will be applicable in accordance with Clause I of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

Load Factor Rebate for HTIS: In accordance with Clause IX of Terms & Conditions of Supply as provided in Section A12 of this Tariff Order.

Voltage Rebate for HTIS: In accordance with Clause VI of Terms & Conditions of Supply as provided in Section A12 of this Tariff Order.

Delayed Payment Surcharge: In accordance with Clause IV of Terms & Conditions of Supply as provided in Section A12 of this Tariff Order.

Power Factor Penalty/Rebate for LTIS: In accordance with Clause II of Terms & Conditions of Supply as provided in Section A12 of this Tariff Order.

Installation of Shunt Capacitors for LTIS: In accordance with Clause II of Terms & Conditions of Supply as provided in Section A12 of this Tariff Order.

Load factor rebate and power factor rebate shall not be allowed to consumers with outstanding arrears.

Prompt Payment Rebate/ Rebate for online payment: In accordance with Clause VII and Clause VIII of Terms & Conditions of Supply as provided in Section A12 of this Tariff Order.

V. INSTITUTIONAL SERVICES

This tariff schedule shall apply for use of Utilities/ Street Lighting system, Railway Traction, Military Engineering Services and Other Distribution Licensees.

Applicability:

Utilities/ Street Light Service (SS): The schedule is applicable to all utilities and municipal services like water and waste water, sewage treatment, street lights etc.

Railway Traction (RTS) and Military Engineering Services (MES): This tariff schedule shall apply for use of railway traction and Military Engineering Services (MES) for a mixed load in defense cantonment and related area.

Other distribution licensees: This tariff schedule shall apply to other distribution licensees procuring power from TSL (except JUSCO which shall continue to procure power as per the prevailing arrangement)

Service Character:

Street Light Service (SS): AC, 50 cycles, Three phase at 415V or 220V or 6.6 kV

Railway Traction Service (RTS): AC, 50 cycles, Single phase at 132 kV.

Military Engineering Services (MES): AC, 50 cycles, three phase at 11 KV/ 33 KV/ 132 kV

Other Distribution Licensees: AC, 50 cycles, three phase at 11 KV/ 33 KV/ 132 kV

Tariff:

Table 58: Approved Tariff for Institutional Service for FY 2017-18

Consumer Category	Fixed Charges		Energy Charges
	Unit	Rate	Rate (Rs./kWh)
Street Light	Rs./Connection/Month	35	4.90
Railway Traction Services, Military Engineering Services and Other Distribution Licensees*	Rs/KVA/Month	350	6.00

*Note: The billing demand shall be the maximum demand recorded during the month or 75% of contract demand whichever is higher. The penalty on exceeding billing demand will be applicable in accordance with Clause I of Terms & Conditions of Supply as provided in Section A13 of this Tariff Order.

Maximum Demand for Railway Traction Services:

The demand charge shall be applied on maximum demand recorded or 75% of the contract-demand whichever is higher at any fifteen minutes time block for which the meter installed should have 15 minutes integration time.

Delayed Payment Surcharge: In accordance with Clause IV of Terms & Conditions of Supply as provided in Section A12 of this Tariff Order

Load factor rebate shall not be allowed to consumers with outstanding arrears.

VI. TEMPORARY CONNECTIONS

Applicability:

The Temporary tariff shall be applicable as per the following conditions:

Temporary tariff is proposed to be equivalent to 1.5 times of the applicable fixed and energy charges for temporary connections falling in each prescribed tariff category with all other terms and conditions of tariff remaining the same.

Temporary connections shall be given prepaid meters with prepaid balance equivalent to 45 days of sale of power which shall be based on the assessment formula (LDHF) prescribed by the Commission.

Temporary connections shall initially be provided for a period of up to 30 days which can be extended on month to month basis upto six months.

Tariff:

Table 59: Approved Tariff for Temporary supply for the FY 2017-18

Consumer Category	Fixed Charges Rate	Energy Charges Rate (Rs./kWh)
All units	1.5 times of the applicable fixed charges	1.5 times of the applicable energy charges

Schedule for Miscellaneous Charges

S.No.	Purpose	Scale of Charges	Manner in which payment will be realized
1	**Application fee**		
	Agriculture	10	Payable with energy bill
	Street light	20	
	Domestic	15 (Kutir Jyoti) 20 (Others)	
	Commercial	20	
	Other LT categories	50	
	HTS	100	
	HTSS, EHTS, RTS	100	
2	**Revision of estimate when a consumer intimates changes in his requirement subsequent to the preparation of service connection estimate based on his original application**		
	Agriculture	10	Payable with energy bill
	Domestic	30	
	Commercial	30	
	Other LT categories	50	
	HT Supply	150	
3	**Testing of consumers Installation**		
	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 with energy bill
4	**Meter test when accuracy disputed by consumer**		
	Single phase	40	If the meter is found defective within the meaning of the Indian Electricity Rules 1956, no charge shall be levied. If it is proved to be correct within the permissible limits laid down in the Rules, the amount will be charged in the next energy bill.
	Three phase	100	
	Trivector of special type meter	650	
5	**Removing/ Refixing of meter**		
	Single phase	50	Payable with energy bill
	Three phase	100	
	Trivector of special type meter	300	
6	**Changing of meter /meter equipment/fixing of sub meter on the request of the consumer/fixing of sub meter**		
	Single phase	50	Payable with energy bill
	Three phase	100	

S.No.	Purpose	Scale of Charges	Manner in which payment will be realized
	Trivector of special type meter	300	
7	**Resealing of meter when seals are found broken**		
	Single phase	25	Payable with energy bill
	Three phase	50	
	Trivector of special type meter	100	
8	**Replacement of meter card, if lost or damaged by consumer**	10	Payable with energy bill
9	**Fuse call – Replacement**		
	Board fuse due to fault of consumer	15	Payable with energy bill
	Consumer fuse	15	
10	**Disconnection/ Reconnection**		
	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	
11	**Security Deposit**		**As per clause 8.2.8 -8.2.20 of the JSERC (Electricity Supply code) Regulations, 2015**
12	**Meter Rent/Month**		
	Domestic Single Phase/ Three phase	Rs. 20/50	Payable with energy bill
	Domestic- HT	Rs 50	
	Commercial Single Phase/ Three phase	Rs 20/105	
	LT meter with CT	Rs. 250	
	HT	Rs 700	

A12: 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 to7.5	2
7.5 to10	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 as stipulated in the JSERC (Supply Code) Regulations, 2015 and its amendments which is presently minimum 15 days after issue date of bill for LT Domestic, Commercial and Agriculture category and minimum 21 days after issue date of bill for other categories.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 on the energy charges as given below:

Consumer Category	Voltage Rebate
HTIS - 33 kV	3.00%
HTIS - 132 kV	5.00%
HTIS - 220 kV	5.50%
HTIS - 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: Rebate for prompt payment

The due date for making payment of energy bills or other charges shall be as stipulated in the JSERC (Supply Code) Regulations, 2015 and its amendments which is presently minimum 15 days after issue date of bill for LT Domestic, Commercial and Agriculture category and minimum 21 days after issue date of bill for other categories. Rebate of 0.5% on the billed amount for payment of the bills within ten (10) days of issue date of bill for all the category of consumers shall be allowed.

Clause VIII: Rebate for online payment

To motivate the consumers to make online payment of the bills through online web portal or digital methods, a rebate of 1% of the billed amount in addition to rebate @ 0.5% for prompt payment, shall be allowed. However, online payment rebate shall be applicable if the consumer makes full payment of the bill within due date.

Clause IX: Load Factor Rebate

Load Factor rebate will be applicable on energy charges only as given below:

Table 60: Load Factor Rebate

Load Factor	Load Factor Rebate
40-60%	**Nil**
60-70%	**7.50%**
70-100%	**10.00%**

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

Clause X: 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

A13: DIRECTIVES

13.1 The Commission directs the Petitioner to comply with following directives:

Optimisation of Power Purchase Cost

13.2 The Commission directs the Petitioner to undertake a detailed demand forecasting exercise for short term, medium term as well as long term based on which it should devise a power procurement strategy with higher focus on managing short term procurement of power through various avenues and optimising costs for procurement other than long term sources.

RPO Obligation

13.3 The Commission directs the Petitioner to comply with the RPO norms set by the Commission in future, failing which the penal action may be taken by the Commission against the licensee.

Quality of power/ Reliability Indices and Standard of Performance (SOP)

13.4 The Commission directs the Petitioner to continue submitting monthly report on Reliability Indices in MS-Excel format along with compliance to SOPs in true spirit, in course of achieving 24x7 quality & reliable power.

Impact assessment study for switching from kWh billing to kVAh billing

13.5 The Commission directs the Petitioners to carry out impact assessment study on transition from kWh billing to kVAh billing, for a sample set of consumers in the HTIS category, and submit a report within six months of issuance of this Order.

Approval of PPAs

13.6 The Commission directs TSL to submit, for approval, all the PPAs which have not yet been approved by the Commission within three months of the date of issuance of this Tariff Order.

Wheeling Tariff

13.7 The Commission directs the Petitioner to propose capacity based Wheeling tariff and specify the voltage-wise distribution losses as per clause 7.9 of the JSERC MYT Regulations, 2015.

Consolidated tariff petition for FY 2018-19 and FY 2019-20

13.8 The Commission directs the Petitioner to file a consolidated Petition for determination of ARR and Tariff for FY 2018-19 and FY 2019-20 along with the True-up of FY 2016-17 and FY 2017-18, within the timelines stipulated in the Tariff Regulations, viz. November 30th, 2018.

Strengthening/ Increasing effectiveness of consumer grievance redressal mechanism

13.9 The Commission directs the Petitioner to strengthen and increase effectiveness of its consumer grievance handling mechanism and submit a report to the Commission along with the next Tariff Petition indicating- total number of complaints received, nature of complaint, complaints resolved, average resolution time, complaints pending etc.

Bank Guarantee for security deposit above Rs 10 Lakhs

13.10 The Commission directs the Petitioner to strictly comply with Clause 8.2.20 of the JSERC (Supply Code) Regulations, 2015 as per which:

"The Consumer whose total amount of Security Deposit exceeds Rs. 10 Lacs may, at his option, furnish irrevocable Bank Guarantee from a nationalized or scheduled commercial Bank initially valid for a period of two years. It shall be the responsibility of the consumer to keep the Bank Guarantee valid at all times and to renew the Bank Guarantee at least 2 months prior to its expiry"

13.11 The above mentioned clause shall be applicable for all existing as well as new consumers.

Investment in Cyber Security solutions

13.12 Owing to widespread cases of compromise of various Government websites in the country, the Commission is of the view that deployment of cyber security solutions needs to be looked into. Moreover, with increasing focus on digital mode of payment coupled with the rebate on payment of electricity bills online/ through digital mode, it becomes even more important to invest in cyber security solutions. In this regards, the Petitioner may look into the possibilities of investing in such cyber security solutions. The cost incurred on such investment shall be allowed to be recovered through the ARR, subject to prudence check.

This Order is signed and issued by the Jharkhand State Electricity Regulatory Commission on this the 18th day of May, 2018.

This Order shall be effective from 1st May, 2018 and shall remain in force till the next Tariff Order is issued by the Commission.

Date: 18.05.2018
Place: Ranchi

Sd/-	Sd/-
(Mr. R. N Singh)	**(Dr. Arbind Prasad)**
MEMBER (T)	**CHAIRPERSON**

A14: ANNEXURE

Annexure-I

List of participating members of public in the public hearing

Sl. No.	Name	Address / Organization if any
1	K. C. Jha	JUSCO
2	A. K. Banerjee	JUSCO
3	Anjani Kumar	Kadma
4	N. Leena	JUSCO
5	S. K. Mohanta	JUSCO
6	Rasmimaya Lenka	Tata Steel Ltd.
7	S.S. Chauhan	V. Nagar
8	A. K. Singh	JUSCO
9	G. S. Golan	S R P. Osl (P) Ltd.
10	Anurag Sexena	Tata Steel Ltd.
11	S. N. Karja	JUSCO
12	Suma Kumar Jha	JUSCO
13	A. Magender	JUSCO
14	Ronald Dcosta	Boulward Hotel
15	D. Mohanthy	JUSCO
16	D. Rai	H. No. - 4, Friends Enclave, Kadma Path
17	Anirban	JUSCO
18	K. Banerjee	JUSCO
19	Ajay Kumar	Tata Steel Ltd.
20	Durgesh Kumar	JUSCO
21	Sunil Kumar	Kadma
22	Kush Kumar	Tata Steel Ltd.
23	P. K. Dalal	Ex. Tata Steel
24	Manoj Kumar Sharma	V. Nagar
25	S.S. Dubey	JUSCO
26	Ajay Sharma	Utkal Automobile
27	S. Parika	Centre P Hotel
28	Deo Narayan Singh	Bhuiayadhi
29	Dinesh Agarwal	Baradwari
30	J.P. Pallav	JUSCO
31	M. K. Panda	JUSCO
32	Pyan Dcosta	Boulevard Hotel
33	Anil Khemka	J H Association
34	Sudipta Chatterjee	JUSCO
35	Shobhna Pati	Town Electrical
36	Bishwajeet Kumar	Tata Steel (JUSCO)
37	Satyanarayan Agarwal	SCCI
38	Ashok Bhalotia	SCCI

Sl. No.	Name	Address / Organization if any
39	Manaw Kedia	SCCI
40	A. Agrawal	JUSCO
41	Atul Choudhary	JUSCO
42	Somenath Mitra	JUSCO
43	Mani Pandey	JUSCO
44	R. Mollice	JUSCO
45	Praveen Jha	Golden Iris, Golmuri
46	Chef Sanjay	Golden Iris, Golmuri
47	Santosh Kumar	Golden Iris, Golmuri
48	Dinesh	Golden Iris, Golmuri
49	Kartik Sharma	Tata Steel Electrical T&D
50	Pankaj Jha	Gent Sec., A Garden Owner Association
51	Sufiyan	The Sonnet
52	Raj Kumar	The Sonnet
53	P. Dey	Hotel G regency
54	Manish Dutt	Hotel Ramada
55	Hari Kumar	Hotel Ramada
56	B. Yadav	Hotel Ramada
57	Sharda Gupta	Sonari
58	S. K. Mouris	JUSCO
59	T roy Choudhary	JUSCO
60	Chandan Kumar Singh	Mascot Electromech
61	Srichar Jee	Jamshedpur
62	Sujit	Jamshedpur
63	Ramji	Jamshedpur
64	Brajesh Singh	Public
65	Subhash	Public
66	Debasish	Public
67	Rajesh Kumar	Sonari
68	A. N. Choudhary	JUSCO
69	K. M. Pandey	JUSCO
70	R. S. Dugal	Accor Hotel
71	V. Taunel	Jamshedpur
72	S. C. Jha	CGRF (TSL)
73	Pintu Mukharji	CGRF (TSL)
74	K. Darjee	Jamshedpur
75	Nirmal Prasad	Press
76	S. Mukharjee	Jamshedpur
77	Sanjay Upadhay	Jamshedpur
78	S. Mohapatra	Hotel L R
79	D. Nag	Hotel SR
80	Amit Kumar	Jamshedpur
81	S. K. Singh	Kadma
82	Ramesh Kumar	Hotel GR

Sl. No.	Name	Address / Organization if any
83	Modey Vijay Swanp	Vijay Nagar, Golmuri
84	M I Swanp	Vijay Nagar, Golmuri
85	Mr. rajesh Beri	Hotel Sidhartha
86	Mr. Ruchit Beri	The Golden Iron
87	Mr. Nikhil Kumar Singh	JK Residency
88	A. K. Tripathy	Sakchi
89	Raju Bose	Sitaramdera
90	Abhishek Kumar	JUSCO
91	R.C. Leshxap	JUSCO
92	Vikash Singh	SRT
93	Rakesh Kumar Singh	SRT, JUSCO
94	R. K. Mishra	Bhalubasa
95	Awtar Singh	Bhalubasa
96	Srikant	Bhalubasa
97	B. K. Sharma	Anand Nagar
98	S. K. Sinha	Anand Nagar
99	S. Bhagat	Anand Nagar
100	Hari Shankar Singh	Anand Nagar
101	L. P. Thakur	Anand Nagar
102	Sanjay	Anand Nagar
103	Manmohan Singh	JUSCO