

Petition before

Hon'ble Jharkhand State Electricity Regulatory Commission for True-up for FY 2018-19, Annual Performance Review for FY 2019-20, Revised Aggregate Revenue Requirement for FY 2020-21 and Tariff Proposal for FY 2020-21

Of

Tata Steel Limited

Submitted to Jharkhand State Electricity Regulatory Commission, Ranchi

Ву



License Area – Jamshedpur
TATA STEEL LIMITED
JAMSHEDPUR
December 2019



The Secretary,
Jharkhand State Electricity Regulatory Commission
2nd Floor, Rajendra Jawan Bhawan-cum-Sainik Bazar
Main Road, Ranchi-834001

PBD / 10 22+59 - T / 10 / 2019 December 20 16, 2019

Sub : Submission of Petition for True up of FY2018-19, Annual Performance Review of FY2019-20, Aggregate Revenue Requirement and Tariff proposal for FY2020-21 by Licensee Tata Steel limited

Dear Sir.

Please find enclosed the petition for True up of FY2018-19, Annual Performance Review of FY2019-20, Aggregate Revenue Requirement and Tariff proposal for FY2020-21. This is being submitted in one original and six copies.

We also attach herewith a cheque no. 556445 dated 19.12.2019 of HDFC Bank for an amount of Rs. 17,64,000/- (Rupees Seventeen lakhs sixty four thousand only), payable to JSERC towards filing fee of this petition according to JSERC (Conduct of Business regulation) 2011.

We request the Hon'ble commission to kindly consider the above facts & submission.

Thanking You,

Yours Faithfully,

(Anurag Saxena) 20 12 19 Chief of Electrical Maintenance

TATA STEEL

Tata Steel Ltd. Jamshedpur Jamshedpur 831 001 India Received the cheque from Tata Steel Ltd. Jamshedpur

NO.

NAME AND ADDRESS OF THE PARTY

DMEIL

JHARKHAND STATE ELECTRICITY REGULATORY COMMISSION, RANCHI.

C/O. GM.(POWER SERVIC) TATA STEEL Jamshedprur 831001

SIGNATURE OF THE RECIPIENT

उनके आदेश पर **1,764,000.00* By Order For TATA STEEL LTD 0 Valid for 3 months Only Ø, H दिनाक Date अदा करे FIGURES INTERNATIONS TATE ELECTRICITY REGULATORY

SECTION OF THOUSAND ONLY

SEVENTEEN LAC SIXTY FOUR THOUSAND ONLY

SEVENTEEN Payable at par through clearing/transfer at all branches of HDFC BANK LTD CIA A/c Payee 00870310000747 MITHILA MOTORS, NEAR RAM MANDIR MAIN ROAD, BISTUPUR, JAMSHEDPUR - 831 001, JHARKHAND. RTGS / NEFT IFSC : HDFC000087 THDFC BANK

"556445" 831240002; 900169" 30

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Government of Jharkhand

e-Stamp



Certificate No.

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Description of Document

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First Party

Second Party

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SUBIN-JHJH900490431805152043770R

TATA STEEL LTD

Article 4 Affidavit

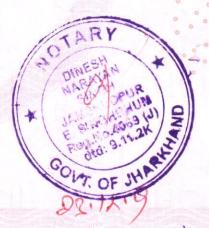
AFFIDAVIT

(Zero)

TATA STEEL LTD

TATA STEEL LTD

(Twenty only)





known to me and sign before me

Advocate, Jamshedpur

Please write or type below this line.....

AFFIDAVIT

BEFORE THE JHARKHAND STATE ELECTRICITY REGULATORY COMMISSION, RANCHI

Filing No.....

Case No.....

IN THE MATTER OF: Filing of the Petition for True-up for FY 2018-19, Annual Performance Review for FY 2019-20, Revised Aggregate Revenue Requirement for FY 2020-21 and Tariff Proposal for FY 2020-21 for the Licensee under Section 45, 46, 61, 62, 64 and 86 of the Electricity Act, 2003 and as per the regulations of Jharkhand State Electricity Regulatory Commission (JSERC) (Terms and Conditions For Distribution Tariff) Regulation, 2015.

The onus of checking the legitimacy is on the users of the certificate.

In case of any discrepancy please inform the Competent Authority.

The authenticity of this Stamp Certificate should be verified at "www.shoilestamp.com". Any discrepancy in the details on this Certificate and as available on the website renders it invalid.



AND

IN THE MATTER OF: Tata Steel Limited (hereinafter referred to as "TSL" which shall mean for the purpose of this petition the Licensee), a company incorporated under the provisions of the Companies Act, 1956 and having its registered office at Mumbai– Petitioner.

AFFIDAVIT VERIFYING THE PETITION

- I, Anurag Saxena son of late L. S. Kudesia, aged 52 years residing at Flat no.23, Jubilee Flats, Northern Town, Bistupur, Jamshedpur do hereby solemnly affirm and state as follows:
- 1. I am working as Chief of Electrical Maintenance (Tata Steel Limited) in the office of Tata Steel Limited (TSL), the Petitioner in the above matter and I am duly authorised by the said Petitioner to make this affidavit.
- 2. I say that on behalf of Tata Steel Limited (TSL), I am now filing this Petition under The Electricity Act, 2003 and relevant provisions under JSERC Tariff Regulations 2015, for approval of Petition for True-up for FY 2018-19, Annual Performance Review for FY 2019-20, Revised Aggregate Revenue Requirement for FY 2020-21 and Tariff Proposal for FY 2020-21.
- 3. I have gone through the accompanying petition and I say that the facts stated therein are based on the records of the petitioner company maintained in the normal course of business and believed by me to be true.
- 4. That I solemnly affirm at Jamoufu... on this day of 2000 Dec 2009. that
- (i) The contents of the above petition are true to my knowledge and I believe that no part of it is false and no material has been concealed there from.
- (ii) Further, to my knowledge and belief, no material information has been concealed in this petition.

Place: Jamshed pur

Date: 23-12-2019

VERIFICATION

I, the deponent above named do hereby verify that the contents of my above affidavit are true to my knowledge, no part of it is false and nothing material has been concealed there from.

Verified at Jamshedpur on this

day of December, 2019

Witness

Known to me and sign before me

District Court



BEFORE THE JHARKHAND STATE ELECTRICITY REGULATORY COMMISSION, RANCHI

Filing	No
Case	No

IN THE MATTER OF:

Filing of the Petition for True-up for FY 2018-19, Annual Performance Review for FY 2019-20, Revised Aggregate Revenue Requirement for FY 2020-21 and Tariff Proposal for FY 2020-21 for the Licensee under Section 45, 46, 61, 62, 64 and 86 of the Electricity Act, 2003 and as per the regulations of Jharkhand State Electricity Regulatory Commission (JSERC) (Terms And Conditions For Distribution Tariff) Regulation, 2015.

AND

IN THE MATTER Of:

Tata Steel Limited (hereinafter referred to as "TSL" which shall mean for the purpose of this petition the Licensee), a company incorporated under the provisions of the Companies Act, 1956 and having its registered office at Mumbai – Petitioner

The Petitioner respectfully submits as under: -

- 1. Tata Steel Limited (TSL) is a power distribution licensee for Jamshedpur, where it also has it's integrated steel manufacturing plant, and associated facilities.
- Pursuant to the enactment of the Electricity Act, 2003, TSL is required to submit its Aggregate Revenue Requirement (ARR) for control period and Tariff Petitions as per procedures outlined in section 61, 62 and 64, of Electricity Act 2003, and the governing regulations thereof.
- The Petitioner is now filing this petition for True up of FY 2018-19, Annual Performance Review for FY 2019-20, Revised Aggregate Revenue Requirement for FY 2020-21 and Tariff Proposal for FY 2020-21.
- 4. TSL along with this petition is submitting the regulatory formats with data & information to an extent applicable and would make available any further information/ additional



data as may be required by the Hon'ble Commission during the course of tariff determination process.

Prayers to the Commission:

- 5. The petitioner respectfully prays that the Hon'ble Commission may:
 - a) Admit the Petition and examine the proposal submitted by the petitioner in the enclosed petition for a favourable dispensation.
 - b) Pass suitable orders with respect to its claim based on regulations and audited accounts for the True-up of ARR of Rs. **1,741.98** Crs for FY 2018-19 which is incurred by TSL for serving its consumers.
 - c) Pass suitable orders with respect to its claim based on regulations and provisional actual for first six months and revised estimate for balance six months of FY 2019-20 for ARR of Rs. 1604.13 Crs for FY 2019-20;
 - d) Pass suitable orders with respect to its claim based on regulations and revised Aggregate Revenue Requirement (ARR) for FY 2020-21 for Rs. **1,677.27** Crs;
 - e) Pass suitable orders with respect to the Tariff Proposal submitted by the petitioner and pass the direction for adjustment of revenue gap/ (surplus) as deemed proper;
 - f) Condone any inadvertent omissions/errors/shortcomings and permit TSL to add/change/modify/alter this filing and make further submissions as may be required at a future date;
 - g) Pass such further, as the Hon'ble Commission may deem fit and appropriate keeping in view the facts and circumstances of the case;

ATA STEEL LIMITED

Petitioner

Jamshedpur

Dated: 23 rd December' 2019



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Abbreviation Description A&G Administration and General ARR Aggregate Revenue Requirement AT&C Aggregate Technical and Commercial AS Accounting Standard CAPEX Capital Expenditure CERC Central Electricity Regulatory Commission CGRF Consumer Grievance Redressal Forum Ckt Km Circuit Kilo Meter CPI Consumer Price Index Crs Crores CWIP Capital Works In Progress DPS Delayed Payment Surcharge DS Domestic Service DS HT Domestic Service High Tension DSM Demand Side Management DVC Damodar Valley Corporation EA 2003 The Electricity Act 2003 F&A Financial Year GFA Gross Fixed Assets HP Horse Power HR Human Resources HT High Tension Service IAS Irrigation & Agriculture Service IDC Interest During Construction ISU Industry Service - Utilities IT Information Technology JSERC Jharkhand State Electricity Regulatory Commission JTS Jamshedpur Utilities and Service Company Limited	List of Abbreviations				
ARR Aggregate Revenue Requirement AT&C Aggregate Technical and Commercial AS Accounting Standard CAPEX Capital Expenditure CERC Central Electricity Regulatory Commission CGRF Consumer Grievance Redressal Forum Ckt Km Circuit Kilo Meter CPI Consumer Price Index Crs Crores CWIP Capital Works In Progress DPS Delayed Payment Surcharge DS Domestic Service DS HT Domestic Service High Tension DVC Damodar Valley Corporation EA 2003 The Electricity Act 2003 F&A Finance & Accounts FY Financial Year GFA Gross Fixed Assets HP Horse Power HR Human Resources HTT High Tension Service IAS Irrigation & Agriculture Service IAS Irrigation & Agriculture Service IDC Interest During Construction ISU Industry Service - Utilities IT Information Technology JSER Jharkhand State Electricity Regulatory Commission JTS Jamshedpur Utilities and Service Company Limited	Abbreviation Description				
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JSERC Jharkhand State Electricity Regulatory Commission JTS Jamshedpur Town Services JUSCO Jamshedpur Utilities and Service Company Limited	JSEB	Jharkhand State Electricity Board			
JUSCO Jamshedpur Utilities and Service Company Limited	JSERC				
JUSCO Jamshedpur Utilities and Service Company Limited	JTS				
· · · · · · · · · · · · · · · · · · ·	JUSCO	·			
kV Kilo Volt	kV	Kilo Volt			
kVA Kilo Volt Ampere	kVA	Kilo Volt Ampere			
kW Kilo Watt		·			
kWh Kilo Watt Hours					
LF Load Factor					
LT Low Tension					
LTIS Low Tension Industrial Service					
MD Maximum Demand					
MU Million Units					



List of Abbreviations				
Abbreviation	Description			
MVA	Mega Volt Ampere			
MW	Megawatt			
MYT	Multi Year Tariff			
NDS	Non-Domestic Service			
O&M	Operation and Maintenance			
PF	Power Factor			
PLR	Prime Lending Rate			
PPA	Power Purchase Agreement			
PSD	Power Services Division			
RBI	Reserve Bank of India			
REC	Renewable energy Certificate			
R&M	Repairs and Maintenance			
RoE	Return on Equity			
RPO	Renewable Power Obligation			
Rs.	Rupees			
SAP	System, Application and Production			
SBI	State Bank of India			
SERC	State Electricity Regulatory Commission			
STU	State Transmission Utility			
T&D	Transmission & Distribution			
TPCL	Tata Power Company Limited			
TPL	Torrent Power Limited			
TSL	Tata Steel Limited			
WPI	Wholesale Price Index			
w.e.f	with effect from			
YoY	Year-on-Year			



Chapter 1. Introduction

1.1 Background

- 1.1.1 The Tata Steel Limited (hereinafter to be referred as "the Petitioner" or "TSL") is a power distribution licensee for Jamshedpur, where it has its integrated steel manufacturing plant, along with associated facilities.
- 1.1.2 Tata Steel Limited (TSL) provides and maintains basic civic amenities in the city of Jamshedpur primarily through its 100% subsidiary Jamshedpur Utility Services Company Limited (JUSCO) including the supply and maintenance of the electricity distribution services in its licensed area.
- 1.1.3 Tata Steel Limited is distributing electricity in Jamshedpur through License granted under section 14 of The Electricity Act 2003. Tata Steel has been managing the power distribution system in Jamshedpur since 1923. This sanction was granted under section 28(1) of the erstwhile Indian Electricity Act, 1910. Post enactment of Electricity Act 2003, Tata Steel Ltd has been regularly filing the petitions before Hon'ble Commission as per prevailing Tariff Regulations and directions of Hon'ble Commission.
- 1.1.4 The Hon'ble Commission in January 2016 has issued JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2015 (hereinafter to be referred as "JSERC Tariff Regulations 2015") which are applicable for the Control Period (FY 2016-17 to FY 2020-21).
- 1.1.5 JSERC (Terms & Conditions of Distribution Tariff) Regulation 2015 provide for the truing up during the Control Period (FY2016-17 to FY 2020-21). The relevant clause of the regulation is as reproduced below: -
 - 10.1 These Regulations do not provide for any truing up for controllable items during the Control Period. Depreciation and return on equity 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;
 - 10.2 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 audited information and subject to the prudence check by the Commission;

.....

"



- 1.1.6 As per Regulation A11 of the JSERC Tariff Regulations 2015, Distribution companies are required to file their True-up petition by 30th November of each year from second year of the Control period.
- 1.1.7 However, vide letter no. JSERC/156/112 dated 11th November 2019, the Hon'ble Commission have extended the timeline for filing petition upto 30th December 2019, considering the code of conduct, due to state assembly elections. Accordingly, petitioner is filing the current petition within given extended timelines.

1.2 Previous Petition

- 1.2.1 The Commission in its tariff order dated 07.06.2018 had directed petitioner to file a consolidated petition. The relevant extract is as under:
 - "13.9 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"
- 1.2.2 The Petitioner as per applicable regulations and above direction in tariff order had filed Petition for True-up of FY 2016-17 and FY 2017-18, Annual Performance Review for FY 2018-19, Revised Aggregate Revenue Requirement for FY 2019-20 and Tariff Proposal for FY 2019-20 vide letter dated PBD/079/59-J/9/2019, dated 06.03.2019
- 1.2.3 The Petitioner had subsequently submitted the additional data requirements pertaining to deficiencies observed in the Petition for True Up of FY 2016-17 and FY 2017-18, Annual Performance Review of FY 2018-19, ARR and Tariff proposal for FY 2019-20 letter no. PBD/725/10/59-T/2019, dated 30.08.2019
- 1.2.4 Comments / Suggestion/Objections from stakeholders on the above petition were invited by TSL through press notification on 13th and 14th Oct'2019. Last date for receiving the same was notified as 4th Nov'2019. The petitioner has also submitted the responses to the queries forwarded by Hon'ble Commission of various stakeholders.

1.3 Present Petition

- 1.3.1 The Petitioner as per applicable regulations is now filing Petition for True-up of FY 2018-19, Annual Performance Review for FY 2019-20, Revised Aggregate Revenue Requirement for FY 2020-21 and Tariff Proposal for FY 2020-21.
- 1.3.2 The True-up of FY 2018-19, is based upon the annual audited accounts which is provided at Error! Reference source not found. of this petition.



- 1.3.3 The annual performance review of FY 2019-20 is based on available provisional actual data for first six months (Apr'19 to Sep'19) w.r.t power purchase, sales, O&M costs and capital expenditure and capitalisation of Assets. The balance six months performance is reestimated to arrive at APR figures for FY 2019-20.
- 1.3.4 Similarly based on latest data and information, the APR figures for FY 2019-20 and ARR figures for FY 2020-21 are revised and Tariff Proposal for FY 2020-21 is submitted.



Chapter 2. True-up for FY 2018-19

2.1 Actual Financial Performance

- 2.1.1 The Hon'ble Commission has approved the Business plan for the 2nd MYT control period from FY 2016-17 to FY 2020-21 on 28th February, 2017. In the same Order dated 28th February, 2017, the Hon'ble Commission has also approved the ARR for the MYT Control Period FY 2016-17 to FY 2020-21.
- 2.1.2 TSL hereby submits the financial performance for FY 2018-19 based on audited accounts and the provisions of Regulations for true-up purpose. The following sections summarise each of the components of ARR for FY 2018-19. A comparison of figures approved in ARR order dated 28th February, 2017 and figures based on audited accounts / normative claims are shown under relevant sections discussed herewith.

2.2 Sales, Consumers and Connected Load

2.2.1 The table below provides the details of actual no of consumers, connected load and respective sales for different consumer category for FY 2018-19.

Consumers, Connected Load & Sales - FY 2018-19 (Actuals)							
Consumer Category	No. of Consumers	Connected Load-Unit	Sanctioned Load	Connected Load (KVA) *	Actual sales & Claimed	Estimates Approved in MYT Order dt 28.2.2017	Variance
	(Nos)	(KW/KVA/ HP)	(KW/ KVA /HP)		(MUs)	(MUs)	
Domestic	35,915	kW	1,95,963	2,30,544	204.27	256	-52
Domestic - DSHT	131	kVA	55,982	55,982	84.10	119	-35
Commercial	9,722	kW	57,460	67,600	72.20	76	-4
Temporary Supply	143	kW	129	152	2.44	2	0
HT Industrial Services (HTIS)	132	kVA	4,36,365	4,36,365	2,081.14	2,322	-240
Utilities/Street Light	349	kW	19,752	23,238	87.48	89	-2
Sale to Other Licensee	1	kVA	70,000	70,000	408.39	338	70
Total	46,393	-	8,35,651	8,83,881	2,940.02	3,202	-262

Table 2-1: Consumers, Connected Load & Sales - FY 2018-19 (Actuals)

2.2.2 The Petitioner would like to submit that the actual sales were lower than the approved MYT projections by ~8% (262 MU), primarily due to lower sales in HTIS Category. However, as compared to FY 18 sales (3003 MU), sales in in FY19 were lower by only 2%. Implementation of efficient lighting system in the city and at consumer premises (including street, area, factory premise lighting) wherein most of the lights have been converted into LED lighting, have also resulted in lower consumption and therefore lower sales.

^{*}Power Factor considered for the kW to kVA conversion is 0.85

^{*}Connected Load in KVA has been arrived based on appropriate multiplication factor



2.2.3 The energy sales as approved in MYT order dated 18.02.2017 was **3,202 MUs**. Sales as per audited accounts for FY 2018-19 is **2,940.02 MUs**. Accordingly, it is requested to Hon'ble Commission to approve the sales of **2,940.02 MUs** for FY 2018-19.

2.3 Energy Balance

2.3.1 The Energy Balance for FY 2018 - 19 is provided in the Table below:

Table 2-2: Energy Balance for FY 2018-19 (MUs)

Energy Balance for FY 2018-19 (MUs)				
Sr No	Particulars	Estimates Approved in MYT Order dt 28.2.2017	Actuals	
		FY 2018-19	FY 2018-19	
Α	ENERGY REQUIREMENT	227.25	100.00	
2	Sales to Other Licensees	337.95	408.39	
3	Distribution Losses on Sales to Other Licensees (%) Unit Lost on Sales to Other Licensees	-	-	
4		227.05	400.20	
	Energy Requirement for Sales to Other Licensees	337.95	408.39	
5	Sales to Steel Work	100.00	171.51	
6	Distribution Losses	-	-	
7	Unit lost on Sales	-	-	
8	Energy Requirement	100.00	171.51	
9	Sales to LT Consumers (Dom + Comm + Street light + Temp)	423.36	366.39	
10	Sales to HT Consumers (Other than Sales to Steel Works)	2,340.85	1,993.73	
11	Total Sales to Consumers other than Steel Works & JUSCO (9 + 10)	2,764.21	2,360.12	
12	Distribution Losses on Sales to Consumers other than Steel Works & JUSCO (%)	4.00%	3.02%	
13	Unit Lost on Sales to Consumers other than Steel Works & JUSCO	115.18	73.46	
14	Energy Requirement for Sales to Consumers other than Steel Works & JUSCO	2,879.39	2,433.58	
15	Overall Sales (4 + 8 +11)	3,202.16	2,940.02	
16	Overall Distribution Losses (%)	3.47%	2.44%	
17	Overall Distribution Losses	115.18	73.46	
18	Total Energy Requirement	3,317.34	3,013.47	
В	ENERGY AVAILABILITY	-	-	
1	Tata Power Company Limited	1,608.34	1,400.95	
а	Unit - II	804.17	698.18	
b	Unit - III	804.17	702.77	
2	Damodar Valley Corporation	1,689.01	1,466.41	
а	132 kV	289.16	393.07	
b	400 kV	1,399.85	1,073.34	
3	TSW Captive	20.00	19.14	
4	RPO			
4	Open access / Other Sources	-	126.97	
19	Total Pooled Energy Availability	3,317.35	3,013.47	



2.3.2 The petitioner has been able to sustain the T&D losses at lowest possible levels, which is among one of the best in the industry. The petitioner requests Hon'ble Commission to approve the energy balance as tabulated above for FY 2018-19.

2.4 Power Purchase Cost

- 2.4.1 For FY 2018-19, Tata Steel Limited has continued to procure electricity from Unit-II and Unit-III of Tata Power Company Ltd, 132 kV and 400 kV of Damodar Valley Corporation, Tata Steel Captive Power Plant, Open market/ Exchanges and procurement of RECs for meeting Renewable Purchase Obligation.
- 2.4.2 This cost is a function of the energy requirement and price of available power from the different source for meeting the requirement. The actual power purchase expense based on audited accounts is Rs. 1,564.29 1,564.29 Crs for FY 2018-19. However, the power purchase expense claim for power purchase from TSL is based on the principles adopted by Hon'ble Commission. Details of power purchase quantum given and cost for FY 2018-19 is as below:



Table 2-3: Total Power Purchase Cost FY 2018-19

Total Power Purchase Cost for FY 2018-19					
	Particulars	Estimates Approved in MYT Order dt 28.2.2017 FY 2018-19	Actual Audited	Claimed in this Petition FY 2018-19	
Tata Power Comp	pany Ltd (A)				
	Unit-II	804.17	698.18	698.18	
Power Purchase -	Unit -III	804.17	702.77	702.77	
MUs	Total	1,608.34	1,400.95	1,400.95	
	Unit-II	4.00	5.25	5.25	
Rate - Rs/kWh	Unit -III	3.89	5.29	5.29	
	Total	3.94	5.2737	5.2737	
	Unit-II	321.37	327.54	327.54	
	Unit-II (Credit for FY13,FY14 & FY15)		3.96	3.96	
	Unit-II:- As per MYT order FY 17 & FY 18 and True up order FY 16		34.72	34.72	
	Unit-II:- Review Petition for True Up order 2015- 16 and MYT Order 2017-2021		0.60	0.60	
	Total Unit II	321.37	366.82	366.82	
Cost - Rs.Crores	Unit -III	312.73	327.51	327.51	
	Unit -III (Credit for FY13, FY14 & FY15) Unit-III:- As per MYT order FY 17 & FY 18 and True		4.71	4.71	
	up order FY 16		39.17	39.17	
	Unit-III:-Review Petition for True Up order 2015- 16 and MYT Order 2017-2021		0.62	0.62	
	Total Unit III	312.73	372.01	372.01	
Total Damodar Valley Corporation 132 KV (B)		634.10	738.83	738.83	
Power Purchase -	• • • • • • • • • • • • • • • • • • • •	200.46	202.07	202.07	
Rate - Rs/kWh	ivius	289.16	393.07	393.07	
Cost - Rs.Crores		5.27	4.6377	4.6377	
	Corporation 400 kV (C)	152.30	182.29	182.29	
Power Purchase -		1,399.85	1,073.34	1,073.34	
Rate - Rs/kWh		3.83	4.8025	4.8025	
Cost - Rs.Crores		536.02	515.47	515.47	
TSW- Captive (D)		330.02	313.77	313.47	
Power Purchase -		20.00	19.14	19.14	
Rate - Rs/kWh		3.83	4.2264	4.6377	
Cost - Rs.Crores		7.66	8.09	8.88	
RPO (E)					
REC Cost - Rs.Cro	res	78.73	56.28	56.28	
Other / Open Acc	. ,				
Power Purchase -	MUs	-	126.97	126.97	
Rate - Rs/kWh		-	4.99	4.99	
Cost - Rs.Crores		-	63.33	63.33	
Total Pooled Power Purchase (F= A+B+C+D+E+F)					
Total Cost - Rs.Cro	2,100.02 2,000.00				
Power Purchase -	NUS	3,317.35	3,013.47	3,013.47	
Rate - Rs/kWh		4.25	5.19	5.1936	

2.4.3 The power purchase cost **claimed** for FY 2018-19 is Rs. 3,013.47 **1,565.08** Crs.



- 2.4.4 Power Purchase from Tata Power Company Ltd (TPCL): TSL purchased 1,400.95 MUs at a total cost of Rs. 738.83 738.83 Crs, which works out to average rate of Rs. 5.2737 5.2737 per unit for FY 2018-19.
- 2.4.5 Total cost of Rs. 738.83 738.83 Crs includes part of the previous year's debit notes which are duly recognised and approved by Hon'ble Commission in previous tariff orders of Tata Power Co.Ltd. These debit notes has per unit impact of Rs.0.60 per unit of Tata Power purchase (Rs.83.78 Cr / 1400.95 MUs).
- 2.4.6 The Petitioner requests the Hon'ble Commission to kindly approve the total cost of Rs. 738.83738.83 Crs for purchase of power from Tata Power.
- 2.4.7 The actual Power Purchase Bills paid for Tata Power by TSL for FY 2018-19 are enclosed with Error! Reference source not found..
- 2.4.8 **Power Purchase from DVC Source 132 kV:** TSL purchased about **393.07** MUs for an amount of Rs. **182.29** Crs which works out to average power purchase cost of Rs. **4.6377** per unit for FY 2018-19.
- 2.4.9 The Hon'ble commission is requested to kindly approve the total power purchase cost of Rs. **182.29** Crs from DVC 132 kV for FY 2018-19.
- 2.4.10 The actual Power Purchase Bills paid for DVC Source 132 kV by TSL for FY 2018-19 are enclosed at Error! Reference source not found..
- 2.4.11 **Power Purchase from DVC Source 400 kV:** TSL purchased **1,073.34** MUs from DVC at 400 kV at a total cost of Rs. **515.47** Crs which comes out to average rate of Rs. **4.8025** per unit.
- 2.4.12 The Hon'ble commission is requested to kindly approve the total power purchase cost of Rs. **515.47** Crs from DVC 400 kV for FY 2018-19.
- 2.4.13 The actual Power Purchase Bills paid for DVC Source 400 kV by TSL for FY 2018-19 are enclosed at Error! Reference source not found.
- 2.4.14 Power Purchase from TSW Captive: TSL licensee purchased 19.14 MUs from TSW Captive during FY 2018-19. The total cost considering actual power purchase from TSW Captive is Rs. 8.88 Crs at a rate of Rs. 4.6377 per unit. The Hon'ble Commission had been allowing this power purchase at the lowest cost source of power from TSL Licensee, which is DVC 132 KV source for FY 2018-19 in the instant case.



- 2.4.15 Accordingly, the Petitioner is claiming power purchase cost for TSL captive works based on lowest cost of all sources i.e. DVC 132 KV source Rs. 4.6377 per unit. The Hon'ble commission is requested to kindly approve the total power purchase cost of Rs. 8.88 Crs from TSW Captive source for FY 2018-19 as per principles approved in previous tariff orders of TSL.
- 2.4.15.1 The monthly power purchase bills of TSL works source for the year FY 2018-19 are enclosed at Error! Reference source not found.
- 2.4.16 **Renewable Power Obligation for FY 2018-19**: As per JSERC (Renewable Purchase Obligation and its Compliance) Regulations, 2016, the Petitioner needs to purchase specified quantum of power from Renewable Energy Sources.
- 2.4.17 Apart from the above carry forward deficit of RPO target in FY 2018-19, there was a standalone RPO obligation to be met for FY 2018-19. The details of RPO to be fulfilled for FY 2018-19 by the Petitioner are provided in the table below:

Table 2-4: RPO Compliance for FY 2018-19 (MUs)

Particulars	Obligation as % of total energy requirement	Obligation for FY 18-19	Carried Forward from 2017-18	Total to be met during FY 2018-19
Total Energy Requirement - MUs		3,013.47		
Less: Exempt source DVC 132 kV		393.07		
Net Energy Reqt for RPO Compliance purpose - MUs		2,620.40		
RPO Energy - MUs	10.00%	262.04	158.22	420.26
Solar	5.50%	144.12	147.42	291.54
Non-Solar	4.50%	117.92	10.80	128.72
Equivalent RECs		2,62,040	1,58,216	4,20,256
Non-Solar		1,44,122	1,47,419	2,91,541
Solar		1,17,918	10,797	1,28,715
Actual REC Purchased				409.70
Solar (MUs)				281.56
RE generation under Net Metering (MUs)				0.37
Non-Solar (MUs)				127.77
Cummulative RPO Carry Forward				
Solar				9.61
Non-Solar				0.94

2.4.18 The petitioner would like to submit that power purchased from DVC at 132kv level is done as per distribution tariff order issued by Hon'ble Commission for DVC power distribution



Licensee. DVC being a distribution licensee need to comply the RPO obligation on whole of the electricity units purchased for distribution in licensed area.

Here we would like to draw a difference that at 400kv source, TSL is purchasing power from generating sources at generation tariff, and it is complying to the RPO obligation. But power purchased at 132 kV level from DVC is at distribution tariff issued by Hon'ble Commission and the cost of RPO is not required to be met by TSL for this purchase.

Similar subject had already been dealt by Hon'ble Commission in the review petition of TSL vide order dated 09.11.2012, wherein the Hon'ble Commission had ordered that on the unit purchased by JUSCO licensee from TSL licensee, TSL licensee is supposed to meet the RPO obligation.

It is further submitted that the Hon'ble Commission has approved this methodology in subsequent Tariff Order of TSL. Relevant part of TSL tariff order dated. 31.05.2015 is represented below:

5.23 "With respect to the computation of RPO for the Petitioner, the Commission accepts the methodology proposed by the Petitioner which is in line with the methodology followed by the Commission in case of power sold to JUSCO from TSL and accordingly, have estimated the RPO on total energy requirement estimated now for FY 2013-14 net of power purchase from DVC at 132 kV. Accordingly, the Commission estimates the revised RPO Obligation of the Petitioner for FY 2013-14 as 96 MU out of which 24 MU is solar obligation 72 MU is non-solar obligation. Moreover, the Commission in its previous Tariff Order had allowed for carry forward shortfall/excess in RPO obligation upto FY 2012-13 while estimating the RPO targets for FY 2013-14. After adjusting past shortfall/excess in RPO targets, the revised target for solar obligation during FY 2013-14 is estimated at 34 MU and that for non-solar obligation at 7 MU."

- 2.4.19 Accordingly, the Petitioner has computed RPO on its energy requirement excluding DVC 132 kV source and the total cost of purchase of RECs for FY 2018-19 is Rs. 56.28 Crs. The copies of RECs are provided at Error! Reference source not found. alongwith summary details.
- 2.4.20 **Power Purchase from Open Market Source:** TSL purchased **126.97** MUs from open market including exchanges at a total cost of Rs. **63.33** Crs which comes out to average rate of Rs. **4.99** per unit.
- 2.4.21 The Hon'ble commission is requested to kindly approve the total power purchase cost of Rs. **63.33** Crs from open market sources including exchange for FY 2018-19.
- 2.4.22 The actual Power Purchase Bills for Open Market source for FY 2018-19 are enclosed at Error! Reference source not found.



- 2.4.22.1 The petitioner would like to submit that the landed power purchase cost of TSL for FY2018-19 is approx. Rs. 5.1936 per unit. This is the landed power purchase cost at distribution system and therefore also has the element of Transmission losses and other transmission related charges which is shown separately by several other Licensees in the country.
- 2.4.23 The Petitioner thus request the Hon'ble Commission to approve the total power purchase cost at Rs. **1,565.08** Crs for FY 2018-19.

2.5 Operation and Maintenance Expenses for FY 2018-19

2.5.1 The Operation and Maintenance (O&M) Expenses includes Employee Cost, R&M Expenses and A&G Expenses. As per provision 6.6 of Tariff Regulations 2015, the expenses are to be claimed as below:

6.6 The above components shall be computed in the manner specified below: a) $R&M\mathbf{n}=K^*GFA$

Where,

'K' is a constant (expressed in %) governing the relationship between R&M costs and Gross Fixed Assets (GFA) and will be calculated based on the % of R&M to GFA of the preceding year of the Base Year;

'GFA' is the opening value of the gross fixed asset of the nth year;

b) EMP \mathbf{n} (excluding terminal liabilities) + A&G \mathbf{n} = (EMP \mathbf{n} -1 + A&G \mathbf{n} -1)*(INDX \mathbf{n} /INDX \mathbf{n} -1) + G \mathbf{n}



Where,

INDX**n** – Inflation factor to be used for indexing the employee cost and A&G cost. This will be a combination of the Consumer Price Index (CPI) and the Wholesale Price Index (WPI) for immediately preceding year before the base year;

Gn – Increase in Employee Expenses in nth year due to increase in consumer base/load growth. Value of G for each year of the Control Period shall be determined by the Commission in the MYT Tariff order based on Licensee's filing, benchmarking with the efficient utilities, actual cost incurred by the licensee due to increase in consumer base/load growth in past, and any other factor considered appropriate by the Commission;

c) INDXn = 0.55*CPIn + 0.45*WPIn;

Note 1: For the purpose of estimation, the same INDXn /INDXn-1 value shall be used for all years of the control period. However, the Commission will consider the actual values in the INDXn /INDXn-1at 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;

Note 2: Any variation due to changes recommended by the Pay Commission etc. will be considered separately by the Commission.

Note 3: Terminal Liabilities will be approved as per actual submitted by the Licensee or be established through actuarial studies.

2.5.2 **Computation of Inflation Factor:** The petitioner would like to submit the calculation of Inflation Factor for FY 2018-19 as per above Note 1 of Tariff Regulations 2015.

Table 2-5: Computation of Inflation Factor for FY 2018-19

Computation of Inflation Factor for FY 2018-19 **WPI Inflation** Month/Year Apr May June July Aug Sep Oct Nov Dec Jan Feb Mar **Average** FY 2018-19 120.1 120.9 122 121.6 117.3 118.3 119.1 119.9 119.7 119.2 119.5 119.9 119.79 FY 2017-18 113.2 112.9 113.9 114.9 115.6 115.7 112.7 114.8 116.4 116 116.1 116.3 114.88

https://eaindustry.nic.in/download_data_1112.asp

Annual Increase over FY 2017-18 4.28% Weightage of 45% 1.93%

CPI Inflation

Month/Year	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Average
FY 2018-19	288.00	289.00	291.00	301.00	301.00	301.00	302.00	302.00	301.00	307.00	307.00	309.00	299.92
FY 2017-18	277.00	278.00	280.00	285.00	285.00	285.00	287.00	288.00	286.00	288.00	287.00	287.00	284.42

http://labourbureau.gov.in/LBO indtab Feb 2019.pdf

Annual Increase over FY 2017-18 5.45%

Weightage of 55% 3.00%
Total Inflation WPI+CPI 4.92%



- 2.5.2.1 Accordingly, the Inflation Factor for FY 2018-19 works out to **4.92**%, which need to be considered for true-up purpose as against the inflation value of **4.36**% considered while projecting the Employee and A&G costs in last tariff order.
- 2.5.3 Computation of Growth Factor: The petitioner would like to submit that Connected Load figures for FY 2017-18 are considered from the reply submitted to Hon'ble Commission (on the petition filed vide dated 28.5.2019) vide letter no.PBD/725/10/59-T/2019 dated 30th August 2019. The sanctioned connected load of LT categories are converted to kVA and growth factor for FY 2018-19 over FY 2017-18 figures is computed.

Table 2-6: Computation of Growth Factor for FY 2018-19

Consumo or Code com.		Connected Load conversion for FY 2017-18		Connected Load conversion for FY 2018-19	
Consumer Category	Unit	Sanctioned Load kW/kVA	Connected Load (kVA) *	Sanctioned Load kW/kVA	Connected Load (kVA) *
Domestic Rural & Urban	kW	1,89,124	2,22,498	1,95,963	2,30,544
Domestic Service - DSHT	kVA	60,035	60,035	55,982	55,982
Commercial Services	kW	46,779	55,034	57,460	67,600
Temporary Connections	kW	129	152	129	152
HT Industrial Services (HTIS)	kVA	4,60,308	4,60,308	4,36,365	4,36,365
Institutional Services - Utilities/ Streetlight	kW	17,020	20,024	19,752	23,238
Sale to Other Licensee (JUSCO)	kVA	50,000	50,000	70,000	70,000
Total		8,23,395	8,68,051	8,35,651	8,83,881
*Power Factor considered for the kW to kVA conversion is 0.85			Growth Fac	tor	1.82%

2.5.4 **Actual O&M Expenses:** The petitioner would first like to discuss and present the expenses based on actual audited accounts and then discuss about O&M expenses based on normative principles. The petitioner would like to make submissions on each of the element of O&M expenses based on the audited accounts which is Rs. **87.89** Crs for FY 2018-19. The same is shown in P&L in different heads and petitioner for the purpose of this petition and as required for the purpose of O&M heads, has adjusted internally amongst Employee expenses, A&G expenses and R&M Expenses as shown below:

Table 2-7: Amount of O&M Expenses in P&L Account for FY 2018-19

Particulars as per P&L Account	Audited Accounts (Rs.Crs)	Particulars as presented in this petition for respective O&M heads	Adjusted Audited Accounts (Rs.Crs)
Other operating and Administrative expenses	31.34	A&G Costs	31.62
Repairs and Maintenance expenses	53.09	R&M Expenses	30.97
Employee benefits expense	3.46	Employee Cost	25.30
Total O&M expenses for the purpose of Sharing of Gains/ Losses	87.79	Total O&M expenses for the purpose of Sharing of Gains/ Losses	87.89

The details of each element of actual O&M expenses is discussed below.



2.5.4.1 **Actual R&M Expenses:** It is submitted that R&M expense presented as per audited account is Rs. **30.97 Crs** (pertaining to pure R&M expenses) for FY 2018-19 and mainly includes Cost of Repairs, Consumption of stores & spare parts and repairs to machinery. The computation of such amount from P&L amount is given in the table below:

Table 2-8: Computation of Actual Net R&M Expenses for FY 2018-19

Particulars	Actual Audited (Rs.Crs) FY 2018-19
R&M expenses by TSL	1.58
Outsourcing cost paid to JUSCO towards CGRF Expenses	0.29
Outsourcing cost paid to JUSCO towards Employees Expenses	21.84
Outsourcing cost paid to JUSCO towards R&M Expenses	29.39
Total R&M expenses shown in books of accounts	53.09
Less: Outsourcing cost paid to JUSCO towards CGRF Expenses	0.29
Less: Outsourcing cost paid to JUSCO towards Employees Expenses	21.84
Net Actual R&M Expenses of TSL	30.97

- 2.5.4.2 The certificate to this effect provided by JUSCO for FY 2018-19 is provided at Error! Reference source not found.
- 2.5.4.3 **Actual Employee Expenses:** It is submitted that employee expense presented as per audited account is **Rs. 25.30 Crs** (including outsourcing cost to JUSCO towards employee expenses) for FY 2018-19 and mainly includes Salaries & Wages, Contribution to Provident and other funds and Staff welfare expenses. The computation of such amount from P&L amount is given in the table below:

Table 2-9: Computation of Actual Net Employee Expenses for FY 2018-19

Particulars	Actual Audited (Rs.Crs)	
	FY 2018-19	
Direct Employees expenses of TSL	3.46	
Add: Outsourcing cost paid to JUSCO towards Employees Expenses	21.84	
Net Actual Employee Expenses of TSL	25.30	

2.5.4.4 **Actual A&G Expenses:** It is submitted that A&G expense presented as per audited account is Rs. **31.62 Crs** (including CGRF expenses and excluding change in law which is shown separately) for FY 2018-19 and mainly includes Rent, Travelling & Conveyance, Consultancy charges, Advertisement expenses, Security Charges, Vehicle hiring charges etc.



Table 2-10: Computation of Actual Net A&G Expenses for FY 2018-19

Particulars	Actual Audited (Rs.Crs)
	FY 2018-19
Gross A&G Expenses	31.34
Add: CGRF Expenses paid to JUSCO	0.29
Net Actual A&G Costs of TSL	31.62

Change in Law -

- 2.5.4.5 Allowance of Increase in License &/ Petition Filing fees under Change in Law due to Change in Conduct of Business Regulations: It is submitted that Hon'ble Commission notified the amended Regulations in 2016 including JSERC (Conduct of Business Regulations), 2016 which led to higher fees for petition filing as compared to previous year. The amendment of conduct of business regulations with higher petition filing fees is a Change in Law and need to be dealt with the relevant provisions of the section 5.32 of the Tariff Regulations 2015, to allow the increased costs due to change in law. The relevant extract of the regulation is given below:
 - "...5.32 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...".
- 2.5.4.6 The comparison of fees to be charged for filing petitions by Licensees as per Conduct of Business Regulations 2012 and Conduct of Business Regulations 2016 for major filings are tabulated below:



exemption from license

Approx % **Particulars** Increase in Fees as per CBR 2012 (Rs) Fees as per CBR 2016 (Rs) Fees 0.05 Paise/'Units' 0.06 Paise/'Units' Annual / base year determination of (Minimum Rs. 10,00,000 (Minimum Rs. 15,00,000 tariff for a distribution licensee 20% - 50% Maximum Rs. 25,00,000) Maximum Rs. 30,00,000) without generation (Annual Tariff Units = Projected sales for Units = Projected sales for Framework and APR Filing) ensuing year ensuing year 0.025 Paises/'Units' 0.05 Paises/'Units' Annual / base year determination of [Minimum Rs. 20,00,000 [Minimum Rs. 20,00,000 20% - 50% tariff for a distribution licensee Maximum Rs. 50,00,000] Maximum Rs. 60,00,000] without generation (MYT Framework) Units = Projected sales for Units = Projected sales for entire control peroid entire control peroid (i) by licensee - 10 per cent of Application for review of Tariff Order the fees paid at or power purchase agreement or the time of the original (i) By licensee – Rs. power procurement rate by Licensee 20-25% application for 5,00,000/under Section 86 (b) of the Electricity determination of Act. tariff. Any other petition / Application 1. By utility/licensee/deemed Rs. 25,000 Rs. 10,000 (Rs. Ten Thousand) >100% (Rs. Twenty Five Thousand) licensee/person granted

Table 2-11: Comparison of Fees as per CBR 2012 & CBR 2016

2.5.4.7 Allowance of additional increase in Consumer Grievance Redressal Forum expenses arising out of complying to the Order of Hon'ble Commission, Expenses under "Change in Law/ Savings of inherent powers of the Commission" due to compliance of the Order of the Hon'ble Commission

We would like to bring to the notice of Hon'ble Commission that that there has been significant increase in CGRF Expenses in FY 2018-19 and FY 2019-20 to comply with the order of Hon'ble commission vide letter no JSERC/54-CGRF / IR / 78 Dt 9th May' 2016. The annual expenses for FY 2018-19 on CGRF was Rs.36.92 Lakhs. To comply to the order of Hon'ble Commission, the CGRF office was required to be revamped.

We would also like to bring to the notice of the Hon'ble Commission that section 12.7 of the Distribution Tariff Regulations 2016 (reproduced below) provides sufficient power to Hon'ble Commission to undertake such decisions-

"..... 12.7 Nothing in these Regulations shall be deemed to limit or otherwise affect the inherent powers of the Commission to make such orders as may be necessary for ends of justice to meet or to prevent abuses of the process of the Commission..."



2.5.4.8 The table below depicts that the expense under Petition filing fees and CGRF expense has increased to Rs. 36.92 Lakhs, whereas the normative A&G will have increase at 3.01% for FY 2017-18 and by 4.92% for FY 2018-19. The additional amount, which is the difference between the actual payment and normative figure need to be considered as allowance under Change in law. The Petitioner requests the Hon'ble Commission to thus consider Rs.5.91 Lakhs as additional A&G costs under Change in Law in addition to the normative values (as normative target values have been calculated based on inflation only).

Normative Balance Normative Normative value for part to value for value for Actual FY FY18-19 be FY16-17 FY17-18 **Actual FY Particulars** 2015-16 allowed considering considering 2018-19 considering (Rs. Lacs) inflation of under inflation of inflation of 4.92% Change 3.96% 3.01% in Law Review of TSL Order dt 5.00 18.5.18 Petition for True up FY15, 14.75 APR FY16 CGRF Expenses (Rent and 12.86 31.92 Remuneration) **Total** 27.61 28.70 29.56 31.02 36.92 5.91

Table 2-12: Statutory / Change in Law payments for FY 2018-19 (Rs.in Lakh)

2.5.5 **Normative O&M Expenses:** The petitioner would now like to discuss about O&M expenses based on normative principles i.e. as per Tariff Regulations and Tariff order issued from time to time for the current control period.

2.5.5.1 Normative Employee Expenses

2.5.5.2 In line with the methodology, normative employee cost for FY 2018-19 considering Inflation of **4.92**% (for FY 2018-19) and Load growth is computed in the table below.

Table 2-13: Computation of Normative Employee Cost for FY 2018-19

Computation of Normative Employee Cost for FY 2018-19				
Particulars	Units	Normative Computation		
		FY 2018-19		
Employee Cost as per normative basis for FY 2017-18	Rs.Crs	22.97		
Connected Load in FY 2017-18	kVA	8,68,051		
Emp. cost per kVA for FY 2017-18	Rs/kVA	264.62		
Weighted avg. inflation factor for FY 2018-19	%	4.92%		
Emp. cost per kVA for FY 2017-18 with Inflation Factor	Rs/kVA	277.64		
Connected Load in FY 2018-19	kVA	8,83,881		
Employee Cost as per normative basis for FY 2018-19	Rs.Crs	24.54		



- 2.5.5.3 We therefore request the Hon'ble Commission to kindly approve the normative employee cost of Rs.**24.54** Crs based on normative principles.
- 2.5.5.4 Normative A&G Expenses: The normative A&G expenses are allowed with inflation factor over previous year approved figures. The Hon'ble Commission had revised A&G expenses for FY 2017-18 in Review Order dated 11.9.2018 to Rs.25.54 Crs and accordingly approved figure for FY 2018-19 would also get change. The normative A&G expenses for FY 2018-19 is tabulated as below:

_				
Computation of Normative A&G Expenses for 2018-19				
	Normative			
Particulars	Calculation			
Particulars	FY 2018-19			
	(Rs.Crs)			
Normative A&G Cost Calculation				
Normative A&G Costs for FY 2017-18	25.76			
Add: Inflation factor for FY18-19	4.92%			
Sub-total	27.03			
Add: Load growth factor for FY 2018-19	1.82%			
Normative A&G Cost for FY 2018-19	27.52			

Table 2-14: Computation of Normative A&G Expenses for FY 2018-19

2.5.5.5 It is submitted that allowing normative A&G expenses with mere inflation also deprives the licensee of legitimate claim with respect to growth in consumer load, network and area of operations. As the business grows, network base increases, number of consumer increases, no of employee increases; A&G expenses will also increase proportionately. Accordingly, the load growth factor has been considered as per the provisions of the MYT Regulations 6.6 referred in the preceding paragraphs. The same is referred again for reference as under: b) EMPn (excluding terminal liabilities) + A&Gn = (EMPn-1 + A&Gn-1)*(INDXn/INDXn-1) + Gn

Where,

INDX**n** – Inflation factor to be used for indexing the employee cost and A&G cost. This will be a combination of the Consumer Price Index (CPI) and the Wholesale Price Index (WPI) for immediately preceding year before the base year;

2.5.5.6 The petitioner in line with regulation and methodology adopted by Hon'ble Commission in MYT order dated 28th February 2017 for Employee expenses has computed normative A&G



expenses considering load growth factor in connected load. This increase is \sim **1.82%** which has been considered along with Inflation factor of **4.92%** to arrive at the normative A&G expense for FY18-19.

- 2.5.5.7 The petitioner requests the Hon'ble Commission to kindly approve the Normative A&G expense linked to Inflation and Growth Factor at Rs.**27.52** Crs.
- 2.5.5.8 **Normative R&M Expenses:** It is submitted that as per regulatory provisions, the petitioner is allowed to claim R&M expenses linked to Opening Gross Fixed Asset (GFA) multiplied by 'K' factor approved in MYT order i.e. 4.80%.
- 2.5.5.9 It is submitted that petitioner is here again is deprived of the inflationary increases in R&M expenses (material, labour etc) and is allowed only expenses linked to Asset base. It is also submitted that the Tariff Regulations 2015 has ignored to make provision for statutory increases like wages & labour charges, service tax levy, GST levy, other taxes & duties etc while allowing the R&M expenses which has direct impact on the expenses of the company and the same are totally uncontrollable. Every business and each expense under it tends to be affected with inflationary increases and R&M expenses under distribution is no different.
- 2.5.5.10 It is submitted that several State Commissions have recognised this need and have considered the inflationary adjustment in R&M expenses. For eg. Maharashtra State Electricity Regulatory Commission also allows Inflation on total O&M expenses (WPI-30% & CPI-70% on 5 years average increase). Gujrat State Electricity Regulatory Commission also allows 5.72% inflationary adjustment. Odisha State Electricity Regulatory Commission allows 5.4% on GFA plus special allowances to undertake critical activities of loss reduction, energy audit etc.
- 2.5.5.11 We request the Hon'ble Commission to kindly consider the above submission and allow inflationary adjustment while approving the normative R&M expense. Such consideration will allow Licensee to undertake appropriate level of repair and maintenance work needed to ensure efficient service delivery.
- 2.5.5.12 Accordingly, the petitioner has computed R&M Expenses for FY 2018-19 on normative principles with Inflation factor as given in the table below:



Computation of Normative R&M Cost for FY 2018-19				
Particulars	Normative Calculation			
	FY 2018-19			
	(Rs.Crs)			
Normative R&M Cost Calculation				
Opening GFA as on 1.4.2018	543.69			
Add: K Factor as per MYT Order	4.80%			
Sub-total	26.10			
Add: Inflation factor for FY18-19	4.92%			
Normative R&M Cost for FY 2018-19	27.38			

Table 2-15: Computation of Normative R&M Cost for FY 2018-19

- 2.5.5.13 The petitioner requests the Hon'ble Commission to kindly consider the above submissions and approve the Normative R&M expense linked to 'K' factor and Inflation factor at Rs. **27.38** Crs.
- 2.5.6 **Summary of O&M Expenses:** The summary of O&M expenses with respect to approved, actual audited and normative computation is given in the table below:

Table 2-16: Summary of O&M Expenses for FY 2018-19

O&M Expenses (Rs. Crs)					
	FY 2018-19				
Particulars	Estimates Approved in MYT Order dt 28.2.2017 (Rs.Crs) *	Audited Accounts (Rs.Crs)	Normative Amount (Rs.Crs)		
A&G Costs	23.18	31.62	27.52		
R&M Expenses	25.88	30.97	27.38		
Employee Cost	22.76	25.30	24.54		
Total O&M expenses for the purpose of Sharing of Gains/ Losses	71.82	87.89	79.44		
Add: Additional expenses due to Statutory / Change in Law payments	_	-	0.06		
Total Expenses	71.83	87.89	79.50		

^{*} Emp.Expn - as revised in Review Order dt 11.9.18 & Inflation @ 4.36% as per MYT T.O.

- 2.5.7 **Sharing of Gains/ (Loss):** According to JSERC Distribution tariff Regulations, 2015, O&M Expense is a "controllable" item.
- 2.5.7.1 The petitioner has considered the actual figures excluding additional impact due to change in law for the purpose of sharing of gains and losses.



2.5.7.2 The computation of Sharing of Gains/ Losses on account of Controllable parameter as per provisions of Tariff Regulations 2015 is given below:

	FY 2018-19
Particulars -	(Rs.Crs)
	Sharings
	Calculation
Normative O&M Expenses - a	79.44
Actual O&M Expenses - b	87.89
Sharing of Gains/ (Loss) c=a-b	-8.45
Sharing of gains/ (Loss) – to be shared with	-8.45
licensee 60% - d	
Add: Additional expenses due to Statutory/	0.06
Change in Law payments - e	
Total O&M Claim of TSL f=b+d+e	79.50

Table 2-17: Sharing of Gains/Loss - O&M Expenses for FY 2018-19

- 2.5.7.3 Accordingly, the petitioner requests Hon'ble Commission to approve total O&M expenses of Rs.**79.50** Crs for FY 2018-19 on normative basis including treatment on account of sharing of gains and statutory / change in law payments.
- 2.5.7.4 The petitioner would like to submit the approved O&M cost comparison of other similar licensees for FY 2017-18 and FY2018-19 for reference purpose. The petitioner would like to submit that it had been able to contain its O&M costs at lowest possible levels at Rs.0.27per unit and is one of the lowest in the country but it is facing tremendous difficulty to undertake all the needed repair, maintenance and service functions. The O&M cost of other similar Licensee is given in the below table:

Table 2-18: Details of O&M Expenses of similar utilities for FY 2017-18 & FY 18-19

Name of Utility	FY 2017-18 (Approved) Rs/kWh*	FY 2018-19 (Approved) Rs/kWh#	Source
BYPL	0.96	1.09	http://www.derc.gov.in/ordersPetitions/orders/Tariff/Tariff%20Order/FY%202019-20/Tariff%20Order%20FY%202019-20/Tariff%20Orders%202019-20/BYPL.pdf
TDDPL	0.74	0.85	http://www.derc.gov.in/ordersPetitions/orders/Tariff/Tariff%20Order/FY%202019-20/Tariff%20Order%20FY%202019-20/Tariff%20Orders%202019-20/TPDDL.pdf
BRPL	0.72	0.79	http://www.derc.gov.in/ordersPetitions/orders/Tariff/Tariff%20Order/FY%202019-20/Tariff%20Order%20FY%202019-20/Tariff%20Orders%202019-20/BRPL.pdf
NDMC	1.37	1.38	http://www.derc.gov.in/ordersPetitions/orders/Tariff/Tariff%20Order/Tariff%20Order%20f or%20FY%202018-19/Tariff%20Order/NDMC%20Tariff%20Order%20FY%202018-19.pdf
TPL- Ahmd	0.39	0.39	https://www.gercin.org/order-category/tariff-orders/ , https://www.gercin.org/wp-content/uploads/document/5919b8e4-22a6-4e6c-aa1b-574566c10655.pdf
TPL- Surat	0.36	0.36	https://demo.kreatetechnologies.com/gerc/wp-content/uploads/document/ea429fc0-03ce-4b71-81a3-b558482ae739.pdf

^{*} Approved under True-up for FY17-18, O&M Expenses includes impact of the 7th Pay Commission #For BYPL, TDDPL, BRPL and TPL- Approved under ARR and TPL-Ahmd & Surat- Approved under MYT for FY18-19



2.5.7.5 Considering the constant need to maintain assets and ensure reliable and quality supply and also to maintain losses within approved levels and that too at country's lowest O&M cost, the petitioner requests Hon'ble Commission to waive the losses to be borne by petitioner under sharing of loss mechanism and allow full actual cost recovery at Rs. 87.89 Crs for FY 2018-19.

2.6 Capital Work in Progress, Gross Fixed Assets and Depreciation

2.6.1 The Capital Work in Progress (CWIP), Gross Fixed Assets (GFA) and the depreciation on GFA for FY 2018-19 are discussed hereunder. The table below provides the details of opening CWIP, Capital Expenditure incurred during the year, Capitalisation of Assets and the working of the depreciation for the year.

CWIP, GFA & Depreciation (Rs.Crs) **Estimates** Approved in MYT Actual Order dt Audited **Particulars** 28.2.2017 (Rs. Crs) (Rs.Crs) FY 2018-19 FY 2018-19 Capital Works in Progress (CWIP) Opening CWIP 15.06 4.00 Add: Capex during year 20.00 9.93 Total CWIP 35.06 13.93 Less: Trfd to GFA 23.59 7.13 Closing CWIP 11.48 6.80 **Gross Fixed Assets (GFA)** Opening GFA 538.71 543.69 Add: Trfd from CWIP excluding discarded assets 23.59 7.13 Closing GFA 562.30 550.83 Depreciation Depreciation for the FY 35.78 31.15 Less: Depreciation on Assets created out of consumer 3.70 3.64 contribution **Net Depreciation** 32.08 27.51

Table 2-19: Summary of CWIP, GFA and Depreciation for FY 2018-19

- 2.6.2 **Capital Works in Progress (CWIP):** The petitioner has considered Opening and Closing CWIP as Balance sheet statement of FY 2018-19. The assets transferred to GFA are considered the Audited Accounts statement.
- 2.6.3 With regards to the Capital expenditure incurred during the year amounting to **Rs. 9.93 Crs** (including consumer contribution amount) as against approval of **Rs. 20 Crs** in MYT order; petitioner would like to explain the variations.



Sr#	Summary of Expenditure Plan	Approved Expenditure in MYT order for FY'19 (Rs.Crs)	Actual Expenditure in FY'19 (Rs.Crs)	Remarks
1	Works for different scheme to Augment existing network, create	18.00	7.24	Few capital expenditure schemes deferred to next year.
	new network to increase area of coverage.			,
2	Works for power connection to individual consumers	2.00	2.69	For last point connection, mainly through consumer's contribution.
3	Total	20.00	9.93	

Table 2-20: Reasons for variation in Capital Expenditure FY 2018-19

- 2.6.4 It is submitted that capital expenditure and resultant capitalization is lower than approved MYT figures as some of the planned activities got deferred for reasons beyond control. The scheme wise details are provided at Error! Reference source not found.
- 2.6.5 The petitioner therefore requests the Hon'ble Commission to kindly review the Capital expenditure and Capitalization for FY 2018-19 as presented above which are based on audited accounts for FY 2018-19 and approve the same.
- 2.6.6 **Gross Fixed Assets:** The details of the Gross Fixed Assets for FY 2018-19 taken from audited accounts are tabulated below:

Table 2-21: Details of GFA for FY 2018-19

Details of GFA for FY 2018-19			
Particulars	GFA as on	Net	GFA as on
	01.04.2018	Additions	31.03.2019
	(Rs.Crs)	for FY 2018-	(Rs.Crs)
		19 (Rs.Crs)	
Freehold Land and Roads	0.30	-	0.30
Buildings	38.58	1.29	39.87
Plant & Machinery	504.63	5.21	509.85
Furniture & Fixtures	0.00	0.25	0.25
Vehicle	0.06	-	0.06
Office Equipment	0.12	0.05	0.17
Total (in Crs.)	543.69	6.80	550.49

2.6.7 **Depreciation:** The depreciation costs proportionate to the extent of fixed assets being funded through Consumer Contribution has been deducted from the total depreciation in order to arrive at the net depreciation allowable to be charged in the ARR.



Details of Depreciation for FY 2018-19				
Particulars	Accumulated Depreciation as on 01.04.2018 (Rs.Crs) *	Depreciation for FY 2018- 19 (Rs.Crs)	Accumulated Depreciation as on 31.03.2019 (Rs.Crs)	
Freehold Land and Roads	0.00	0.00	0.00	
Buildings	6.51	1.20	7.71	
Plant & Machinery	258.69	29.88	288.56	
Furniture & Fixtures	0.00	0.05	0.05	
Vehicle	0.06	-	0.06	
Office Equipment	0.04	0.02	0.05	
Total (in Crs.)	265.29	31.15	296.44	

Table 2-22: Details of Depreciation for FY 2018-19

2.6.8 The details of accumulated depreciation can be referred in Notes to Audited Accounts for FY 2018-19 and Depreciation charged during the year can be referred from Profit and Loss Statement for FY 2018-19. It is further submitted that the net depreciation amount to be claimed in true-up in proportion to the own assets is computed after deducting the amount treated as deferred income for assets created out of consumer contribution.

Table 2-23: Net Depreciation Claim for FY 2018-19

Computation of Net Depreciation for FY 2018-19 (Rs.Crs)		
Closing GFA (A)	550.49	
Closing Consumer Contribution capitalised (B)	64.33	
Gross Depreciation FY 2018-19 (C)	31.15	
Depreciation on Consumer Contribution (D=C/A*B)	3.64	
Net Depreciation to be charged in ARR (E=C-D)	27.51	

2.6.9 Accordingly, the net depreciation to be charged for FY 2018-19 computes to Rs. **27.51** Crs. The Petitioner therefore request to the Hon'ble Commission to kindly approve the net depreciation as above.

2.7 Interest and Finance Charges

- 2.7.1 The normative loans have been computed considering the Capital Investment Norm in the Regulatory regime in which Debt-Equity Ratio has been kept at 70:30. Therefore, deemed addition to the normative loans have been taken at 70% of the assets addition during the year net of Consumer Contribution assets. The deemed repayment has been considered equivalent of the net depreciation cost for the financial year.
- 2.7.2 The normative loans have been computed considering the Capital Investment Norm in the Regulatory regime in which Debt-Equity Ratio has been kept at 70:30. Therefore, deemed

^{*}After adjustments to Accumulated Depreciation balance



addition to the normative loans have been taken at 70% of the assets addition during the year net of Consumer Contribution assets. The deemed repayment has been considered equivalent of the net depreciation cost for the financial year.

2.7.3 The table below shows the normative loan and normative equity added during the FY 2018-19 as per methodology discussed above. Normative loan is estimated based on actual capitalization and consumer contribution capitalised during the year for FY 2018-19.

Table 2-24: Normative Loan & Equity Added during FY 2018-19

Addition to Loan & Equity (Rs.Crs)	
Transferred To GFA (A)	7.13
Capitalization from Consumer Contribution (B)	3.15
GFA (own) (C=A-B; if A is higher)	3.98
Debt (D= C x 70%)	2.79
Equity (E= C x 30%)	1.19

2.7.4 Interest on Normative Loan - The normative interest is computed on the average balance of loan during the financial year. The opening balance of normative loan has been taken from closing normative loan balance for FY 2017-18. Additions to loan account has been considered from above table and repayments are considered equal to depreciation. 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 year is considered as applicable SBI Base Rate plus 1st, 200 basis points as on April 2018 i.e. 10.70% (Source: https://www.sbi.co.in/portal/web/interest-rates/base-rate-historical-data). The normative interest comes to Rs.9.33 Crs as against Rs. 10.93 Crs approved by Hon'ble Commission in Tariff order dated 28.02.2017. The table below provides calculation of Interest on Normative Loan for FY 2018-19.

Table 2-25: Interest on Normative Loan - FY 2018-19

Particulars	Estimates Approved in MYT Order dt 28.2.2017 (Rs.Crs)	Normative Claim (Rs.Crs)	
	FY 2018-19	FY 2018-19	
Opening Balance of Normative Loan	105.19	99.59	
Add: Deemed Additions during the FY 2018-19	15.11	2.79	
Less: Deemed Repayments	32.08	27.51	
Closing Balance of Normative Loans	88.22	74.87	
Average Balance of Normative Loans	96.71	87.23	
Interest Rate (SBI base Rate+200 bp)	11.30%	10.70%	
Normative Interest Amount	10.93	9.33	



- 2.7.5 Working Capital and Interest on Working Capital The Petitioner has arrived at the Working Capital based on the JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2015.
- 2.7.6 The normative working capital has been computed as per methodology adopted by Commission in APR order. The interest rate of SBI Base Rate as on 1st April 2018 plus 350 basis points i.e. **12.20%**.
- 2.7.7 In accordance with Regulation 6.29 and 6.30 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 & retail business of electricity has been computed. The Wheeling & Retail ARR has been computed as per allocation ratios in accordance with JSERC (Power Regulatory Accounting) Regulations, 2015 and methodology as adopted in Tariff order dated 18.05.2018. The allocation of ARR into wheeling and retail business is provided in Table 2-34: Segregation of Wheeling & Retail Supply ARR for FY 2018-19 which is used for computation of below interest on working capital.

Table 2-26: Interest on Working Capital (Wheeling & Retail) for FY 2018-19

Particulars	Estimates	Approved	Wheeling Normative	Retail Normative	Total Normative
r al treatar 3	Wheeling Business	Retail Business	Claim (Rs.Crs)	Claim (Rs.Crs)	Claim (Rs.Crs)
O&M Expenses @ 1 Month for Wheeling / Retail business	4.04	1.94	4.91	2.42	7.33
Maintainence Spares @1% of Opening GFA for Wheeling / Retail business in ratio of 90:10	4.85	0.54	4.89	0.54	5.44
Receivables for 2 months' Revenue @ existing Tariff from Wheeling / Retail business	18.47	241.49	22.35	269.19	291.54
Sub-Total	27.36	243.97	32.15	272.15	304.31
Less: Security Deposit		18.43		22.77	22.77
Less: Power Purchase cost for 1 month		117.40		130.42	130.42
Total Working Capital	27.36	108.15	32.15	118.96	151.12
SBI Base rate + 350 basis points	12.80%	12.80%	12.20%	12.20%	
Total Interest on Working Capital *	3.50	13.84	3.92	14.51	18.44

- 2.7.8 The Hon'ble Commission is requested to kindly approve the Interest on working capital of Rs. **18.44** Crs for FY 2018-19.
- 2.7.9 **Interest on Security Deposit** The petitioner in the table below has furnished the details of security deposit as per Audited figures for FY 2018 -19. In the year FY 2018 -19, the actual



outflow towards interest on security deposit paid to consumers is Rs. **2.17** Crs. Considering the actual security deposits, period of security deposits held and applicable interest rate, the interest on security deposit is paid.

Table 2-27: Interest on Security Deposit for FY 2018-19

Interest on Security Deposit (Rs Cr)				
Particulars	Estimates Approved in MYT	Audited Accounts		
Pai ticulai s	Order dt 28.2.2017			
	FY 2018-19	FY 2018-19		
Opening Security Deposit	17.81	22.90		
Security Deposit received	1.23	-0.26		
Closing Security Deposit	19.04	22.64		
Average Security Deposit	18.43	22.77		
Rate of Interest : Bank Rate	9.30%	8.70%		
Interest on Secuity Deposit	1.71	2.17		

- 2.7.10 The customer wise interest on security deposit paid during FY 2018-19 is attached as Error! Reference source not found..
- 2.7.11 It is submitted that petitioner also receives security deposit in the form of Bank Guarantee (BG) as per provision 8.2.20 of Supply Code Regulations 2015.
 - "..8.2.20 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."
- 2.7.12 The petitioner submits that apart from cash security deposit mentioned in above table, it has also received BG from customers to the extent of Rs.**0.54** Crs till March, 2019.
- 2.7.13 Accordingly, the total Interest and Finance Charges for FY 2018-19 are summarized in the table below:



Interest and Finance Charges (Rs Cr)			
Particulars	Estimates Approved in MYT Order dt 28.2.2017 (Rs.Crs)	Actual Audited / Normative Claim	
	FY 2018-19	FY 2018-19	
Interest on Normative Loan	10.93	9.33	
Interest on Working Capital	13.84	18.44	
Interest on Security Deposit	1.71	2.17	
Total Interest & Finance Charges	26.48	29.94	

Table 2-28: Interest and Finance Charges for FY 2018-19

2.7.14 The Petitioner therefore request to the Hon'ble Commission to kindly approve the total interest and finance charge amounting to Rs.**29.95** Crs for FY 2018-19.

2.8 Funding Cost of Delayed Payment Surcharge (DPS)

- 2.8.1 The Hon'ble Commission normally considers the 'Delayed Payment Surcharge' as part of power income (under NTI or part of revenue from sale of power) to compute net ARR. However, as per APTEL order, the additional working capital requirement for funding of Delayed Payment Surcharge at SBI PLR has been additionally allowed in ARR. Thus, precedence of judgement for allowing cost of funding of DPS and working of funding cost of DPS for TSL is as follows:
- 2.8.2 **Precedence of judgment for Allowing cost of funding of DPS:** There is judgment of Hon'ble Appellate Tribunal for Electricity (APTEL) dated 12.07.2011 in case no. 142 & 147 of 2009 wherein working capital requirement is additionally allowed for funding of DPS @ SBI PLR. The relevant extracts of the Judgment In the matter of BSES Rajdhani Power Limited vs Delhi Electricity Regulatory Commission & Government of NCT of Delhi are reproduced below:

"The normative working capital compensates the distribution company in delay for the 2 months credit period which is given to the consumers. The late payment surcharge is only if the delay is more than the normative credit period. For the period of delay beyond normative period, the distribution company has to be compensated with the cost of such additional financing. It is not the case of the Appellant that the late payment surcharge should not be treated as a non- tariff income. The Appellant is only praying that the financing cost is involved due to late payment and as such the Appellant is entitled to the compensation to incur such additional financing cost. Therefore, the financing cost of outstanding dues, i.e the entire principal amount, should be allowed and it should not be limited to late payment surcharge amount alone. Further, the interest rate which is fixed as 9% is not the prevalent market Lending Rate due to increase in Prime Lending Rate since 2004-05. Therefore, the



State <u>Commission is directed to rectify its computation of the financing cost relating to the</u>

<u>late payment surcharge for the FY 2007-08 at the prevalent market lending rate during</u>

<u>that period keeping in view the prevailing Prime Lending Rate".</u>

Emphasis added

The Bihar Electricity Regulatory Commission has been allowing the same to BSEB. The extract from the Tariff Order dated 15.3.2013 for FY 2012-13 is provided below:

As prevailing SBI PLR as on 1st April, 2011 was 13%, the Commission has allowed the financing cost for DPS @ 12.50%. The financing cost approved by the Commission is shown in Table below.

Table 4.32: Funding of DPS

(Rs.crore)

SI.No	Particulars	FY 2011-12
1	DPS as per audited annual accounts for FY 2011-12 (@ 1.5% per	114.53
	month) (A)	
2	Principal amount on which DPS was charged (B=A/18%)	636.28
3	Interest Rate for funding of Principal of DPS	12.50%
4	Interest on funding of Principal amount of DPS	79.54

Accordingly, the Commission has computed the amount of Non -Tariff Income as summarized below:

Table 4.33: Trued-up Non-tariff Income for FY 2011-12

(Rs. crore)

SI.No.	Particulars	Amount
1	Total Non - tariff Income	193.12
2	Less: Financing cost of principal amount of DPS	79.54
3	Net Non-tariff income	113.58

Therefore, the Commission approves Rs. 113.58 crore as Non-Tariff Income for FY 2011-12, against the Petitioners claim of Rs. 193.12 crore as given in the Table below:

2.8.2.1 Extract from latest Tariff order of Noida Power Company Limited, North & South Bihar Distribution Company Limited and UHBVN & DHBVN (Haryana) Discoms for FY 2019-20 are provided at Error! Reference source not found. for reference of Hon'ble Commission particularly the treatment to Funding of Delayed/ Late Payment Surcharge.

2.8.3 Working of Funding of DPS for TSL:

2.8.3.1 Based on the above ruling, the computation of funding cost for TSL for FY 2018-19 is provided in the table below with funding cost being grossed up by 1.50% p.m. i.e. 18% p.a on DPS amount and thereafter computing Interest @ SBI PL rate for FY 2018-19:



Sr.	Particulars	FY 2018-19
1	DPS as per audited annual accounts (A)	3.20
2	Principal amount on which DPS was charged (B=A/DPS 18% p.a.)	17.77
3	Interest Rate for funding of Principal of DPS (C) #	12.20%
4	Interest on funding of Principal amount of DPS (D=B*C)	2.17

Table 2-29: Computation of Funding Cost of DPS for FY 2018-19

2.8.3.2 Thus, petitioner requests the commission to allow the above-mentioned funding cost of DPS for TSL for FY18-19. The Hon'ble commission is requested to allow to claim the funding cost of Delayed Payment Surcharge for FY18-19 in this petition at Rs.2.17 Crs.

2.9 Return on Equity

- 2.9.1 The deemed addition to the normative equity has been taken at 30% of Closing GFA net of Consumer Contribution. The normative return on equity is claimed @ **15.5** % which is the return prescribed under the Distribution Tariff Regulation 2015.
- 2.9.2 The Opening Balance of Equity for FY 2018-19 is taken as equal to the closing of FY 2017-18. The amount of equity addition for FY 2018-19 is explained in **Table 2-24**.
- 2.9.3 Income Tax: It is submitted that petitioner has paid actual income tax for FY 2018-19. The income tax challan paid are provided at Error! Reference source not found.. The normative tax computation as per the principles laid down in Tariff Regulations 2015 and as per methodology approved by Hon'ble Commission in previous tariff orders is adopted and accordingly return on equity is grossed by tax rate and claimed for truing up purpose.
- 2.9.4 It is submitted that petitioner has paid Normal Tax Rate for FY 2018-19. The computation of ROE based on normative approach including income tax is as under:

[#] Prevailing SBI PLR as on 1st April plus 350 bps



Table 2-30: Return on Equity for FY 2018-19

Return on Equity (Rs Cr)		
Particulars	Estimates Approved in MYT Order dt 28.2.2017 (Rs.Crs)	Normative Claim
	FY 2018-19	FY 2018-19
Opening Balance of Normative Equity	144.78	144.89
Add: Deemed Additions during the FY 2016-17	6.48	1.19
Closing Balance of Normative Equity	151.26	146.08
Average Balance of Normative Equity	148.02	145.48
Rate of Return on Equity	0.16	0.16
Normative ROE Amount -(A)	22.94	22.55
Income Tax Rate - (B)		34.94%
Normative ROE Amount with Income tax C=A/(1-B)	22.94	34.66

2.9.5 The Petitioner therefore requests the Hon'ble Commission to kindly approve the Post-tax Return on Equity of Rs. **34.66** Crs for FY 2018-19 as per above claim.

2.10 Non-Tariff Income

- 2.10.1 Non-Tariff Income includes income from interest, miscellaneous charges etc. The non-tariff Income for FY 2018-19 as per the Notes to Audited accounts and Reconciliation of Revenue/ Income is Rs. 4.65 Crs as against the approved Rs. 5.86 Crs in Tariff order dated 28th February, 2017.
- 2.10.2 The Hon'ble Commission is requested to kindly approve an amount of Rs. **4.65** Crs as non-tariff income for FY 2018-19.

2.11 Net Aggregate Revenue Requirement

2.11.1 The net ARR for FY 2018-19 after adjustment of Sharing of gains/ (loss) is given below and Hon'ble Commission is requested to approve the same:

1,559.74

1,559.74

1,741.98

1,741.98



14

15

16

Sr No **Particulars** ARR for FY 2018-19 **Estimates Approved** Total Audited / Normative Claim in MYT Order dt 28.2.2017 (Rs.Crs) (Rs.Crs) **Power Purchase Cost** 1,565.08 1,408.81 2 **Employee Expenses** 25.30 3 A&G Expenses 71.79 31.62 4 **R&M** Expenses 30.97 5 Statutory / Change in Law payments 0.06 6 Interest on Loan 9.33 10.93 8 Interest on Working Capital 17.34 18.44 Funding Cost of DPS FY19 8 1.49 9 Interest on Security Deposit 1.71 2.17 10 Depreciation 32.08 27.51 11 Return on Equity 22.94 34.66 12 Gross Aggregate Revenue Requirement (1 to 11) 1,565.60 1,746.63 13 Less: Non Tariff Income 4.65 5.86

Table 2-31: Net ARR for FY 2018-19

2.12 Revenue from sale of power

Aggregate Revenue Requirement (12-13)

Net Aggregate Revenue Requirement (14+15)

Add/ Less: Impact of Sharing of Gains/ (Loss) on O&M Expenses *

2.12.1 It is submitted that revenue from sales of power as per audited accounts for Reconciliation of Revenue/ Income (revenue + meter rent) is Rs.1,841.77 Cr for FY 2018-19. The category wise revenue from sale of power for FY 2018-19 is given below:

Consumers, Connected Load, Sales & Revenue for FY 2018-19 Delayed Penalty/ FPPA Meter Total No. of Connected Fixed/ Demand Energy Charge: Sales (MUs) **Consumer Category** Rebate charges Consumers Charges (Rs.Crs) (Rs.Crs) Load (Rs.Crs) (Rs.Crs) (Rs.Crs) (Rs.Crs) (Rs.Crs) Domestic 35,915 2,30,544 204.27 1.07 77.09 0.55 -4.23 2.82 1.06 78.36 Domestic - DSHT 131 55,982 84.10 2.35 35.74 0.11 -0.04 1.63 0.01 39.80 Commercial 9,722 72.20 1.28 45.47 0.55 -2.62 1.87 0.48 47.03 67,600 High Tension I High Tension II 1,447.75 132 4,36,365 2,081.14 152.79 1,309.34 1.98 -84.43 67.97 0.10 High Tension III High Tension IV Utilities/Street Light 0.00 349 23,238 87.48 0.00 42.88 -0.01 2.01 0.01 44.90 Temporary Supply 0.00 -0.00 0.00 143 152 2.44 0.01 1.99 0.07 2.06 Sale to Other Licensee 1 70,000 408.39 172.72 9.15 181.87 Total 46,393 8,83,881 2,940.02 157.50 1,685.22 3.20 -91.34 85.52 1,841.77

Table 2-32: Revenue from Sale of Power for FY 2018-19

^{*}There had been an impact of Rs.(5.97) Crs as per regulations and normative basis, however TSL would like to submit that it had been able to contain its O&M costs at lowest possible levels at Rs. 0.28 p.u. which is one of the lowest in the country. Considering that TSL has provided reliable and quality supply services and maintained loss levels much lower than approved levels; requests Hon'ble Commission to waive of the losses to be borne by TSL and not deduct any amount from ARR.

stConnected Load in KVA has been arrived based on appropriate multiplication factor on sanctioned load of LT categories.



2.12.2 The Petitioner requests Hon'ble Commission to kindly approve the revenue of Rs.1,841.77 Crs from sale of power as per above table for FY 2018-19.

2.13 Summarised ARR and Revenue gap/ (surplus) for FY 2018-19

2.13.1 The ARR and Revenue gap/ (surplus) for FY 2018-19 are presented in the table below:

Table 2-33: Revenue Gap / (Surplus) for FY 2018-19

Particulars	Amount - Rs.Crs
Net Aggregate Revenue Requirement	1,741.98
Less: Revenue from Sale of Power @ Existing Tariff	1,841.77
Revenue Gap/ (Surplus) for the year	(99.79)

2.13.2 The Hon'ble Commission is requested to kindly approve the ARR and the resultant revenue gap/ (surplus) of Rs. **(99.10)** Crs for FY 2018-19 based on Audited figures for FY 2018-19 and normative claims.

2.14 Segregation of ARR into Wheeling and Retail ARR for FY 2018-19

2.14.1 The Hon'ble Commission has approved the allocation ratios in accordance with JSERC (Power Regulatory Accounting) Regulations, 2015. In line with the cost allocation approved by the Hon'ble Commission in previous tariff orders, the ARR for FY 2018-19 based on audited accounts and / normative claim is summarised below:



Table 2-34: Segregation of Wheeling & Retail Supply ARR for FY 2018-19

	Summary of ARR (Rs.Crs)									
Sr No	Particulars		Wheeling a	nd Retail A	RR for FY 20	18-19				
		Estimates Approved in MYT Order dt 28.2.2017 (Rs.Crs)	Wheeling %	Retail %	Wheeling ARR (Rs.Crs)	Retail ARR (Rs.Crs)	Total Audited / Normative Claim (Rs.Crs)			
1	Power Purchase Cost	1,408.81	0%	100%	-	1,565.08	1,565.08			
2	Employee Expenses		60%	40%	15.18	10.12	25.30			
3	A&G Expenses	71.79	50%	50%	15.81	15.81	31.62			
4	R&M Expenses		90%	10%	27.87	3.10	30.97			
5	Statutory / Change in Law payments	-	50%	50%	0.03	0.03	0.06			
6	Interest on Loan	10.93	90%	10%	8.40	0.93	9.33			
7	Interest on Working Capital	17.34	10%	90%	3.92	14.51	18.44			
8	Funding Cost of DPS FY19	-	10%	90%	0.15	1.35	1.49			
9	Interest on Security Deposit	1.71	0%	100%	-	2.17	2.17			
10	Depreciation	32.08	90%	10%	24.76	2.75	27.51			
11	Return on Equity	22.94	90%	10%	31.20	3.47	34.66			
12	Gross Aggregate Revenue Requirement (1 to 11)	1,565.60			127.32	1,619.31	1,746.63			
13	Less: Non Tariff Income	5.86	10%	90%	0.47	4.19	4.65			
14	Aggregate Revenue Requirement (12-13)	1,559.74			126.85	1,615.13	1,741.98			
15	Less: Revenue from Sale of Power @ Existing Tariff		Wheeling ARR Ratio	Retail ARR Ratio	134.12	1,707.65	1,841.77			
16	Revenue Gap / (Surplus) (14- 15)				(7.27)	(92.52)	(99.79)			
17	Add/ Less: Impact of Sharing of Gains/ (Loss) on O&M Expenses				, ,		-			
18	Revenue Gap / (Surplus) after Sharing of Gains/ Loss (16+17)	-			(7.27)	(92.52)	(99.79)			
	Average Cost of Supply (14-17)/Sales)Without Carrying cost on Gap/surplus	4.87					5.93			
	Average Cost of Supply (14-17)/Sales)With Carrying cost on Gap/surplus						6.38			



Chapter 3. Annual Performance Review of FY 2019-20

3.1 Background

- 3.1.1 JSERC (Terms & Conditions of Distribution Tariff) Regulation 2015 has a provision of periodic reviews during the Control Period (FY2016-17 to FY 2020-21). The relevant extract of the regulation is reproduced below: -
 - "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 latest available audited/authenticated accounts and the tariff worked out in accordance with these Regulations;
- 3.1.2 The Hon'ble Commission has approved the Business plan for the 2nd MYT control period from FY 2016-17 to FY 2020-21 on 28th February, 2017. In the same Order dated 28th February, 2017, the Hon'ble Commission has also approved the ARR for the MYT Control Period FY 2016-17 to FY 2020-21.
- 3.1.3 TSL hereby submits the annual performance review (APR) for FY 2019-20 based on first six months (H1) actual performance and estimated for balance six months (H2). The following sections summarise each of the components of APR for FY 2019-20. A comparison of figures approved in ARR order dated 28th February 2017 which were estimated at that point of time and figures based on accounts & estimates / normative claims are shown under relevant sections discussed herewith as there is no APR order figures available for comparison.

3.2 Sales, Consumers and Connected Load

3.2.1 The table below provides the details of actual no of consumers, sanctioned load and respective sales for different consumer category for FY 2019-20.



No. of Consumers, Load and Sales for FY 2019-20 (H1 + H2 breakup)									
	No	of Consum	ers	Sanctio	ned Load (kW	// KVA)		Sales (M	Us)
Consumer Category	H1	H2	FY19-20	H1	H2	FY19-20	H1	H2	FY19-20
Domestic Rural & Urban	36,972	36,972	36,972	1,99,928	1,99,928	1,99,928	135	90	224
Domestic Service - DSHT	139	139	139	59,311	59,311	59,311	51	34	85
Commercial Services	10,011	10,011	10,011	63,354	63,354	63,354	52	26	77
Temporary Connections	114	114	114	129	129	129	1	1	1
HT Industrial Services (HTIS)	134	134	134	4,26,504	4,26,504	4,26,504	948	948	1,896
Institutional Services - Utilities/ Streetlight	398	398	398	18,575	18,575	18,575	42	42	84
Sale to Other Licensee (JUSCO)	1	1	1	70,000	70,000	70,000	174	174	349
Sale in Exchange							20	5	25
Total	47,769	47,769	47,769	8,37,801	8,37,801	8,37,801	1,422	1,320	2,742

Table 3-1: Consumers, Sanctioned Load & Sales – FY 2019-20

3.2.2 The conversion of Sanctioned to Connected load for the purpose of growth computation etc is provided below:

Table 3-2: Sanctioned Load to Connected Load conversion – FY 2019-20

		Connected Lo	ad conversion
Consumer Category	Unit	Sanctioned Load kW/kVA	Connected Load (kVA) *
Domestic Rural & Urban	kW	1,99,928	2,35,210
Domestic Service - DSHT	kVA	59,311	59,311
Commercial Services	kW	63,354	74,534
Temporary Connections	kW	129	152
HT Industrial Services (HTIS)	kVA	4,26,504	4,26,504
Institutional Services - Utilities/ Streetlight	kW	18,575	21,853
Sale to Other Licensee (JUSCO)	kVA	70,000	70,000
Total		8,37,801	8,87,564

^{*}Power Factor considered for the kW to kVA conversion is 0.85

3.2.3 The table provides the comparison of MYT approved estimates and revised figures FY 2019-20.



Comparison of MYT Approved Estimates & Revised Estimates in APR for FY 2019-20									
Consumer Category	Estimates	Approved in MY 28.2.2017	T Order dt	Revised Estimates for FY 2019-20					
	No. of Consumers	Connected Load (kW)	Sales (MUs)	No. of Consumers	Connected Load (kVA)	Sales (MUs)			
Domestic Rural & Urban	41,814	2,05,606	267	36,972	2,35,210	224			
Domestic Service - DSHT	156	54,938	123	139	59,311	85			
Commercial Services	9,389	42,252	78	10,011	74,534	77			
Temporary Connections	-	-	2	114	152	1			
HT Industrial Services (HTIS)	136	4,79,911	2,387						
High Tension 1	100	22,364	41						
High Tension II	21	36,566	171	134	4,26,504	1,896			
High Tension III	14	3,10,981	2,075						
High Tension IV	1	1,10,000	100						
Institutional Services - Utilities/ Streetlight	393	19,278	88	398	21,853	84			
Sale to Other Licensee (JUSCO)	1	-	338	1	70,000	349			
Sale in Exchange		-	-			25			
Total	51,889	8,01,984	3,283	47,769	8,87,564	2,742			

Table 3-3: Comparison of MYT Approved Estimates & Revised Estimates – FY 2019-20

3.2.4 As per the information available with the Licensee, no additional industrial units are planned within the licensed area and existing Industries are also optimising their power demand by various energy saving initiatives and installation of solar rooftops. Hence overall sales for FY 2019-20 is expected to be lower by ~6.5% than FY 2018-19 levels which is mainly due to drop in HTIS consumption by ~10% over previous year. The Hon'ble Commission is requested to approve the estimated sales of **2742** MUs for FY 2019-20 which would be subject to true-up based on actual values after the end of financial year.

3.3 Energy Balance

3.3.1 The petitioner has considered H1 performance and estimated the overall FY 2019-20 performance. The power purchase volume for H2 is assumed in line with H1 power purchase from same sources. For APR purpose, the T&D loss level for FY2019-20 has been considered at 2.50% and accordingly energy requirement is arrived at in the table below:



Table 3-4: Energy Balance for FY 2019-20 (MUs)

	Energy Balance for FY	2019-20 (MUs			
Sr No	Particulars	Estimates Approved in MYT Order dt 28.2.2017 FY 2019-20	Apr-Sep 2018 (H1) FY 2019-20	Oct-Mar 2019 (H2) FY 2019-20	APR Figure (H1 + H2) FY 2019-20
Α	ENERGY REQUIREMENT				
1	Sales to Other Licensees	337.95	174.48	174.48	348.95
2	Distribution Losses on Sales to Other Licensees (%)	-	-	-	-
3	Unit Lost on Sales to Other Licensees	-			-
4	Energy Requirement for Sales to Other Licensees	337.95	174.48	174.48	348.95
5	Sales to Steel Works	100.00	60.67	60.67	121.35
6	Distribution Losses to Steel works (%)	-	-	-	-
7	Unit lost on Sales to Steel works	-	-	-	-
8	Energy Requirement for Steel works	100.00	60.67	60.67	121.35
9	Sale of daily surplus balance to Exchange (MUs)		20.09	5.00	25.09
10	Sales to LT Consumers (Dom + Comm + SL + Temp)	434.44	228.94	158.29	387.23
11	Sales to HT Consumers (DSHT + HTIS)	2,410.45	938.27	921.30	1,859.57
12	Total Sales to Consumers other than Steel works, JUSCO & Exchange (10+11)	2,844.90	1,167.21	1,079.59	2,246.80
13	Dist. Losses on Sales to Consumers other than JUSCO	4%	2.51%	3.79%	3.030%
14	Unit Lost on Sales to Consumers other than JUSCO	118.54	29.33	40.87	70.20
15	Energy Reqt. for Sales to Consumers other than JUSCO	2,963.43	1,196.53	1,120.47	2,317.00
16	Overall Sales (4 + 8 + 9 + 12)	3,282.85	1,422.45	1,319.74	2,742.19
17	Overall Distribution Losses (%)	3.48%	2.02%	3.00%	2.50%
18	Overall Distribution Losses	118.54	29.33	40.87	70.20
18	Total Energy Requirement	3,401.38	1,451.77	1,360.62	2,812.39
В	ENERGY AVAILABILITY				
1	Tata Power Company Limited	1,608.34	710.78	693.80	1,404.58
а	Unit - II		347.01	342.68	
b	Unit - III		363.76	351.11	
2	Damodar Valley Corporation		704.64	632.04	
а	132 kV	373.20	174.47	167.45	341.92
b	400 kV	1,399.85	530.17	464.59	994.75
3	TSW Captive	20.00	4.80	4.80	9.59
4	RPO	-		-	
5	Open access / Other Sources	-	31.56	29.98	61.55
19	Total Pooled Energy Availability	3,401.38	1,451.77	1,360.62	2,812.39

3.3.2 The petitioner requests Hon'ble Commission to approve the energy balance as tabulated above for FY 2019-20.



3.4 Power Purchase Cost

- 3.4.1 The performance of Apr-Sep'19 (H1 FY 2019-20) is considered for estimating power purchase cost for Oct-Mar'20(H2 FY 2019-20). The power purchase cost for all the source for H2 FY 2019-20 has been considered in line with actuals of H1 FY 2019-20 except DVC 132 kV source. For DVC 132 kV source, actual 8 months + projected 4 months is estimated for full year FY 2019-20.
- 3.4.2 The details of power purchase quantity and cost for FY 2019-20 is given in table below:

Power Purchase Expenses for FY 2019-20 Estimates Approved in MYT Order Apr-Sep 2019 (H1) Oct-Mar 2020 (H2) APR for FY 2019-20 dt 28.2.2017 **Particulars** Per Unit Per Unit Cost Cost Cost Cost MUs MUs MHs MUs (Rs.Crs) (Rs.Crs) (Rs.Crs) Cost Cost (Rs.Crs) Tata Power Company Ltd (A) Unit-II 4.03 347.01 171.28 342.68 689.70 4.94 341.01 804.17 324.12 169.73 Power 351.11 Unit -III 804.17 3.92 315.25 363.76 172.46 168.93 714.88 4.78 341.38 Purchase Total 1,608.34 3.98 710.78 343.74 4.86 682.40 639.37 693.80 338.66 1,404.58 Damodar Valley Corporation 132 KV (B) 373.20 4.91 174.47 5.49 183.08 100.11 167.45 87.71 341.92 Power Purchase 187.82 Damodar Valley Corporation 400 kV (C) 3.87 293.62 Power Purchase 1,399.85 541.78 530.17 464.59 162.97 994.75 4.59 456.59 TSW- Captive (D) **Power Purchase** 3.87 4.80 2.24 4.80 4.68 20.00 7.74 2.25 9.59 4.49 RPO (E) **REC Purchase** 92.13 28.79 52.21 81.00 Other / Open Access (F) Power Purchase 31.56 10.69 29.98 10.15 61.55 3.39 20.84 **Total Pooled Power Purchase** 3,401.39 779.19 4.30 1,464.10 1,451.77 1,360.62 653.94 2,812.39 5.10 1,433.13 (F = A + B + C + D + E + F)

Table 3-5: Total Power Purchase Cost FY 2019-20

- 3.4.3 The power purchase cost estimated for FY 2019-20 is Rs.**1433.13** 3,013.47 Crs. The power purchase for actual 6 months + projected 6 month is considered for power purchase of all sources except DVC 132 kV source. For DVC 132 kV source, actual 8 months +projected 4 months is estimated for full year FY20.
- 3.4.4 **Power Purchase from Tata Power Company Ltd (TPCL):** TSL has estimated purchase of **1404.58** MUs at a total cost of Rs.**682.40** Crs which works out to average rate of Rs.**4.86** Per unit and requests the Hon'ble Commission to kindly approve the same.



- 3.4.5 The actual Power Purchase Bills of Tata Power for H1 of FY 2019-20 are enclosed at Error! Reference source not found. with along with monthly breakup of quantum and cost.
- 3.4.6 **Power Purchase from DVC Source 132 kV:** TSL has estimated purchase of **341.92** MUs at a total cost of Rs.**187.82** Crs which works out to average rate of Rs.**5.49** Per unit and requests the Hon'ble Commission to kindly approve the same. The above estimate for FY 2019-20 is based on actual 8 months + projected 4 months.
- 3.4.7 The actual Power Purchase Bills of DVC 132 kV source for H1 of FY 2019-20 are enclosed at Error! Reference source not found. with along with monthly breakup of quantum and cost.
- 3.4.8 **Power Purchase from DVC Source 400 kV:** TSL has estimated purchase of **994.75** MUs at a total cost of Rs.**456.59** Crs which works out to average rate of Rs.**4.59** Per unit and requests the Hon'ble Commission to kindly approve the same.
- 3.4.9 The actual Power Purchase Bills of DVC 400 kV source for H1 of FY 2019-20 are enclosed at Error! Reference source not found. with along with monthly breakup of quantum and cost.
- 3.4.10 **Power Purchase from TSW Captive**: TSL has estimated purchase of **10** MUs at a total cost of Rs.**4.50** Crs which works out to average rate of Rs.**4.68** per unit and requests the Hon'ble Commission to kindly approve the same. Presently the rate has been assumed based on actual of H1 and would consider the lowest cost of all the sources at the time of true up. The Hon'ble commission is requested to kindly approve the same.
- 3.4.11 The actual Power Purchase Bills of TSL Captive works source for H1 of FY 2019-20 are enclosed at Error! Reference source not found. with along with monthly breakup of quantum and cost.
- 3.4.12 **Renewable Power Obligation for FY 2019-20**: As per JSERC (Renewable Purchase Obligation and its Compliance) Regulations, 2016, the Petitioner needs to purchase specified quantum of power from Renewable Energy Sources.
- 3.4.13 As explained by petitioner in earlier chapter of True-up at 2.4.18, the RPO is applicable on all sources other than DVC 132 kV source. Accordingly, the Petitioner has computed RPO on its energy requirement excluding DVC 132 kV source. Apart from the



standalone RPO obligation to be met for FY 2019-20, the petitioner has carry forward deficit of RPO target which is to be met.

3.4.14 The details of RPO to be fulfilled by petitioner for FY 2019-20 is given in table below:

Table 3-6: RPO Compliance for FY 2019-20 (MUs)

RPO Computations for FY 2019-20									
Particulars	Obligation as % of total energy requirement	of total energy Obligation for FV19-20		Total to be met during FY 2019- 20					
Total Energy Requirement - MUs		2,812							
Less: Exempt source DVC 132 kV		342							
Net Energy Reqt for RPO Compliance purpose - MUs		2,470							
RPO Energy - MUs	11.55%	285	11	296					
Solar	6.55%	162	10	171					
Non-Solar	5.00%	124	0.94	124					
Equivalent RECs		2,85,339	10,555	2,95,895					
Solar		1,61,816	9,611	1,71,427					
Non-Solar		1,23,524	944	1,24,468					

- 3.4.15 The petitioner has purchased RECs amounting to Rs.28.79 Crs for Solar and Non-Solar in H1 of FY 2019-20 and plans to procure the balance RECs required during H2 of FY 2019-20. Based on prevailing REC prices and balance RPO to be met, the petitioner has estimated to incur Rs.52.21 Crs for procurement of RECs in H2 of FY 2019-20. The total amount of RECs for FY 2019-20 is estimated at Rs.81 Crs.
- 3.4.16 The copies of RECs procured in H1 of FY 2019-20 are provided at Error! Reference source not found. along with the bills of RECs.
- 3.4.17 Power Purchase from Open Market including Exchanges: TSL has estimated purchase of 61.55 MUs at a total cost of Rs.20.84 Crs which works out to average rate of Rs.3.39 per unit and requests the Hon'ble Commission to kindly approve the same.
- 3.4.18 The actual Power Purchase Bills of purchase from Open Market sources for H1 of FY 2019-12 are enclosed at Error! Reference source not found. with along with monthly breakup of quantum and cost.
- 3.4.19 **Summary of Power Purchase Cost:** The Petitioner thus request the Hon'ble Commission to approve the total power purchase cost at **Rs.1433.13 Crs** for FY 2019-20 for the purpose of APR subject to final true-up. The power purchase cost is



estimated to be Rs.**5.10** per unit for FY 2019-20 and is in the comparable range as per the current fuel prices in country and as per the rates approved by Commission in latest tariff orders of similar private licensees.

3.4.20 The petitioner would like to submit the approved power purchase cost comparison of other similar private licensees for FY 19-20 for reference purpose.

Name of Utility	FY 2019-20 (Approved) Rs/kWh	Source
BYPL	4.33	Figures updated from ARR FY 2019-20 vide DERC order dated 31.07.2019
TDDPL	5.44	Figures updated from ARR FY 2019-20 vide DERC order dated 31.07.2019
BRPL	5.08	Figures updated from ARR FY 2019-20 vide DERC order dated 31.07.2019
NDMC	6.57	Figures updated from ARR FY 2019-20 vide DERC order dated 31.07.2019
TPL-Ahmd & Surat	4.80	Figures updated from MTR FY 2019-20 and Tariff determination FY 2019-20 vide GERC order dated 24.4.2019 in case no. 1764.8. 1765 of 2018

Table 3-7: Details of Power Purchase Cost of similar utilities for FY 2019-20

3.4.20.1 As can be seen from above table, the power purchase cost of other licensees has been around Rs.5-6.50 per unit and in case of Torrent the same is slightly lower as it has its own power plant. The Petitioner thus request the Hon'ble Commission to approve the total power purchase cost at Rs.1433.13 Crs for FY 2019-20.

3.5 Operation and Maintenance Expenses for FY 2019-20

3.5.1 The Operation and Maintenance (O&M) Expenses includes Employee Cost, R&M Expenses and A&G Expenses. As per provision 6.6 of Tariff Regulations 2015, the expenses are to be claimed as below:

6.6 The above components shall be computed in the manner specified below:

a) R&Mn = K*GFA

Where,

'K' is a constant (expressed in %) governing the relationship between R&M costs and Gross Fixed Assets (GFA) and will be calculated based on the % of R&M to GFA of the preceding year of the Base Year;

'GFA' is the opening value of the gross fixed asset of the nth year;

b) EMPn (excluding terminal liabilities) + A&Gn = (EMPn-1 + A&Gn-1)*(INDXn/INDXn-1) + Gn

Where,



INDX**n** – Inflation factor to be used for indexing the employee cost and A&G cost. This will be a combination of the Consumer Price Index (CPI) and the Wholesale Price Index (WPI) for immediately preceding year before the base year;

Gn – Increase in Employee Expenses in nth year due to increase in consumer base/load growth. Value of G for each year of the Control Period shall be determined by the Commission in the MYT Tariff order based on Licensee's filing, benchmarking with the efficient utilities, actual cost incurred by the licensee due to increase in consumer base/load growth in past, and any other factor considered appropriate by the Commission;

c) INDXn = 0.55*CPIn + 0.45*WPIn;

Note 1: For the purpose of estimation, the same INDXn /INDXn-1 value shall be used for all years of the control period. However, the Commission will consider the actual values in the INDXn /INDXn-1at 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;

Note 2: Any variation due to changes recommended by the Pay Commission etc. will be considered separately by the Commission.

Note 3: Terminal Liabilities will be approved as per actual submitted by the Licensee or be established through actuarial studies.

3.5.2 **Computation of Inflation Factor:** The petitioner would like to submit the calculation of Inflation Factor for FY 2019-20 as per above Note 1 of Tariff Regulations 2015. Since the financial year is in progress, the inflation rate applicable for FY 2018-19 is considered for FY 2019-20.

Table 3-8: Computation of Inflation Factor for FY 2019-20 (same as FY 2018-19)

/DI	Inflation	

CPI Inflation

Month/Year	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Average
FY 2018-19	117.3	118.3	119.1	119.9	120.1	120.9	122	121.6	119.7	119.2	119.5	119.9	119.79
FY 2017-18	113.2	112.9	112.7	113.9	114.8	114.9	115.6	116.4	115.7	116	116.1	116.3	114.88

https://eaindustry.nic.in/download data 1112.asp

Annual Increase over FY 2017-18 4.28% Weightage of 45%

1.93%

Aug Sep Average Month/Year Apr May Nov Dec 301.00 FY 2018-19 288.00 289.00 291.00 301.00 301.00 302.00 302.00 301.00 307.00 307.00 309.00 299.92 FY 2017-18 277.00 278.00 | 280.00 | 285.00 285.00 285.00 287.00 288.00 286.00 288.00 287.00 287.00 284.42

http://labourbureau.gov.in/LBO indtab Feb 2019.pdf

Annual Increase over FY 2017-18

Weightage of 55% 3.00% Total Inflation WPI+CPI 4.92%

- The Inflation Factor for FY 2018-19 is 4.92%, which is considered for FY 2019-20 and would be subject to actual change in inflation indices at the time of truing-up purpose.
- Computation of Growth Factor: The petitioner submits that growth factor for FY 2019-20 over FY 2018-19 in line with calculation submitted in earlier chapter, works



- out to 0.42% {(887564 kVA 883881 kVA)/ 883881kVA} based on present estimates of load for balance period of FY19-20.
- 3.5.5 **Revised Estimates for O&M:** The petitioner would first like to provide the scenario of O&M expenses based on actual performance of H1 and revised estimate for H2 by petitioner. The revised estimated O&M expenses and estimates approved by Commission in MYT order for FY 2019-20 are tabulated below:

Table 3-9: Computation of Revised Estimated O&M expenses for FY 2019-20

Revised Estimated O&M Expenses FY 2019-20 (Rs. Crs)								
Particulars	Apr-Sep 2019 (H1)	Oct-Mar 2020 (H2)	Total APR FY 2019-20					
Employee Cost								
Direct Employees expenses of TSL	1.50	1.50	2.99					
Add: Outsourcing cost paid to JUSCO towards Employees Expenses	11.50	11.50	23.00					
Total Employee Cost	13.00	13.00	25.99					
A&G Expenses								
Gross A&G Expenses	12.85	12.85	25.70					
Add: Outsourcing cost paid to JUSCO towards CGRF Expenses	0.18	0.18	0.35					
Less: Additional expenses due to Change in Law/ Statutory payments	0.05	0.05	0.10					
A&G Costs	12.98	12.98	25.95					
R&M Expenses								
R&M expenses by TSL	23.37	31.63	55.00					
Less: Outsourcing cost paid to JUSCO towards CGRF Expenses	0.18	0.18	0.35					
Less: Outsourcing cost paid to JUSCO towards Employees Expenses	11.50	11.50	23.00					
Net R&M Expenses to be claimed	11.69	19.96	31.65					
Net O&M Expenses	37.67	45.93	83.59					

3.5.6 **Normative O&M Expenses:** The petitioner would also like to provide the scenario based on normative principles as per computations done in earlier chapter of FY 2018-19. The Normative O&M expenses for FY 2019-20 are tabulated below:



Table 3-10: Computation of Normative O&M expenses for FY 2019-20

Particulars	Units	Normative Computation FY 2019-20
Normative Employee Cost Calculation		11 2015-20
Employee Cost as per normative basis for FY 2018-19 (a)	Rs.Crs	24.54
Connected Load in FY 2018-19 (b)	kVA	8,83,881
Emp. cost per kVA for FY 2018-19 (c=a/b)	Rs/kVA	277.64
Weighted avg. inflation factor for FY 2019-20 (d)	%	4.92%
Emp. cost per kVA for FY 2019-20 with Inflation Factor (e=cx(1+d))	Rs/kVA	291.31
Connected Load in FY 2019-20 (f)	kVA	8,87,564
Employee Cost as per normative basis for FY 2019-20 (g=exf)	Rs.Crs	25.86
Normative A&G Cost Calculation		
Normative A&G Costs for FY 2018-19	Rs.Crs	27.52
Add: Inflation factor for FY19-20	%	4.92%
Sub-total	Rs.Crs	28.88
Add: Load Growth Factor for FY 2019-20	%	0.42%
Normative A&G Cost for FY 2019-20	Rs.Crs	29.00
Normative R&M Cost Calculation		
Opening GFA as on 1.4.2019	Rs.Crs	550.49
K Factor as per MYT Order	%	4.80%
Sub-total	Rs.Crs	26.42
Add: Inflation factor for FY18-19	%	4.92%
Normative R&M Cost for FY2019-20	Rs.Crs	27.72
Normative O&M Cost for FY2019-20	Rs.Crs	82.58

- 3.5.6.1 It is submitted that petitioner is here again deprived of the inflationary increases in R&M expenses (material, labour etc) and is allowed only expenses linked to Asset base. It is also submitted that the Tariff Regulations 2015 has ignored to make provision for statutory increases like wages & labour charges, service tax levy, GST levy, other taxes & duties etc while allowing the R&M expenses which has direct impact on the expenses of the company and the same are totally uncontrollable. Every business and each expense under it tends to be affected with inflationary increases and R&M expenses under distribution is no different.
- 3.5.6.2 It is submitted that several State Commissions have recognised this need and have considered the inflationary adjustment in R&M expenses. For eg. Maharashtra State Electricity Regulatory Commission also allows Inflation on total O&M expenses (WPI-30% & CPI-70% on 5 years average increase). Gujrat State Electricity Regulatory Commission also allows 5.72% inflationary adjustment. Odisha State Electricity



- Regulatory Commission allows 5.4% on GFA plus special allowances to undertake critical activities f loss reduction, energy audit etc.
- 3.5.6.3 We request the Hon'ble Commission to kindly consider the above submission and allow inflationary adjustment while approving the normative R&M expense. Such consideration will allow Licensee to undertake appropriate level of repair and maintenance work needed to ensure efficient service delivery.
- 3.5.7 **Summary of O&M Expenses:** The summary of O&M expenses with respect to estimates approved, revised estimated and normative amount is given in the table below:

O&M Expenses (Rs. Crs) for FY19-20 **Particulars** FY 2019-20 Estimates Actual Normative Approved in Audited / amount MYT Order dt Estimated (Rs Crs) 28.2.2017 (Rs.Crs) A&G Costs 24.19 25.95 29.00 **R&M** Expenses 27.01 31.65 27.72 **Employee Cost** 24.03 25.99 25.86 **Total Expenses** 75.23 83.59 82.58

Table 3-11: Summary of O&M Expenses for FY 2019-20

3.5.8 The petitioner would like to submit the approved O&M cost comparison of other similar licensees for FY 2019-20 for reference purpose. The petitioner would like to submit that it had been able to contain its O&M costs at lowest possible levels and estimates that for FY 2019-20 it would be approx. at Rs.0.30 per unit. The O&M cost of other similar Licensee is given in the below table:

Table 3-12: Details of O&M Expenses of similar utilities for FY 2019-20

Name of Utility	FY 2019-20 (Approved) Rs/kWh	Source
BYPL	0.94	Figures updated from ARR FY 2019-20 vide DERC order dated 31.07.2019
TDDPL	0.71	Figures updated from ARR FY 2019-20 vide DERC order dated 31.07.2019
BRPL	0.69	Figures updated from ARR FY 2019-20 vide DERC order dated 31.07.2019
NDMC	1.52	Figures updated from ARR FY 2019-20 vide DERC order dated 31.07.2019
TPL-Ahmd	0.37	Figures updated from MTR FY 2019-20 and Tariff determination FY 2019-20 vide GERC order dated 24.4.2019 in case no. 1764 of 2018



Name of Utility	FY 2019-20 (Approved) Rs/kWh	Source
TPL-Surat	0.39	Figures updated from MTR FY 2019-20 and Tariff
		determination FY 2019-20 vide GERC order dated
		24.4.2019 in case no.1765 of 2018

- 3.5.9 The petitioner would like to reiterate its submission that normative A&G expenses may be allowed with Inflation and Growth Factor and normative R&M expenses be allowed with GFA linked to 'K' factor with Inflation factor.
- 3.5.10 Considering the constant need to maintain assets and ensure reliable and quality supply, and also to maintain losses within approved levels, the petitioner requests Hon'ble Commission to approve the O & M cost of Rs. **82.58** Crs for FY 2019-20.

3.6 Capital Work in Progress, Gross Fixed Assets and Depreciation

3.6.1 The Capital Work in Progress (CWIP), Gross Fixed Assets (GFA) and depreciation on GFA for FY 2019-20 are discussed hereunder. The table below provides details of opening CWIP, Capital Expenditure incurred during the year, Capitalisation of Assets and the working of the depreciation for the year based on H1 actual performance and H2 estimates.

Table 3-13: Summary of CWIP, GFA and Depreciation for FY 2019-20

CWIP, GFA & Depreciation (Rs.Crs) for FY19-20							
Particulars	Estimates Approved in MYT Order dt 28.2.2017 (Rs.Crs)	Rev.Est / Normative Claim (Rs.Crs)					
Capital Works in Progress (CWIP)							
Opening CWIP	11.48	6.80					
Add: Capex during year	42.00	71.72					
Total CWIP	53.48	78.52					
Less: Trfd to GFA	27.60	51.26					
Closing CWIP	25.88	27.26					
Gross Fixed Assets (GFA)							
Opening GFA	562.30	550.49					
Add: Trfd from CWIP excluding discarded assets	27.60	51.26					
Closing GFA	589.90	601.75					
Depreciation							
Depreciation for the FY	37.44	32.79					
Less: Depreciation on Assets created out of consumer contribution	3.81	3.73					
Net Depreciation	33.63	29.06					



- 3.6.2 Capital Works in Progress (CWIP): The petitioner has considered Opening CWIP for FY 2019-20 as closing CWIP of FY 2018-19 from Balance sheet statement of FY 2018-19. The Capital expenditure and Capitalization for FY 2019-20 is as per H1 performance and capex planning for H2 including additional approved schemes.
- 3.6.3 With regards to the Capital expenditure expected to incur during the year amounting to Rs. 71.72 Crs (including consumer contribution amount) as against approval of Rs. 42.00 Crs in MYT order; petitioner would like to explain the variations.

Actual/ Approved **Estimated** Expenditure in **Summary of Expenditure Plan Expenditure** MYT order in Remarks in FY'20 FY'19 (Rs.Crs) (Rs.Crs) Works different 1 for TSL's own capex. Higher scheme Augment to capex due to deferment of 68.72 Cr existing network, create 40.00 Cr few capital project from new network to increase previous year. area of coverage. 2 Works for power For last point connection,

Table 3-14: Reasons for variation in Capital Expenditure FY 2019-20

3.6.4 It is submitted that petitioner has done capital expenditure and resultant capitalization more than approved figures due to completion of previous year deferred activities also.

3.00 Cr

71.72 Cr

mainly

consumer's contribution.

2.00 Cr

42.00 Cr

connection to individual

consumers

Total

5

- 3.6.5 The petitioner therefore requests the Hon'ble Commission to approve the Capital expenditure and Capitalization for FY 2019-20 as presented in above tables.
- 3.6.6 **Gross Fixed Assets:** The details of the Gross Fixed Assets for FY 2019-20 are considered as per actuals of H1 and above capitalisation plan given in Error! Reference source not found. The total GFA amount at the end of FY 2019-20 is estimated at **Rs. 601.75** Crs.
- 3.6.7 Depreciation: For the purpose APR gross depreciation is computed based on weighted average rate of previous year i.e. FY2018-19. This value is subject to final determination during true-up and based on actual depreciation based on audited accounts.

through



3.6.8 Accordingly, the net depreciation to be charged for FY 2019-20 computes to Rs.**29.06**Crs as against Rs. **33.63** Crs allowed by the Hon'ble Commission in MYT Order. The Petitioner therefore request to the Hon'ble Commission to kindly approve the net depreciation as above for the purpose of APR subject to final true-up.

3.7 Interest and Finance Charges

- 3.7.1 The normative loans have been computed considering the Capital Investment Norm in the Regulatory regime in which Debt-Equity Ratio has been kept at 70:30. Therefore, deemed addition to the normative loans have been taken at 70% of the assets addition during the year net of Consumer Contribution assets. The deemed repayment has been considered equivalent of the net depreciation cost for the financial year.
- 3.7.2 The table below shows the normative loan and normative equity to be added during the FY 2019-20 as per methodology adopted in orders of Commission. Normative loan is estimated based on actual capitalization and consumer contribution capitalised expected during the year for FY 2019-20.

Addition to Loan & Equity during year FY19-20 Rev.Est / Normative Claim **Particulars** (Rs.Crs) FY 2019-20 Transferred To GFA during year (A) 51.26 Capitalization from Consumer Contribution (B) 4.05 GFA (own) (C=A-B; if A is higher) 47.21 Debt (D= C x 70%) 33.05 Equity ($E=C \times 30\%$) 14.16

Table 3-15: Normative Loan & Equity added during FY 2019-20

3.7.3 Interest on Normative Loan - The normative interest is computed on the average balance of loan during the financial year. The opening balance of normative loan has been taken from closing normative loan balance for FY 2018-19. Additions to loan account has been considered from above table and repayments are considered equal to depreciation. 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 year is considered as applicable SBI Base Rate plus 200 basis points as on April 1st, 2019 i.e. 10.95%. The normative interest comes to Rs.8.42 Crs as against



Rs. **9.08** Crs approved by Hon'ble Commission in MYT order. The table below provides calculation of Interest on Normative Loan for FY 2019-20.

Table 3-16: Interest on Normative Loan - FY 2019-20

Particulars	Estimates Approved in MYT Order dt 28.2.2017 (Rs.Crs)	Rev.Est / Normative Claim (Rs.Crs)	
	FY 2019-20	FY 2019-20	
Opening Balance of Normative Loan	88.22	74.87	
Add: Deemed Additions during the FY	17.92	33.05	
Less: Deemed Repayments	33.62	29.06	
Closing Balance of Normative Loans	72.51	78.85	
Average Balance of Normative Loans	80.37	76.86	
Interest Rate (SBI base Rate+200 bp)	11.30%	10.95%	
Normative Interest Amount	9.08	8.42	

https://sbi.co.in/web/interest-rates/interest-rates/base-rate-historical-

- 3.7.4 **Working Capital and Interest on Working Capital** The Petitioner has arrived at the Working Capital based on the JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2015.
- 3.7.5 The normative working capital has been computed as per methodology adopted by Commission in APR order. The interest rate of SBI Base Rate as on 1st April 2019 plus 350 basis points i.e.12.45%
- 3.7.6 In accordance with Regulation 6.29 and 6.30 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 & retail business of electricity has been computed. The Wheeling & Retail ARR has been computed as per allocation ratios in accordance with JSERC (Power Regulatory Accounting) Regulations, 2015 and methodology as adopted in Tariff order dated 18.05.2018. The allocation of ARR into wheeling and retail business is provided in segregated ARR table at the end of this chapter which is used for computation of below interest on working capital.



Table 3-17: Interest on Working Capital (Wheeling & Retail) for FY 2019-20

Particulars	Estimates A MYT Or 28.2.2017	der dt	Wheeling Normative		Total Normative	
	Wheeling Business	Retail Business	Claim (Rs.Crs)	Claim (Rs.Crs)	Claim (Rs.Crs)	
O&M Expenses @ 1 Month for Wheeling / Retail business	4.24	2.03	4.58	2.30	6.88	
Maintainence Spares @1% of Opening GFA for Wheeling / Retail business in ratio of 90:10	5.06	0.56	4.95	0.55	5.50	
Receivables for 2 months' Revenue @ existing Tariff from Wheeling / Retail business	18.99	251.01	22.74	279.21	301.95	
Sub-Total	28.29	253.60	32.27	282.06	314.33	
Less: Security Deposit	-	19.63	-	23.14	23.14	
Less: Power Purchase cost for 1 month		122.01		119.43	119.43	
Total Working Capital	28.29	111.98	32.27	139.50	171.77	
SBI base rate plus 350 bp as on 1st April	12.80%	12.80%	12.45%	12.45%		
Total Interest on Working Capital	3.62	14.33	4.02	17.37	21.39	

https://sbi.co.in/web/interest-rates/interest-rates/base-rate-historical-data

- 3.7.7 The Hon'ble Commission is requested to kindly approve the Interest on working capital of Rs.**21.39** Crs for FY 2019-20.
- 3.7.8 **Interest on Security Deposit** The petitioner in the table below has estimated the security deposit amount to be received during the year based on the growth expected in FY 2019-20. The table below provides the details of interest on security deposit.

Table 3-18: Interest on Security Deposit for FY 2019-20

Interest on Security Deposit FY19-20						
Particulars	Estimates Approved in MYT Order dt 28.2.2017 (Rs.Crs)	Rev.Est / Normative Claim (Rs.Crs)				
	FY 2019-20	FY 2019-20				
Opening Security Deposit	19.04	22.64				
Security Deposit received	1.17	1.00				
Closing Security Deposit	20.21	23.64				
Average Security Deposit	19.63	23.14				
Rate of Interest : SBI Base Rate	9.30%	10.95%				
Interest on Secuity Deposit	1.83	2.53				

https://sbi.co.in/web/interest-rates/interest-rates/base-rate-history



- 3.7.9 Based on the interest rate and amount of security deposit for FY 2019-20, the petitioner submits that interest on security deposit amount would be Rs.2.53 Crs.
- 3.7.10 **Finance Charges** The petitioner would like to submit that it has provided Bank Guarantee (BG) to generators against payment security for power purchase. It is submitted that BG charges for FY 2019-20 are expected to be around Rs.**0.30** Crs.
- 3.7.11 Accordingly, the total Interest and Finance Charges for FY 2019-20 are summarized in the table below:

Interest and Finance Charges FY19-20 Estimates Rev.Est / Approved in **Normative** MYT Order dt Claim **Particulars** 28.2.2017 (Rs.Crs) (Rs.Crs) FY 2019-20 FY 2019-20 Interest on Normative Loan 9.08 8.42 Interest on Working Capital 17.95 21.39 Interest on Security Deposit 2.53 1.83 **Finance Charges** 0.30 **Total Interest & Finance Charges** 28.86 32.64

Table 3-19: Interest and Finance Charges for FY 2019-20

3.7.12 The Petitioner therefore request to the Hon'ble Commission to kindly approve the total interest and finance charge amounting to Rs.**32.64** Crs for FY 2019-20 for the purpose of APR subject to final true-up.

3.8 Return on Equity

- 3.8.1 The deemed addition to the normative equity has been taken at 30% of Closing GFA net of Consumer Contribution. The normative return on equity is claimed @ 15.5% which is the return prescribed under the Distribution Tariff Regulation 2015.
- 3.8.2 The Opening Balance of Equity for FY 2019-20 is taken as equal to the closing of FY 2018-19. The amount of equity addition for FY 2019-20 is explained in **Table 3-15**.
- 3.8.3 **Income Tax:** It is submitted that petitioner has considered income tax at MAT rate for grossing up ROE for FY 2019-20. The computation of composite Tax Rate for FY 2019-20 is as below:



 Computation of Income Tax Rate for FY 2019-20

 Income Tax
 FY 2019-20

 MAT Rate
 A
 22.00%

 Add: Surcharge
 B
 10.00%

 Mat Rate with Surcharge
 C=A*(1+B)
 24.20%

 Add: Education Cess
 D
 4.00%

E=C*(1+D)

25.168%

Table 3-20: Computation of Income Tax Rate for FY 2019-20

3.8.4 The computation of ROE based on normative approach is as under:

Composite Tax Rate

Table 3-21: Return on Equity for FY 2019-20

Return on Equity for FY19-20						
Particulars	Estimates Approved in MYT Order dt 28.2.2017 (Rs.Crs)	Rev.Est / Normative Claim (Rs.Crs)				
	FY 2019-20	FY 2019-20				
Opening Balance of Normative Equity	151.26	146.08				
Add: Deemed Additions during the FY 2019-20	7.68	14.16				
Closing Balance of Normative Equity	158.94	160.24				
Average Balance of Normative Equity	155.10	153.16				
Rate of Return on Equity	15.50%	15.50%				
Normative ROE Amount -(A)	24.04	23.74				
Income Tax Rate - (B)		25.168%				
Normative ROE Amount with Income tax C=A/(1-B)	24.04	31.72				

3.8.5 The Petitioner therefore requests the Hon'ble Commission to kindly approve the Return on Equity of **Rs. 31.72** Crs for FY 2019-20 as per above claim.

3.9 Non-Tariff Income

3.9.1 The petitioner estimates that Non-tariff income for FY 2019-20 would be around Rs. **1,609.13** Crs as against Rs. **1,625.87** Crs MYT approved figure. The Hon'ble Commission is requested to kindly approve the same.

3.10 Net Aggregate Revenue Requirement

3.10.1 The net ARR for FY 2019-20 is given below and Hon'ble Commission is requested to approve the same:



Table 3-22: Net ARR for FY 2019-20

Summary of ARR (Rs.Crs)						
Sr No	Particulars	Estimates Approved in MYT Order dt 28.2.2017	Revised Estimates FY 2019-20			
1	Power Purchase Cost	1,464.10	1,433.13			
2	Employee Expenses	27.01	25.86			
3	A&G Expenses	24.19	29.00			
4	R&M Expenses	24.03	27.72			
5	Interest on Loan	9.08	8.42			
6	Finance Charges	-	0.30			
7	Interest on Working Capital	17.95	21.39			
8	Interest on Security Deposit	1.83	2.53			
9	Depreciation	33.63	29.06			
10	Return on Equity	24.04	31.72			
11	Gross Aggregate Revenue Requirement (1 to 10)	1,625.87	1,609.13			
12	Less: Non Tariff Income	5.86	5.00			
13	Aggregate Revenue Requirement (11-12)	1,620.01	1,604.13			

3.10.2 The Petitioner requests Hon'ble Commission to kindly approve the ARR of Rs.**1604.13**Crs as per above table for the purpose of APR subject to final true-up based on audited accounts.

3.11 Revenue from Sale of power

3.11.1 It is submitted that revenue from sales of power for H1 FY 2019-20 is taken as per actuals. Petitioner has already submitted the tariff petition for FY 2019-20 which is under approval of the Hon'ble Commission. Considering that the proposed tariff will be effective for at least 2 months in FY 2019-20 and would be approved as submitted, the petitioner has considered H2 FY 2019-20 revenue higher by 0.67% over H1 FY 2019-20 revenue. The revenue from sale of power for H1 FY 2019-20, H2 FY 2019-20 and overall are provided in the table below:



Table 3-23: Revenue from Sale of Power for FY 2019-20 (H1)

Consumers, Connected Load, Sales & Revenue for FY 2019-20 (H1)									
Consumer Category	No. of Consumers	Connected Load (kVA)	Sales (MUs)	Energy Charges (Rs.Crs)	FPPPA (Rs.Crs)	Demand Charge (Rs.Crs)	Penalty/ Rebate & DPC (Rs.Crs)	Meter Rent (Rs.Crs)	Total Revenue (Rs.Crs)
Domestic Rural & Urban	36,972	2,35,210	134.59	55.53	2.99	0.60	(1.70)	0.54	57.98
Domestic Service - DSHT	139	59,311	50.91	21.38	2.13	1.38	(0.02)	0.00	24.87
Commercial Services	10,011	74,534	51.57	31.79	2.84	1.16	(0.55)	0.26	35.51
Temporary Connections	114	152	0.56	0.43	0.04	0.00	0.00	0.00	0.47
HT Industrial Services (HTIS)	134	4,26,504	948.04	598.47	59.71	76.87	(38.85)	0.05	696.24
Institutional Services - Utilities/ Streetlight	398	21,853	42.22	20.69	2.07	0.01	0.00	0.02	22.79
Sale to Other Licensee (JUSCO)	1	70,000	174.48	75.02	7.50	1	-	-	82.53
Sale in Exchange			20.09	7.75	1	•	-	-	7.75
Total	47,769	8,87,564	1,422.45	811.07	77.27	80.03	-41.11	0.88	928.14

Table 3-24: Revenue from Sale of Power for FY 2019-20 (H2)

Consumers, Connected Load, Sales & Revenue for FY 2019-20 (H2)									
Consumer Category	No. of Consumers	Connected Load (kVA)	Sales (MUs)	Energy Charges (Rs.Crs)	FPPPA (Rs.Crs)	Demand Charge (Rs.Crs)	Penalty/ Rebate (Rs.Crs)	Meter Rent (Rs.Crs)	Total Revenue (Rs.Crs)
Domestic Rural & Urban	36,972	2,35,210	89.72	37.02	2.00	0.60	(1.70)	0.54	38.47
Domestic Service - DSHT	139	59,311	33.94	14.25	1.42	1.38	(0.02)	0.00	17.04
Commercial Services	10,011	74,534	25.78	15.90	1.42	1.16	(0.55)	0.26	18.19
Temporary Connections	114	152	0.56	0.43	0.04	0.00	0.00	0.00	0.47
HT Industrial Services	134	4,26,504	948.04	598.47	59.71	76.87	(38.85)	0.05	696.24
Institutional Services - Utilities/ Streetlight	398	21,853	42.22	20.69	2.07	0.01	0.00	0.02	22.79
Sale to Other Licensee (JUSCO)	1	70,000	174.48	75.02	7.50	,	-	-	82.53
Sale in Exchange			5.00	1.93	1	1	-	-	1.93
Total at Existing Tariff	47,769	8,87,564	1,319.74	763.71	74.15	80.03	-41.11	0.88	877.66
Considering the impact of proposed tariff for FY2020 for 2 months incremental revenue in H2 FY 2019-20							5.88		
			·		Total H	12 FY 2019-	20 revenue	expected	883.54



Consumers, Connected Load, Sales & Revenue for FY 2019-20 (H1 + H2)									
Consumer Category	No. of Consumers	Connected Load (kVA)	Sales (MUs)	Energy Charges (Rs.Crs)	FPPPA (Rs.Crs)	Demand Charge (Rs.Crs)	Penalty/ Rebate (Rs.Crs)	Meter Rent (Rs.Crs)	Total Revenue (Rs.Crs)
Domestic Rural & Urban	36,972	2,35,210	224.31	92.56	4.99	1.21	(3.39)	1.08	96.44
Domestic Service - DSHT	139	59,311	84.84	35.63	3.54	2.76	(0.03)	0.01	41.91
Commercial Services	10,011	74,534	77.35	47.69	4.25	2.33	(1.10)	0.53	53.70
Temporary Connections	114	152	1.12	0.86	0.07	0.01	0.01	0.00	0.95
HT Industrial Services (HTIS)	134	4,26,504	1,896.07	1,196.93	119.42	153.74	(77.70)	0.10	1,392.49
Institutional Services - Utilities/ Streetlight	398	21,853	84.44	41.38	4.14	0.02	0.00	0.04	45.57
Sale to Other Licensee (JUSCO)	1	70,000	348.95	150.05	15.00	1	-	-	165.05
Sale in Exchange			25.09	9.68	-	-	-	-	9.68
Total at Existing Tariff	47,769	8,87,564	2,742.19	1,574.78	151.42	160.06	-82.22	1.76	1,805.79
Considering the impact of proposed tariff for FY2020 for 2 months incremental revenue in H2 FY 2019-20							5.88		
					Tot	al FY 2019-	20 revenue	expected	1,811.67

Table 3-25: Revenue from Sale of Power for FY 2019-20 (H1+H2)

3.11.2 The Petitioner requests Hon'ble Commission to kindly approve the revenue of Rs.**1811.67** Crs from sale of power as per above table for the purpose of APR subject to final true-up based on audited accounts.

3.12 Summarised ARR and Revenue gap/ (surplus) for FY 2019-20

3.12.1 The ARR and Revenue gap/ (surplus) for FY 2019-20 are presented in the table below.

Table 3-26: Summarised ARR and Revenue gap/ (surplus) for FY 2019-20

Particulars	Amount - Rs.Crs	
Net Aggregate Revenue Requirement	1,604.13	
Less: Revenue from Sale of Power @ Existing Tariff	1,811.67	
Revenue Gap/ (Surplus) for the year	(207.54)	

3.12.2 The Hon'ble Commission is requested to kindly approve the ARR and the resultant revenue gap/ (surplus) of Rs. (207.54) Crs for FY 2019-20 based on revised estimates for FY 2019-20 and normative claims.

3.13 Segregation of ARR into Wheeling and Retail ARR for FY 2019-20

The Hon'ble Commission has approved the allocation ratios in accordance with JSERC (Power Regulatory Accounting) Regulations, 2015. In line with the cost allocation approved by the



Hon'ble Commission in previous tariff orders, the ARR for FY 2019-20 based on revised estimates is summarised below:

Table 3-27: Segregated Wheeling and Retail ARR for FY 2019-20

Summary of ARR (Rs.Crs)								
		Wheeling and Retail ARR for FY 2019-20						
Sr No	Particulars	Estimates Approved in MYTT.O.dt 28.2.2017	Wheeling %	Retail %	Wheeling ARR (Rs.Crs)	Retail ARR (Rs.Crs)	Revised Estimates (Rs.Crs)	
1	Power Purchase Cost	1,464.10	0%	100%	-	1,433.13	1,433.13	
2	Employee Expenses	27.01	60%	40%	15.51	10.34	25.86	
3	A&G Expenses	24.19	50%	50%	14.50	14.50	29.00	
4	R&M Expenses	24.03	90%	10%	24.95	2.77	27.72	
5	Interest on Loan	9.08	90%	10%	7.57	0.84	8.42	
6	Finance Charges	-	10%	90%	0.03	0.27	0.30	
7	Interest on Working Capital	17.95	10%	90%	4.02	17.37	21.39	
8	Interest on Security Deposit	1.83	0%	100%	-	2.53	2.53	
9	Depreciation	33.63	90%	10%	26.16	2.91	29.06	
10	Return on Equity	24.04	90%	10%	28.55	3.17	31.72	
11	Gross Aggregate Revenue Requirement (1 to 10)	1,625.87			121.30	1,487.83	1,609.13	
12	Less: Non Tariff Income	5.86	10%	90%	0.50	4.50	5.00	
13	Aggregate Revenue Requirement (11-12)	1,620.01			120.80	1,483.33	1,604.13	
14	Less: Revenue from Sale of Power @ Existing Tariff	-	Wheeling ARR Ratio	Retail ARR Ratio	136.42	1,675.25	1,811.67	
15	Revenue Gap / (Surplus) (13-14)	-					(207.54)	
16	Average Cost of Supply (13/Sales)-Without Carrying cost on Gap/surplus	5.06					5.85	
17	Average Cost of Supply (13/Sales)-With Carrying cost on Gap/surplus						6.34	

3.13.1 The Hon'ble Commission is requested to kindly approve the APR of **Rs.1811.67** Crs and the resultant revenue gap/ (surplus) of **Rs.(207.54)** Crs for FY 2019-20 based on actual performance of H1 FY 2019-20 and revised estimates for H2 FY 2019-20.



Chapter 4. Revised Aggregate Revenue Requirement for FY 2020-21

4.1 Background

- 4.1.1 The Hon'ble Commission has approved the Business plan for the 2nd MYT control period from FY 2016-17 to FY 2020-21 on 28th February, 2017. In the same Order dated 28th February, 2017, the Hon'ble Commission has also approved the ARR for the MYT Control Period FY 2016-17 to FY 2020-21.
- 4.1.2 TSL hereby submits the revised estimates/ projections for FY 2020-21 based on APR figures of FY 2019-20. The following sections summarise each of the components of ARR for FY 2020-21. A comparison of figures approved in ARR order dated 28th February 2017, which were estimated at that point of time and revised estimates for FY 2020-21 now are shown under relevant sections discussed herewith.

4.2 Revised ARR for FY 2020-21

4.2.1 The Petitioner submits that in the revised projections of ARR for FY 2020-21, the petitioner has revised the Unit Sales forecast based on FY 2019-20 sales. Due to this revised sales estimates, Revenue and Power Purchase costs have also undergone change and the same is revised in the ARR for FY 2020-21. The revised estimates for other ARR elements have been prepared on a normative basis. The petitioner requests the Hon'ble commission to revise the power purchase costs as it constitutes approximately 88% of the ARR and has significant impact on ARR values. The Petitioner requests Hon'ble Commission to kindly consider the revised projections of sales, power purchase cost and other cost elements in the ARR for FY 2020-21 as provided in subsequent sections.

4.3 Consumers, Connected Load and Sales for FY 2020-21

- 4.3.1 As per the information available with the Licensee, no additional industrial units are planned within the licensed area and existing Industries are also optimising their power demand by various energy saving initiatives and installation of solar rooftops. Accordingly, energy sales for all categories have been retained at same level as FY 2019-20 except for Domestic-HT and HT Industrial services.
- 4.3.1.1 Domestic HT The Number of consumers has been estimated to grow by 5 nos. in absolute terms with load of around 1000 kVA. Accordingly, sales have been estimated based on present load consumption ratio, time period of addition in sales etc at approx. additional 1.00 MU.
- 4.3.1.2 HT Industrial Services It is expected that sales would pick-up in this category by 5% over previous year i.e. approx. additional **94.80 MU**. TSL expects nos. of consumers and load to be constant and in the range of previous year level. Hence no change has been considered in nos. of consumers and connected load for FY 2020-21.



Consumers, Connected Load & Sales - FY 2020-21 (Revised Projections)										
	Estimates App	roved in MYT Or	der dt 28.2.2017	Revised Projections for FY 2020-21						
Consumer Category	No. of Consumers	Connected Load	Sales	No. of Consumers	Sanctioned Load	Sanctioned Load- Unit	Connected Load *	Sales		
	(Nos)	(kW)	(MUs)	(Nos)	(kW/kVA)		(kVA)	(MUs)		
Domestic	42,699	2,10,040	276.53	36,972	1,99,928	kW	2,35,210	224.31		
Domestic - DSHT	161	56,672	127.01	144	60,311	kVA	60,311	85.84		
Commercial	9,550	42,971	79.02	10,011	63,354	kW	74,534	77.35		
Temporary Supply		-	2.00	114	129	kW	152	1.12		
HT Industrial Services (HTIS)	141	4,81,018	2,454.92	134	4,26,504	kVA	4,26,504	1,990.88		
Utilities/Street Light	393	19,278	88.00	398	18,575	kW	21,853	84.44		
Sale to Other Licensee	1		337.95	1	70,000	kVA	70,000	348.95		
Sale in Exchange								25.09		
Total	52,945	8,09,978	3,365.43	47,774	8,38,801		8,88,564	2,838.00		

Table 4-1: Consumers, Connected Load & Sales for FY 2020-21-Revised Estimates

4.4 Energy Balance for FY 2020-21

- 4.4.1 The above energy sales are planned to be met from power procurement from Tata Power Jojobera, DVC 132kV Source, DVC 400kV Source, Power taken from exchanges/ open market during outage of units, and balance power from TSL Captive Source.
- 4.4.2 The petitioner tries to optimise its Power Purchase Costs based on incremental cost analysis on real-time basis. At the same time reliability and availability of power needs to be ensured. Therefore, during outage of machines with whom the petitioner has PPA, additional power needs to be procured from power exchange/ open market.
- 4.4.3 The petitioner has kept the Hon'ble Commission informed of all such purchases during the previous periods and has considered the similar level of Power Purchase from open access / exchange during the FY 2020-21, as is expected in FY 2019-20.
- 4.4.4 The petitioner would like to inform to the Hon'ble Commission that, as advised by Hon'ble Commission in the past, in its effort to optimise the power purchase costs, petitioner has started offering the daily surplus power (subject to load flows and technical considerations) of planned PPA, in exchange from 19.05.2019. Petitioner has invoked the deemed approval provisions of open access, as consent of DVC was becoming a constraint. After several rounds of persuasions and follow-up with ERLDC and DVC, finally petitioner could manage to start the same of its daily surplus power. The sale of such power has been estimated and shown in overall sales under sale to exchange line item.

^{*}Power Factor considered for the kW to kVA conversion is 0.85



4.4.5 Further the petitioner has estimated that overall loss level would remain around 3%, due to its constant efforts and possibly within the approved level of 3.50% approved by Commission in MYT order.

Table 4-2: Projected Energy Balance for FY 2020-21

	Energy Balance for FY 2020-21 (MUs)		
Sr No	Particulars	Estimates Approved in MYT Order dt 28.2.2017 FY 2020-21	Revised Projections FY 2020-21
Α	ENERGY REQUIREMENT		
1	Sales to Other Licensees	337.95	348.95
2	Distribution Losses on Sales to Other Licensees (%)	-	-
3	Unit Lost on Sales to Other Licensees		
4	Energy Requirement for Sales to Other Licensees	337.95	348.95
5	Sales to Steel Work	100.00	121.35
6	Distribution Losses (%)	-	-
7	Unit lost on Sales	- 1	-
8	Energy Requirement	100.00	121.35
9	Sale of daily surplus balance to Exchange (MUs)		25.09
10	Sales to LT Consumers (Dom + Comm + Street light + Temp)	445.55	387.23
11	Sales to HT Consumers (Other than Sales to Steel Works)	2,481.94	1,955.37
12	Total Sales to Consumers other than Steel works, JUSCO & Exchange (10+11)	2,927.49	2,342.60
13	Distribution Losses on Sales to Consumers other than Sales to Steel Works & JUSCO (%)	4.00%	3.75%
14	Unit Lost on Sales to Consumers other than Sales to Steel Works & JUSCO	121.98	87.77
15	Energy Requirement for Sales to Consumers other than Sales to Steel Works & JUSCO	3,049.46	2,430.38
16	Overall Sales (4 + 8 + 9 + 12)	3,365.43	2,838.00
17	Overall Distribution Losses (%)	3.50%	3.00%
18	Overall Distribution Losses	121.98	87.77
19	Total Energy Requirement	3,487.41	2,925.77
В	ENERGY AVAILABILITY		
1	Tata Power Company Limited	1,608.34	1,404.58
а	Unit - II		
b	Unit - III		
2	Damodar Valley Corporation	1,859.08	
а	132 kV	459.23	341.92
b	400 kV	1,399.85	994.75
3	TSW Captive	20.00	9.59
4	RPO		-
4	Open access / Other Sources		174.93
20	Total Pooled Energy Availability	3,487.42	2,925.77



4.4.6 The Hon'ble Commission is requested to approve the Energy balance as per above table for FY 2020-21 which would be subject to change based on annual performance review depending on actual progress in H1 of FY 2020-21.

4.5 Power Purchase costs for FY 2020-21

- 4.5.1 Power Purchase cost for FY2020-21 has been worked out assuming same power purchase cost of all sources as per the revised estimates of FY 2019-20 except for open market/ exchanges.
- 4.5.2 **TSW Captive:** In line with the practice being followed by the Hon'ble Commission in the past, transfer from TSW captive is considered at average power purchase price of lowest average cost source (from TPCL, DVC 132 kV and DVC 400 kV).
- 4.5.3 **RPO / REC:** As per JSERC (Renewable Purchase Obligation and its Compliance) Regulations, 2016, the Petitioner needs to purchase specified quantum of power from Renewable Energy Sources.
- 4.5.4 The details of standalone RPO to be fulfilled for FY 2019-20 by the Petitioner are provided in the table below:

RPO Computations for FY 2020-21								
Particulars	Obligation as % of total energy requirement	Obligation for FY20-21	Carried Forward from FY19-20	Total to be met during FY 2020-21				
Total Energy Requirement -		2,925.77						
MUs		2,323.77						
Less: Exempt source DVC 132		341.92						
kV		341.32						
Net Energy Reqt for RPO		2,583.85						
Compliance purpose - MUs		2,303.03						
RPO Energy - MUs	11.55%	298.43	-	298.43				
Non-Solar	5.00%	129.19		129.19				
Solar	6.55%	169.24		169.24				
Equivalent RECs		2,98,435	-	2,98,435				
Non-Solar		1,29,192	-	1,29,192				
Solar		1,69,242	-	1,69,242				

Table 4-3: RPO Computations for FY 2020-21

4.5.5 The cost of purchase of RECs for the above obligation is assumed same as approved by Hon'ble Commission in MYT order at Rs.**92.13** Crs.



4.5.6 **Open Market/ Exchange:** The balance requirement is assumed to be met from open market/ exchange and a rate of Rs.4.00 per unit is taken based on trend of last 18-20 months.

Table 4-4: Power purchase cost for FY 2020-21

Total Power Purchase Cost for FY 2020-21							
Particulars	Estimates Approved in MYT Order dt 28.2.2017	Revised Projections					
Tata	a Power Company	Ltd (A)					
	Unit-II	804.17	689.70				
Power Purchase - MUs	Unit -III	804.17	714.88				
	Total	1,608.34	1,404.58				
	Unit-II	4.07	4.94				
Rate - Rs/kWh	Unit -III	3.95	4.78				
	Total	4.01	4.86				
	Unit-II	326.94	341.01				
	Total Unit II	326.94	341.01				
Cost - Rs.Crores	Unit -III	317.83	341.38				
	Total Unit III	317.83	341.38				
	Total	644.77	682.40				
Damodar Valley Corporation 132 KV (B)							
Power Purchase - MUs		459.23	341.92				
Rate - Rs/kWh		3.51	5.49				
Cost - Rs.Crores		214.60	187.82				
Damodar Valley Corporation 400 kV	(C)						
Power Purchase - MUs		1,399.85	994.75				
Rate - Rs/kWh		2.18	4.59				
Cost - Rs.Crores		547.69	456.59				
TSW- Captive (D)							
Power Purchase - MUs		20.00	9.59				
Rate - Rs/kWh		3.91	4.59				
Cost - Rs.Crores		7.83	4.40				
RPO (E)	T						
REC Cost - Rs.Crores		92.13	92.13				
Other / Open Access (F)	I						
Power Purchase - MUs		-	174.93				
Rate - Rs/kWh		-	4.00				
Cost - Rs.Crores		-	69.97				
Total Pooled Power Purchase (F= A+I	B+C+D+E+F)	1					
Total Cost - Rs.Crores		1,507.02	1,493.31				
Power Purchase - MUs		3,487.41	2,925.77				
Rate - Rs/kWh		4.32	5.10				



4.5.7 The petitioner submits that overall weighted average cost of power purchase is at same level as per revised estimates of FY 2019-20 at Rs.**5.10** per unit with total cost of Rs.**1493.31** Crs for FY 2020-21 and requests Commission to approve the same.

4.6 Operation and Maintenance Expenses for FY 2020-21

4.6.1 The Operation and Maintenance (O&M) Expenses includes Employee Cost, R&M Expenses and A&G Expenses. As per provision 6.6 of Tariff Regulations 2015, the expenses are to be claimed as below:

6.6 The above components shall be computed in the manner specified below: a) $R&M\mathbf{n} = K*GFA$

Where,

'K' is a constant (expressed in %) governing the relationship between R&M costs and Gross Fixed Assets (GFA) and will be calculated based on the % of R&M to GFA of the preceding year of the Base Year;

'GFA' is the opening value of the gross fixed asset of the nth year;

b) EMP \mathbf{n} (excluding terminal liabilities) + A&G \mathbf{n} = (EMP \mathbf{n} -1 + A&G \mathbf{n} -1)*(INDX \mathbf{n} /INDX \mathbf{n} -1) + G \mathbf{n}

Where,

INDX**n** – Inflation factor to be used for indexing the employee cost and A&G cost. This will be a combination of the Consumer Price Index (CPI) and the Wholesale Price Index (WPI) for immediately preceding year before the base year;

Gn – Increase in Employee Expenses in nth year due to increase in consumer base/load growth. Value of G for each year of the Control Period shall be determined by the Commission in the MYT Tariff order based on Licensee's filing, benchmarking with the efficient utilities, actual cost incurred by the licensee due to increase in consumer base/load growth in past, and any other factor considered appropriate by the Commission;

c) INDXn = 0.55*CPIn + 0.45*WPIn;

Note 1: For the purpose of estimation, the same INDXn /INDXn-1 value shall be used for all years of the control period. However, the Commission will consider the actual values in the INDXn /INDXn-1at 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;

Note 2: Any variation due to changes recommended by the Pay Commission etc. will be considered separately by the Commission.

Note 3: Terminal Liabilities will be approved as per actual submitted by the Licensee or be established through actuarial studies.



4.6.2 Computation of Inflation Factor: The petitioner would like to submit that inflation factor of FY 2020-21 is kept same as that of FY 2019-20. Since the financial year FY 2019-20 is in progress, the inflation rate applicable for FY 2018-19 is considered for FY 2020-21 i.e. 4.92% which would be subject to change as per inflation indices at later date.

Table 4-5: Computation of Inflation Factor for FY 2020-21 (same as FY 2018-19)

WPI	Inflation	

Month/Year	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Average
FY 2018-19	117.3	118.3	119.1	119.9	120.1	120.9	122	121.6	119.7	119.2	119.5	119.9	119.79
FY 2017-18	113.2	112.9	112.7	113.9	114.8	114.9	115.6	116.4	115.7	116	116.1	116.3	114.88

https://eaindustry.nic.in/download_data_1112.asp

Annual Increase over FY 2017-18 4.28

Weightage of 45% 1.93%

CPI Inflation	
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Month/Year	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Average
FY 2018-19	288.00	289.00	291.00	301.00	301.00	301.00	302.00	302.00	301.00	307.00	307.00	309.00	299.92
FY 2017-18	277.00	278.00	280.00	285.00	285.00	285.00	287.00	288.00	286.00	288.00	287.00	287.00	284.42

http://labourbureau.gov.in/LBO indtab Feb 2019.pdf

Annual Increase over FY 2017-18 5.45%

Weightage of 55% 3.00% Total Inflation WPI+CPI 4.92%

- 4.6.3 Growth Factor: The growth factor for FY 2020-21 based on estimates of load for FY 2019-20 and FY 2020-21 works out to 0.11% {(888564 kVA-887564 kVA)/887564 kVA}.
- 4.6.4 **Revised Estimates for O&M:** The petitioner would like to provide the revised estimates based on normative principles as per computations done in earlier chapter of FY 2019-20. The Normative O&M expenses for FY 2020-21 are tabulated below:



Table 4-6: Computation of Normative O&M costs for FY 2020-21

Particulars	Units	Normative Computation
		FY 2020-21
Normative Employee Cost Calculation		
Employee Cost as per normative basis for FY 2019-20	Rs.Crs	25.86
Connected Load in FY 2019-20	kVA	8,87,564
Emp. cost per kVA for FY 2019-20	Rs/kVA	291.31
Weighted avg. inflation factor for FY 2020-21	%	4.92%
Emp. cost per kVA for FY 2020-21 with Inflation Factor	Rs/kVA	305.66
Connected Load in FY 2020-21	kVA	8,88,564
Employee Cost as per normative basis for FY 2020-21	Rs.Crs	27.16
Normative A&G Cost Calculation		
Normative A&G Costs for FY 2019-20	Rs.Crs	29.00
Add: Inflation factor for FY20-21	%	4.92%
Sub-total	Rs.Crs	30.42
Add: Load Growth Factor for FY 2020-21 (projected increase over FY 2019-20 load)	%	0.11%
Normative A&G Cost for FY 2020-21	Rs.Crs	30.46
Normative R&M Cost Calculation		
Opening GFA as on 1.4.2020	Rs.Crs	601.75
K Factor as per MYT Order	%	4.80%
Sub-total Sub-total	Rs.Crs	28.88
Add: Inflation factor for FY 2020-21	%	4.92%
Normative R&M Cost for FY2020-21	Rs.Crs	30.31
Normative O&M Cost for FY2020-21	Rs.Crs	87.92

Table 4-7: Comparison of Approved and Normative O&M costs for FY 2020-21

O&M Expenses FY 2020-21 (Rs. Crs)						
Particulars	Estimates Approved in MYT Order Dt 28.2.2017	Normative Estimates for FY 2020-21				
Employee Cost	25.33	27.16				
A&G Costs	25.24	30.46				
R&M Expenses	28.34	30.31				
Total O&M Expenses	78.91	87.92				

4.6.5 The Hon'ble Commission is requested to approve the normative O&M expenses for FY 2020-21 as per above table and in line with the principles adopted in previous chapter allowing inflation factor and growth factor. Accordingly, the petitioner requests the Hon'ble Commission to approve Rs. **87.92** Crs for O&M expenses for the purpose of APR, subject to change in annual performance review and final true-up based on audited accounts at a later stage.



4.7 Capital Work in Progress, Gross Fixed Assets and Depreciation

- 4.7.1 The Capital Work in Progress (CWIP), Gross Fixed Assets (GFA) and depreciation on GFA for FY 2020-21 are discussed hereunder. The table below provides details of opening CWIP, Capital Expenditure incurred during the year, Capitalisation of Assets and the working of the depreciation for the year on normative basis.
- 4.7.2 The scheme wise estimated capital expenditure and capitalisation planned for FY 2020-21 are provided at Error! Reference source not found.. Based on the estimated closing CWIP and closing GFA of FY 2019-20, below details of CWIP, GFA and depreciation are worked out for FY 2020-21.
- 4.7.3 **Gross Fixed Assets:** The details of the Gross Fixed Assets for FY 2020-21 are considered on normative basis. The total GFA amount at the end of FY 2020-21 is estimated at **Rs. 665.75** Crs.

Table 4-8: Summary of CWIP, GFA and Depreciation for FY 2020-21

CWIP, GFA & Depreciation							
Particulars	Estimates Approved in MYT Order dt 28.2.2017 (Rs.Crs)	Revised Projections (Rs.Crs)					
	FY 2020-21	FY 2020-21					
Capital Works in Progress (CWIP)							
Opening CWIP	25.88	27.26					
Add: Capex during year	34.50	37.52					
Total CWIP	60.38	64.78					
Less: Trfd to GFA	33.85	64.00					
Closing CWIP	26.53	0.78					
Gross Fixed Assets (GFA)							
Opening GFA	589.90	601.75					
Add: Trfd from CWIP excluding discarded assets	33.85	64.00					
Closing GFA	623.75	665.75					
Depreciation							
Depreciation for the FY	39.44	36.07					
Less: Depreciation on Assets created out of consumer contribution	3.93	3.84					
Net Depreciation	35.51	32.23					

4.7.4 Depreciation: The gross depreciation is computed based on normative principles. For revised ARR, gross depreciation is computed based on weighted average rate of FY 2018-19 (being figures of audited year available). This value of FY 2020-21 is subject to final determination during APR & true-up stage. The net depreciation is computed



by reducing depreciation on consumer contribution amount as computed and shown below:

Computation of Net Depreciation for FY 2020-21 (Rs.Crs)

Closing GFA (A) 665.75

Closing Consumer Contribution capitalised (B) 70.88

Gross Depreciation FY 2020-21 (C) 36.07

Depreciation on Consumer Contribution (D=C/A*B) 3.84

Net Depreciation to be charged in ARR (E=C-D) 32.23

Table 4-9: GFA and Depreciation for FY 2020-21

4.7.5 Accordingly, the net depreciation to be charged for FY 2020-21 is estimated to be Rs.**32.23** Crs. The Petitioner therefore request to the Hon'ble Commission to kindly approve the net depreciation as above for the purpose of revised ARR subject to final true-up.

4.8 Interest and Finance Charges

- 4.8.1 The normative loans have been computed considering the Capital Investment Norm in the Regulatory regime in which Debt-Equity Ratio has been kept at 70:30. Therefore, deemed addition to the normative loans have been taken at 70% of the assets addition net of Consumer Contribution assets. The deemed repayment has been considered equivalent of the net depreciation cost for the financial year.
- 4.8.2 The table below shows the normative loan and normative equity during the FY 2020-21 as per methodology adopted in orders of Commission. Normative loan is estimated based on the expected capitalization and consumer contribution capitalisation expected during FY 2020-21.

Table 4-10: Normative Loan & Equity during FY 2020-21

Addition to Loan & Equity (Rs.Crs)					
Transferred To GFA (A)	64.00				
Capitalization from Consumer	2.50				
Contribution (B)					
GFA (own) (C=A-B; if A is higher)	61.50				
Debt (D= C x 70%)	43.05				
Equity (E= C x 30%)	18.45				

4.8.3 **Interest on Normative Loan** - The normative interest is computed on the average balance of loan during the financial year. The opening balance of normative loan has been taken from closing normative loan balance for FY 2019-20. Additions to loan account has been considered from above table and repayments are considered equal



to depreciation. 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 year is considered as applicable SBI Base Rate plus 200 basis points as on April 1st, 2019 i.e. **10.95%**. The normative interest comes to **Rs.9.23 Crs** as against **Rs. 7.45 Crs** approved by Hon'ble Commission in MYT order. The table below provides calculation of Interest on Normative Loan for FY 2020-21.

Table 4-11: Interest on Normative Loan - FY 2020-21

Particulars	Estimates Approved in MYT Order dt 28.2.2017 (Rs.Crs)	Normative Claim (Rs.Crs)
	FY 2020-21	FY 2020-21
Opening Balance of Normative Loan	72.51	78.85
Add: Deemed Additions during the FY 2020-21	22.30	43.05
Less: Deemed Repayments	35.51	32.23
Closing Balance of Normative Loans	59.30	89.68
Average Balance of Normative Loans	65.91	84.27
Interest Rate (SBI base Rate+200 bp)	11.30%	10.95%
Normative Interest Amount	7.45	9.23

- 4.8.4 Working Capital and Interest on Working Capital The Petitioner has arrived at the Working Capital based on the JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2015.
- 4.8.5 The normative working capital has been computed as per methodology adopted by Commission in APR order. The interest rate of SBI Base Rate as on 1st April 2019 plus 350 basis points i.e.**12.45%**.
- 4.8.6 In accordance with Regulation 6.29 and 6.30 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 & retail business of electricity has been computed in the MYT order dated 27.02.2017. The Wheeling & Retail ARR for FY 2020-21 has been computed here as per allocation ratios in accordance with JSERC (Power Regulatory Accounting) Regulations, 2015 and methodology as adopted in Tariff order dated 18.05.2018. The allocation of ARR into wheeling and retail business is provided in segregated ARR table at the end of this chapter, which is used for computation of below interest on working capital.



Particulars		Estimates Approved in MYT Order dt 28.2.2017 (Rs.Crs)		Retail Normative	Total Normative	
	Wheeling Business	Retail Business	Claim (Rs.Crs)	Claim (Rs.Crs)	Claim (Rs.Crs)	
O&M Expenses @ 1 Month for Wheeling / Retail business	19.67	258.47	4.90	2.43	7.33	
Maintainence Spares @1% of Opening GFA for Wheeling / Retail business in ratio of 90:10	4.44	2.13	5.42	0.60	6.02	
Receivables for 2 months' Revenue @ existing Tariff from Wheeling / Retail business	5.31	0.59	24.19	284.03	308.22	
Sub-Total	29.42	261.19	34.50	287.06	321.56	
Less: Security Deposit		20.76		23.89	23.89	
Less: Power Purchase cost for 1 month		125.59		124.44	124.44	
Total Working Capital	29.42	114.84	34.50	138.73	173.23	
SBI Base rate + 350 basis points	12.80%	12.80%	12.45%	12.45%		
Total Interest on Working Capital *	3.77	14.70	4.30	17.27	21.57	

Table 4-12: Interest on Working Capital (Wheeling & Retail) for FY 2020-21

- 4.8.7 The Hon'ble Commission is requested to kindly approve the Interest on working capital of Rs.**21.57** Crs for FY 2020-21.
- 4.8.8 **Interest on Security Deposit** The petitioner in the table below has estimated the security deposit amount to be received during the year based on the growth expected in FY 2020-21. The table below provides the details of interest on security deposit.

Interest on Security Deposit (Rs Cr)							
Particulars	Estimates Approved in MYT Order dt 28.2.2017 (Rs.Crs)	Revised Projections (Rs.Crs)					
	FY 2020-21	FY 2020-21					
Opening Security Deposit	20.21	23.64					
Security Deposit received	1.11	0.50					
Closing Security Deposit	21.32	24.14					
Average Security Deposit	20.77	23.89					
Rate of Interest : SBI Bank	9.30%	10.95%					
Rate + 200 bps							
Interest on Secuity Deposit	1.93	2.62					

Table 4-13: Interest on Security Deposit for FY 2020-21

- 4.8.8.1 Based on the interest rate and amount of security deposit for FY 2019-20, the petitioner submits that interest on security deposit amount would be Rs. 2.62 Crs.
- 4.8.9 **Finance Charges** The petitioner would like to submit that it has provided Bank Guarantee (BG) to generators against payment security for power purchase. It is submitted that BG charges for FY 2020-21 are expected to be around Rs.**0.30** Crs.



4.8.10 Accordingly, the total Interest and Finance Charges for FY 2020-21 are summarized in the table below:

Interest and Finance Charges (Rs Cr) Estimates Approved in Revised MYT Order dt **Projections Particulars** 28.2.2017 (Rs.Crs) (Rs.Crs) FY 2020-21 FY 2020-21 Interest on Normative Loan 7.45 9.23 Interest on Working Capital 18.47 21.57 Interest on Security Deposit 1.93 2.62 **Finance Charges** 0.30 **Total Interest & Finance Charges** 27.85 33.71

Table 4-14: Interest and Finance Charges for FY 2020-21

4.8.11 The Petitioner therefore request to the Hon'ble Commission to kindly approve the total interest and finance charge amounting to **Rs. 33.71 Crs** for FY 2020-21 as per revised projections.

4.9 Return on Equity

- 4.9.1 The deemed addition to the normative equity has been taken at 30% of Closing GFA net of Consumer Contribution. The normative return on equity is claimed @ 15.5% which is the return prescribed under the Distribution Tariff Regulation 2015.
- 4.9.2 The Opening Balance of Equity for FY 2020-21 is taken as equal to the closing of FY 2019-20. The amount of equity addition for FY 2020-21 is explained in **Table 4-10**
- 4.9.3 **Income Tax:** It is submitted that petitioner has considered income tax at MAT rate for grossing up ROE for FY 2020-21. The computation of composite Tax Rate for FY 2020-21 is as below:

Table 4-15: Computation of Income Tax Rate for FY 2020-21

Computation of Income Tax Rate for FY 2020-21							
Income Tax	FY 2020-21						
MAT Rate	Α	22.00%					
Add: Surcharge	В	10.00%					
Mat Rate with Surcharge	C=A*(1+B)	24.20%					
Add: Education Cess	D	4.00%					
Composite Tax Rate	E=C*(1+D)	25.168%					



4.9.4 The computation of ROE based on normative approach is as under:

Table 4-16: Return on Equity for FY 2020-21

Particulars	Estimates Approved in MYT Order dt 28.2.2017 (Rs.Crs)	Rev.Est / Normative Claim (Rs.Crs)	
	FY 2020-21	FY 2020-21	
Opening Balance of Normative Equity	158.94	160.24	
Add: Deemed Additions during the FY 2020-21	9.56	18.45	
Closing Balance of Normative Equity	168.50	178.69	
Average Balance of Normative Equity	163.72	169.47	
Rate of Return on Equity	15.50%	15.50%	
Normative ROE Amount -(A)	25.38	26.27	
Income Tax Rate - (B)		25.168%	
Normative ROE Amount with Income tax C=A/(1-B)	25.38	35.10	

4.9.5 The Petitioner therefore requests the Hon'ble Commission to kindly approve the Return on Equity of Rs.**35.10** Crs for FY 2020-21 as per above claim.

4.10 Non-Tariff Income

4.10.1 The petitioner has estimated Non-tariff income for FY 2020-21 at same level of FY 2019-20 i.e. Rs. **1,682.27** Crs as against Rs.5.86 Crs approved in MYT.

4.11 Net Aggregate Revenue Requirement

4.11.1 The net ARR for FY 2020-21 is given below for approval of Hon'ble Commission.

Table 4-17: Net ARR for FY 2020-21

Summary of ARR for FY 2020-21 (Rs.Crs)								
Sr No	Particulars	Estimates Approved in MYT Order dt 28.2.2017	Revised Projections FY 2020-21					
1	Power Purchase Cost	1,507.02	1,493.31					
2	Employee Expenses	25.33	27.16					
3	A&G Expenses	25.24	30.46					
4	R&M Expenses	28.34	30.31					
5	Interest on Loan	7.45	9.23					
6	Finance Charges	-	0.30					
7	Interest on Working Capital	18.47	21.57					
8	Interest on Security Deposit	1.93	2.62					
9	Depreciation	35.51	32.23					
10	Return on Equity	25.38	35.10					
11	Gross Aggregate Revenue Requirement (1 to 10)	1,674.67	1,682.27					
12	Less: Non Tariff Income	5.86	5.00					
13	Aggregate Revenue Requirement (11-12)	1,668.81	1,677.27					



4.11.2 The Petitioner requests Hon'ble Commission to kindly approve the ARR of Rs. 1,677.27 Crs as per above table for the purpose of ARR subject to change in annual performance review and final true-up based on audited accounts at a later stage.

4.12 Revenue from Sale of Power at Existing tariff (previous year proposed)

4.12.1 The revenue at existing tariff is calculated based on revised sales, no. of consumers and connected load forecasted for FY 2020-21. Rebate and Surcharges are considered in line with the rebate availed by consumers in FY 2019-20 by each category, as it also has component of load factor, power factor and voltage rebate which is dependent upon their consumption pattern. The tariffs proposed in previous petition is assumed will be approved by Commission and may be effective from 1st February 2020. Accordingly, the proposed tariff in previous petition is being computed below for FY 2020-21.



Table 4-18: Revenue from Sale of Power at proposed tariff in previous petition for FY 2020-21

		Re	venue from Sa	le of Power	for FY 2020-	21 at Existin	ng Tariff				
S.No.	Consumer Category	No. of Consumers	Contract Demand/ Sanctioned Load	Sales	Fixed/ Demand Charge	Energy Charge	Revenue from Fixed Charge	Revenue from Energy Charge	Penalty/ Rebate	Meter Rent	Total Revenue
		Nos	kW/BHP/ kVA	MUs	(Rs/Conn/ month or Rs/kW/ month or Rs/kVA/ month)	Rs/kWh	Rs. Crores	Rs. Crores	Rs. Crores	Rs. Crores	Rs. Crores
1	2	3	4	5	6	7	8	9	10		11
- 1	DOMESTIC SERVICE	37,116	2,60,239	310.15			4.63	138.22	(3.43)	1.09	140.52
	DS LT	36,972	1,99,928	224.31			1.38	99.59	(3.39)	1.08	98.66
	0-100 units	7,394	39,986	44.86	15	2.80	0.13	12.56	(0.68)	0.22	12.23
	Above 100 units	29,578	1,59,943	179.45	35	4.85	1.24	87.03	(2.71)	0.87	86.43
	DS HT	144	60,311	85.84	45	4.50	3.26	38.63	(0.03)	0.01	41.86
II	IRRIGATION & AGRICULTURE SERVICE (IAS)				25	4.80					
III	COMMERCIAL SERVICES (CS)	10,011	63,354	77.35			1.26	51.83	(1.10)	0.53	52.51
	All Units	10,011	63,354	77.35	105	6.70	1.26	51.83	(1.10)	0.53	52.51
IV	INDUSTRIAL SERVICES	134	4,26,504	1,990.88			157	1,344	(78)	0.10	1,423
	Low Tension Industrial Service				110	5.35					-
	High Tension Industrial Service	134	4,26,504	1,990.88	340	6.75	157	1,344	(77.70)	0.10	1,423
٧	INSTITUTIONAL SERVICES	399.00	88,575	433.39			0.01	222.44	0.00	0.04	222.49
	Street Light	398.00	18,575	84.44	40	5.25	0.01	44.33	0.00	0.04	44.39
	Sale to JUSCO	1.00	70,000	348.95		5.10		178.10	-	-	178.10
	Railway Traction Services, Military Engineering Services and Other Distribution Licensees*(Except JUSCO)				375	6.40					
VI	TEMPORARY CONNECTIONS	114	129	1.12		8.15	0.01	0.92	0.01	0.00	0.93
VII	Sale in Exchange	-	-	25.09		4.00		10.04			10.04
	Total	47,774	8,38,801	2,838			162.53	1,767.28	(82.22)	1.76	1,849.35

4.12.2 The Petitioner requests Hon'ble Commission to kindly approve the revenue from sale of power of Rs. **1,849.35** Crs at proposed tariff in previous petition, as per above table for FY 2020-21.

4.13 Summarised ARR and Revenue gap/ (surplus) for FY 2020-21 (proposed tariff in previous petition)

4.13.1 The ARR and Revenue gap/ (surplus) for FY 2020-21 are presented in the table below.



Table 4-19: Summarised ARR and Revenue gap/ (surplus) at Existing Tariff for FY 2020-21

Particulars	Amount -
rai titulai s	Rs.Crs
Net Aggregate Revenue Requirement	1,677.27
Less: Revenue from Sale of Power @ Existing Tariff	1,849.35
Revenue Gap/ (Surplus) at Existing Tariff	(172.08)

4.13.2 The Hon'ble Commission is requested to kindly approve the ARR and the resultant revenue gap/ (surplus) of Rs. (172.08) Crs for FY 2020-21 which is based on existing tariff.

4.14 Wheeling and Supply ARR and Revenue gap/ (surplus) for FY 2020-21

4.14.1 The Hon'ble Commission has approved the allocation ratios in accordance with JSERC (Power Regulatory Accounting) Regulations, 2015. The allocation statement approved by the Hon'ble Commission is as under:

Table 4-20: Break up of Wheeling and Retail ARR

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%

4.14.2 In line with the cost allocation approved by the Hon'ble Commission in previous tariff orders, the segregated ARR for FY 2020-21 is summarised below:



Table 4-21: Wheeling & Retail ARR and Revenue Gap/ (Surplus) for FY 2020-21

	Summary of ARR for FY 2020-21 (Rs.Crs)								
			Wheelir	ng and Retai	ARR for FY	2020-21			
Sr No	Particulars	Estimates Approved in MYT Order dt 28.2.2017	Wheeling %	Retail %	Wheeling ARR (Rs.Crs)	Retail ARR (Rs.Crs)	Revised Estimates (Rs.Crs)		
1	Power Purchase Cost	1,507.02	-	1.00	-	1,493.31	1,493.31		
2	Employee Expenses	25.33	0.60	0.40	16.30	10.86	27.16		
3	A&G Expenses	25.24	0.50	0.50	15.23	15.23	30.46		
4	R&M Expenses	28.34	0.90	0.10	27.28	3.03	30.31		
5	Interest on Loan	7.45	0.90	0.10	8.30	0.92	9.23		
6	Finance Charges	-	0.10	0.90	0.12	0.12	0.30		
7	Interest on Working Capital	18.47	0.10	0.90	4.30	17.27	21.57		
8	Interest on Security Deposit	1.93	-	1.00	-	2.62	2.62		
9	Depreciation	35.51	0.90	0.10	29.01	3.22	32.23		
10	Return on Equity	25.38	0.90	0.10	31.59	3.51	35.10		
11	Gross Aggregate Revenue Requirement (1 to 10)	1,674.67			132.12	1,550.10	1,682.27		
12	Less: Non Tariff Income	5.86	0.10	0.90	0.50	4.50	5.00		
13	Aggregate Revenue Requirement (11-12)	1,668.81			131.62	1,545.60	1,677.27		
14	Less: Revenue from Sale of Power @ Existing Tariff	-	Wheeling ARR Ratio	Retail ARR Ratio	145.13	1,704.17	1,849.35		
15	Revenue Gap / (Surplus) (13-14)	-					(172.08)		
16	Average Cost of Supply (13/Sales)- Without Carrying cost on Gap/surplus	5.21					5.91		
17	Average Cost of Supply (13/Sales)-With Carrying cost on Gap/surplus						6.36		

- 4.14.3 The petitioner requests the Hon'ble Commission to approve the Segregated Aggregate Revenue Requirement for Wheeling and Retail business as per above table.
- 4.14.4 The details of cumulative revenue gap/ (surplus), the tariff philosophy and treatment for revenue gap/ (surplus) is discussed in subsequent chapters.



Chapter 5. Cumulative Gap/ (Surplus) till FY 2020-21

5.1 Cumulative Gap / (Surplus) till FY 2020-21

5.1.1 The revenue gap/ (surplus) as approved by Hon'ble Commission till FY 2015-16 (final true-up) in T.O. dated 18.05.2018 is taken as base for subsequent years. The carrying cost has been taken based on methodology adopted and approved by Hon'ble Commission in previous tariff orders i.e. Interest equivalent to prevailing SBI Base rate as on 1st April + 350 basis point.

Table 5-1: Cumulative Revenue gap/ (surplus) as per T.O. dated 18.05.2018

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 1 st 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

5.1.2 The Hon'ble Commission in review order dated 11.09.2018 revised O&M expenses for FY 2016-17 & FY 2017-18 and hence there was change in resultant revenue gap/ (surplus) for these years. The relevant extract from review order is given below which is duly considered by Petitioner in the cumulative revenue gap/ (surplus) computed in subsequent table.



Table 5-2: Revised Revenue Gap / (surplus) for FY 2016-17 as per Review Order dated 11.09.2018

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

Par	ticulars	Approved in Order dated 18.05.2018	Approved Now
1	Power Purchase Cost	1227.67	1227.67
2	Operation & Maintenance Expenses	68.84	70.93
3	Depreciation	33.80	33.80
4	Interest and Finance Charges	34.97	35.00
a	Interest on Loan	15.09	15.09
b	Interest on Security Deposits	1.26	1.26
C	Interest on Working Capital	18.62	18.65
5	Sub Total (1 to 4)	1365.28	1367.39
6	Add: Return on Equity	21.83	21.83
7	Less: Non-Tariff Income	5.86	5.86
9	Aggregate Revenue Requirement (5+6-7+8)	1381.25	1383.37
10	Less: Revenue from Sale of Power @ Existing Tariff	1528.09	1528.09
11	Revenue Gap / (Surplus) (9-10)	(146.83)	(144.72)

Table 5-3: Revised Revenue Gap / (surplus) for FY 2017-18 as per Review Order dated 11.09.2018

Revised Table 47 of the Order: Summary of ARR and Revenue Gap for FY 2017-18 (Rs Cr)

	Particulars	Approved in Order dated 18.05.2018	Approved Now
1	Power Purchase Cost	1265.55	1265.55
2	Operation & Maintenance Expenses	70.41	72.56
3	Depreciation	29.83	29.83
4	Interest and Finance Charges	28.51	28.58
a	Interest on Loan	11.87	11.87
b	Interest on Security Deposits	1.85	1.85
C	Interest on Working Capital	14.80	14.86
5	Sub Total (1 to 4)	1394.30	1396.52
6	Add: Return on Equity	22.18	22.18
7	Less: Non-Tariff Income	5.86	5.86
9	Aggregate Revenue Requirement (5+6-7+8)	1410.62	1412.84
10	Less: Revenue from Sale of Power @ Existing Tariff	1872.52	1872.52
11	Revenue Gap / (Surplus) (9-10)	(461.90)	(459.67)

5.1.3 Based on the submissions for FY 2016-17 and FY 2017-18 in the previous petition (filed on 28.5.2019) and FY 2018-19, FY 2019-20 and FY 2020-21 in the current petition the cumulative revenue gap/ (surplus) till FY 2020-21 based on Existing Tariff is presented in the table below:



Table 5-4: Cumulative Revenue gap/ (surplus) till FY 2020-21-proposed Tariff with previous petition

	Cumulative Revenu	ie Gap / (Sui	rplus) till FY 2	2020-21 (Rs.Cr	ores)- Existing Ta	riff	
Sr.	Consumer Categories	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
No.		Trued-up	Audited/	Audited/	Audited/ True-	Revised	Revised
			True-up	True-up	up	Estimates	Projections (Existing)
1	Opening Revenue Gap/ (Surplus) as on 1st April of FY - A	1,108.84	1,269.38	1,323.49	1,157.84	1,193.22	1,121.31
2	Revenue Gap/ (Surplus) created	(2.81)	(101.85)	(312.71)	(99.79)	(207.54)	(172.08)
	during the year incl. Incentives/ Penalty on O&M exps - B						
3	Rate of Interest (as per prevailing SBI	14.75%	12.80%	12.60%	12.20%	12.45%	12.45%
	Base Rate + 350 Bps) - C						
4	Carrying Cost on Opening Balance D = A x C	163.55	162.48	166.76	141.26	148.56	139.60
5	Carrying Cost on Additional Gap /	(0.21)	(6.52)	(19.70)	(6.09)	(12.92)	(10.71)
	(surplus) created during year E = B X C x 6/12 months						
6	Total Carrying Cost F = D + E	163.35	155.96	147.06	135.17	135.64	128.89
7	Total Gap/ (Surplus) incl. Carrying Cost G = A + B + F	1,269.38	1,323.49	1,157.84	1,193.22	1,121.31	1,078.12
0							
8	Status of Revenue Gap / (Surplus) recognition/ approval by Commission	Approved	Submitted	Submitted	Proposed	Proposed	Proposed



Chapter 6. Tariff Philosophy

6.1 Tariff Philosophy

- 6.1.1 Based on the submissions for FY 2016-17 and FY 2017-18 in the previous petition (filed on 28.5.2019) and FY 2018-19, FY 2019-20 and FY 2020-21 in the current petition the cumulative revenue gap/ (surplus) till FY 2020-21 based on proposed tariff in previous petition is **Rs. 1,078.12 Crs** as explained in earlier chapter.
- 6.1.2 **Recovery in 3 years:** The petitioner would like to provide following considerations for meeting the revenue gap on partial basis as part of tariff philosophy.
- 6.1.2.1 The Petitioner intends to liquidate the Cumulative gap in the next three financial years; thus, a tariff increase is proposed by the Petitioner for FY 2020-21.
- 6.1.2.2 It is estimated that Tariff increase in the range of **20%-25%** would be required to liquidate the entire cumulative gap till date along with subsequent year carrying cost over a period of next 3 financial years. However, increasing tariff to this extent would mean tariff shock to the consumers and hence it needs to be phased out.
- 6.1.2.3 The Petitioner proposes an increase of ~4.7% (6.92 / 6.61) over FY20 expected Average Billing Rate and ~10.4% (6.92 / 6.26) over FY19 Avg. Billing Rate. Approx. 4% to 5% increase in energy charge is being proposed in all category except Domestic Category, where the increase in energy charge is between 10% 24%.
- 6.1.3 **Tariff Rationalisation:** The proposed tariff is based on the following tariff rationalisation.
- 6.1.3.1 Increase in domestic category, since their existing average tariffs are highly cross-subsidized and thus, are much less than the average cost of supply. The current Tariff in Domestic category is ineffective in bringing out efficient use of electricity, so bringing the Domestic Category Tariff closer to Average cost of Supply is proposed by the Petitioner.
- 6.1.3.2 However, considering the interest of poor and weaker section of society only marginal increase is proposed for the consumption slab 0-100 Units.
- 6.1.3.3 The Petitioner submits that although, there is no consumer in the Irrigation and Agriculture Services category, the Tariff in that category is proposed to be brought closer to the average cost of supply of the Petitioner.



- 6.1.3.4 The petitioner suggests that for the purpose of tariff alignment, in line with National Tariff Policy, the fixed part of tariff needs to be revised upward to make it more realistic & closer to Average Cost of supply.
- 6.1.3.5 Hon'ble Commission in the past has advised the Licensee to introduce KVAH based Tariff for HTIS Category which will motivate industrial customers to maintain higher power factor as the benefit of higher power factor will accrue in form of reduced KVAH consumption. So, as per the study conducted by the Licensee, if KVAH based billing is introduced, there is a need to adjust KVAH rate downward by approx. 3%-3.5% as compared to KWh based rate. Accordingly, for HTIS category, KVAH based rate is also proposed.
- 6.1.3.6 Accordingly, tariff increase/ rationalisation has been proposed for different consumer categories.
- 6.1.3.7 As per the existing supply code regulation in the State all new consumer connections are to be provided with appropriate meter (Ref. Clause 5.4.3(e) of JSERC Electricity Supply Code, Regulations, 2015). In view of the same no tariff is proposed under the unmetered category.
- 6.1.3.8 Under HT category, penalty for exceeding Contract Demand continuously for three months in a year is proposed to be levied at 200% in place of 150% existing.
- 6.1.3.9 Thus, the tariff increase has been proposed to ensure that the cumulative revenue gap for the petitioner is further reduced by the end of FY2020-21. Post implementation of proposed tariff, the cumulative revenue gap as on 31st March 2021 will be Rs. 957.35 **957.50** Crs. The cumulative revenue gap/ (surplus) till FY 2020-21 based on Proposed Tariff is presented in the table below:



recognition/ approval by Commission

					-	
Cumulative Revenue Gap /	(Surplus) til	I FY 2020-2:	1 (Rs.Crores)	- Proposed	Tariff	
Particulars		FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Opening Revenue Gap/ (Surplus) as on 1st April of FY	А	1269.38	1323.49	1157.84	1193.22	1121.31
Revenue Gap/ (Surplus) created during the year incl. Incentives/ Penalty on O&M exps	В	(101.76)	(312.88)	(99.79)	(207.54)	(285.78)
Add/ Less: Incentives/ Penalty on T&D loss	С	(0.09)	0.17	0.00	0.00	0.00
Total additions during the year	D=B+C	-101.85	(312.71)	(99.79)	(207.54)	(285.78)
Rate of Interest (as per prevailing SBI Base Rate + 350 Bps)	E	12.80%	12.60%	12.20%	12.45%	12.45%
Carrying Cost on Opening Balance	F=A*E	162.48	166.76	141.26	148.56	139.60
Carrying Cost on Additional Gap / (surplus)	G=E*D	(6.52)	(19.70)	(6.09)	(12.92)	(17.79)
Total Carrying Cost		155.96	147.06	135.17	135.64	121.81
Total Gap/ (Surplus) incl. Carrying Cost	I=A+D+H	1323.49	1157.84	1193.22	1121.31	957.35
Status of Revenue Gap / (Surplus)		Submitted	Submitted	Proposed	Proposed	Proposed

Table 6-1: Cumulative Revenue gap/ (surplus) till FY 2020-21-Proposed Tariff

- 6.1.4 As can be seen that additional revenue from proposed tariff is Rs. **113.70** Crs (**Rs. 1,963.05** Crs **Rs. 1,849.35** Crs); however, it is providing relief in cumulative gap by Rs. **120.77** Crs (Rs. 1,078.12 **1,078.12** Crs Rs. **957.50** Crs) thereby reducing the carrying cost on gap / (surplus) expected to be created during the year.
- 6.1.5 In schedule for Miscellaneous Charges, no changes have been proposed except Disconnection/Reconnection. TSL submits that it is due to some consumers, majority of other consumers of the network get affected and the existing cost of disconnection/reconnection is very low. Therefore, the Petitioner proposes to increase the said charges to reduce cause of disconnection/reconnection.
- 6.1.6 Thus, the Tariff proposed by the Petitioner for FY 2020-21 (along with the existing Approved Tariff & Tariff proposed in previous petition) is presented in the Table below:



Table 6-2: Proposed Tariff for FY 2020-21

Consumer Category	Fixed Charges		g Tariff 3.5.2018)	Proposed Tariff- Petition		•	osed Tariff ow	
		Fixed	Energy	Fixed Charges	Energy	Fixed	Energy	
		Charges	Charges		Charges	Charges	Charges	
	Unit	Rate	(Rs./kWh)	Rate	(Rs./kWh)	Rate	(Rs./kWh)	
DOMESTIC SERVICE								
DS LT								
0-100 units	Rs./Conn/ Month	13	2.60	15	2.80	30	3.00	
Above 100 units	Rs./Conn/ Month	30	4.55	35	4.85	70	6.00	
DS HT	Rs/KVA/ Month	40	4.20	45	4.50	90	5.50	
IRRIGATION & AGRICULTURE	Rs./HP/ Month	20	4.50	25	4.80	50	6.00	
SERVICE (IAS)								
COMMERCIAL SERVICES (CS)								
All Units	Rs./Conn/ Month	100	6.25	105	6.70	210	7.00	
INDUSTRIAL SERVICES								
Low Tension Industrial Service	Rs./KVA/ Month	100	5.00	110	5.35	165	5.60	
High Tension Industrial Service*	Rs./KVA/ Month	320	6.30	340	6.75	440	7.00	
nigh rension mausthar service	Rs./KVAH/ Month		kVAH B	Based Tariff		440	6.79	
INSTITUTIONAL SERVICES								
Street Light/Utilities	Rs./Conn/ Month	35	4.90	40	5.25	80	5.50	
Sale to JUSCO		Wtd. Average Power cost						
Railway Traction Services, Military	Rs/KVA/ Month	350	6.00	375	6.40	440	6.70	
Engineering Services and Other								
Distribution Licensees* (Excluding								
JUSCO)								

^{*}Rebate on Energy Charges: - Voltage Rebate- 3% for 33 KV voltage, 5% FOR 132 KV; Load Factor Rebate: 7.5% for LF between 60%-70% and 10% for LF above 70%, Prompt Payment rebate- 0.5%; Effective energy rate for LF 60%-70% - INR 6.21/ Unit. For HTIS- KVAH based Tariff is also being proposed at Rs. 6.79/KVAH/Month.



6.2 Revenue from Sale of Power at Proposed Tariff

- 6.2.1 Based on above philosophy & proposal, the petitioner hereby submits revenue from sale of power at proposed tariff for FY 2020-21 as given in the table below. As mentioned earlier, the tariffs proposed in previous petition may get approved and be effective from 1st February 2020 onwards. It is further expected that current petition being filed in December 2019, may get processed by 4-5 months and new tariffs would be effective from 1st June 2020. Accordingly, it is assumed that tariffs proposed in earlier petition (28.5.2019) would be applicable for 2 months of April and May 2020 and new tariffs proposed in the current petition would be approved as proposed and will be effective from 1st June 2020.
- 6.2.2 Accordingly, petitioner has computed the revenue from sale of power for different periods and also presented in consolidated manner.



Table 6-3: Revenue from Sale of Power FY 2020-21 (April 2020 to May 2020)

	Revenue from Sale of Power for FY 2020-21 at Proposed Tariff (Tariff as Proposed in previous petition-Till May FY 2020)													
S.No.	Consumer Category	No. of Consumers	Contract Demand	Sales	Fixed/ Demand Charge	Energy Charge	Revenue from Fixed Charge	Revenue from Energy Charge	Penalty/ Rebate etc	Meter Rent	Total Revenue			
		Nos	kW/BHP/ kVA	MUs	(Rs/Conn/month or Rs/kW/ month or Rs/kVA/ month)	Rs/kWh	Rs. Crores	Rs. Crores	Rs. Crores	Rs. Crores	Rs.Crores			
1	2	3	4	5	6	7	8	9	10		11			
ı	DOMESTIC SERVICE	37,116	2,60,239	51.69			0.77	23.04	-0.57	0.18	23.42			
	DS LT	36,972	1,99,928	37.39			0.23	16.60	-0.57	0.18	16.44			
	0-100 units	7,394	39,986	7.48	15	2.80	0.02	2.09	-0.11	0.04	2.04			
	Above 100 units	29,578	1,59,943	29.91	35	4.85	0.21	14.51	-0.45	0.14	14.40			
	DS HT	144	60,311	14.31	45	4.50	0.54	6.44	-0.01	0.00	6.98			
	IRRIGATION & AGRICULTURE SERVICE (IAS)	-	-	-	25	4.80								
III	COMMERCIAL SERVICES (CS)	10,011	63,354	12.89			0.21	8.64	-0.18	0.09	8.75			
	All Units	10,011	63,354	12.89	105	6.70	0.21	8.64	-0.18	0.09	8.75			
IV	INDUSTRIAL SERVICES	134	4,26,504	331.81			26.10	223.97	-12.95	0.02	237.14			
	Low Tension Industrial Service	-	-	-	110	5.35					-			
	High Tension Industrial Service	134	4,26,504	331.81	340	6.75	26.10	223.97	-12.95	0.02	237.14			
٧	INSTITUTIONAL SERVICES	399	88,575	72.23			0.00	37.07	0.00	0.01	37.08			
	Street Light	398	18,575	14.07	40	5.25	0.00	7.39	0.00	0.01	7.40			
	Sale to JUSCO	1	70,000	58.16		5.10		29.68	-	-	29.68			
	Railway Traction Services, Military Engineering Services and Other Distribution	-	-	-	375	6.40			-	-				
	Licensees*(Except JUSCO)													
	TEMPORARY CONNECTIONS	114	129	0.19		8.15	0.00	0.15	0.00	0.00	0.16			
V1	TELLI SIGNI CONTECTIONS	114	123	0.19		0.13	0.00	0.13	0.00	0.00	0.10			
VII	Sale in Exchange	-	-	4.18		4.00		1.67	-	-	1.67			
	Total	47,774	8,38,801	473.00			27.09	294.55	-13.70	0.29	308.22			



Table 6-4: Revenue from Sale of Power FY 2020-21 (June 2020 to March 2021)

	Revenue from Sale				ariff (Tariff as Prop	<u> </u>				rch, 2021)	
S.No.	Consumer Category	No. of Consumers	Contract Demand	Sales	Fixed/ Demand Charge	Energy Charge	Revenue from Fixed Charge	Revenue from Energy Charge	Penalty/ Rebate etc	Meter Rent	Total Revenue
		Nos	kW/BHP/ kVA	MUs	(Rs/Conn/month or Rs/kW/ month or Rs/kVA/ month)	Rs/kWh	Rs. Crores	Rs. Crores	Rs. Crores	Rs. Crores	Rs.Crores
1	2	3	4	5	6	7	8	9	10		11
I	DOMESTIC SERVICE	37,116	2,60,239	258.46			7.72	140.28	(2.86)	0.91	146.06
	DS LT	36,972	1,99,928	186.93			2.29	100.94	(2.83)	0.90	101.31
	0-100 units	7,394	39,986	37.39	30.00	3.00	0.22	11.22	(0.57)	0.18	11.05
	Above 100 units	29,578	1,59,943	149.54	70.00	6.00	2.07	89.72	(2.26)	0.72	90.25
	DS HT	144	60,311	71.54	90.00	5.50	5.43	39.34	(0.03)	0.01	44.75
	IRRIGATION & AGRICULTURE SERVICE (IAS)	-	-	-	50.00	6.00			-	-	
III	COMMERCIAL SERVICES (CS)	10,011	63,354	64.46	0.00	0.00	2.10	45.12	(0.92)	0.44	46.75
	All Units	10,011	63,354	64.46	210.00	7.00	2.10	45.12	(0.92)	0.44	46.75
IV	INDUSTRIAL SERVICES	134	4,26,504	1,659.06	0.00	0.00	169	1,161	(64.75)	0.09	1,266
	Low Tension Industrial Service	-	-	-	165.00	5.60			-	-	-
	High Tension Industrial Service	134	4,26,504	1,659.06	440.00	7.00	169	1,161	(64.75)	0.09	1,266
٧	INSTITUTIONAL SERVICES	399	88,575	361.16	0.00	0.00	0.02	187.12	0.00	0.03	187.18
	Street Light	398	18,575	70.37	80.00	5.50	0.02	38.70	0.00	0.03	38.76
	Sale to JUSCO	1	70,000	290.79	0.00	5.10		148.42	-	-	148.42
	Railway Traction Services, Military Engineering Services and Other Distribution Licensees*(Except JUSCO)	-	-	-	440.00	6.70			-	-	
VI	TEMPORARY CONNECTIONS	114	129	0.94	1.5 times of the applicable fixed charges	9.44	0.01	0.88	0.00	0.00	0.90
VII	Sale in Exchange	-	-	20.91	#REF!	4.00		8.36	-	-	8.36
	Total	47,774	8,38,801	2,365.00			178.75	1,543.12	(68.52)	1.47	1,654.82



Table 6-5: Revenue from Sale of Power FY 2020-21 (April 2020 to March 2021)

					2020-21 (April 2020 2020-21 at Proposed		,		
S. No.	Consumer Category	No. of Consumers	Contract Demand	Sales	Revenue from Fixed Charge	Revenue from Energy Charge	Penalty/ Rebate	Meter Rent	Total Revenue
		Nos	kW/BHP/ kVA	MUs	Rs. Crores	Rs. Crores	Rs. Crores	Rs. Crores	Rs.Crores
1	2	3	4	5	8	9	10		11
ı	DOMESTIC SERVICE	37,116	2,60,239	310.15	8.49	163.32	-3.43	1.09	169.48
	DS LT	36,972	1,99,928	224.31	2.52	117.54	-3.39	1.08	117.75
	0-100 units	7,394	39,986	44.86	0.24	13.31	-0.68	0.22	13.09
	Above 100 units	29,578	1,59,943	179.45	2.28	104.23	-2.71	0.87	104.66
	DS HT	144	60,311	85.84	5.97	45.78	-0.03	0.01	51.73
II	IRRIGATION & AGRICULTURE SERVICE (IAS)	-	-	-	•	-	1	-	-
III	COMMERCIAL SERVICES (CS)	10,011	63,354	77.35	2.31	53.76	-1.10	0.53	55.50
	All Units	10,011	63,354	77.35	2.31	53.76	-1.10	0.53	55.50
IV	INDUSTRIAL SERVICES	134	4,26,504	1,990.88	195.00	1,385.32	-77.70	0.10	1,502.72
	Low Tension Industrial Service	-	-	-	-	-	-	-	-
	High Tension Industrial Service	134	4,26,504	1,990.88	195.00	1,385.32	-77.70	0.10	1,502.72
٧	INSTITUTIONAL SERVICES	399	88,575	433.39	0.03	224.20	0.00	0.04	224.26
	Street Light	398	18,575	84.44	0.03	46.09	0.00	0.04	46.16
	Sale to JUSCO	1	70,000	348.95	-	178.10	-	-	178.10
	Railway Traction Services, Military Engineering Services and Other Distribution Licensees*(Except JUSCO)	-	-	-	-	-	-	-	-
VI	TEMPORARY CONNECTIONS	114	129	1.12	0.01	1.04	0.01	0.00	1.05
VII	Sale in Exchange	-	-	25.09	-	10.04	-	-	10.04
	Total	47,774	8,38,801	2,838.00	205.84	1,837.67	-82.22	1.76	1,963.05



Chapter 7. Tariff Proposal

7.1 Retail Tariff Proposal

7.1.1 This chapter discusses the approach and philosophy for the proposed Tariff.

7.2 Tariff Philosophy and Proposed tariff Schedule

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

7.3 Domestic Service

7.3.1 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 recognized charitable institutions, where no rental or fees are charged. 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.

7.3.2 Category of Services:

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

<u>Domestic Service – Urban:</u> For Urban areas covered by Nagar Nigam, Nagar Parishad, Nagar Panchayat.

<u>Domestic service – HT:</u> 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.

7.3.3 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



7.3.4 **Proposed Tariff:**

Consumer	Ex	isting tar	iff	Proposed tarif		Proposed tariff- Current Petition	
Category	Fixed Char	ges	Energy Charges	Fixed Charges	Energy Charges	Fixed Charges	Energy Charges
Domestic	Unit	Rate	Rate (₹/kWh)	Rate	Rate (₹/kWh)	Rate	Rate (₹/kWh)
0-100 units	₹/Conn/ Month	13	2.60	15	2.80	30	3.00
Above 100 units	₹/Conn/ Month	30	4.55	35	4.85	70	6.00
нт	₹/kVA/ Month	40	4.20	45	4.50	90	5.50

- 7.3.5 **Delayed Payment Surcharge:** In accordance with Clause IV of Terms & Conditions of Supply as provided in Paragraph 7.14 of the Present Tariff Petition.
- 7.3.6 **Prompt Payment Rebate/ Rebate for online payment:** In accordance with Clause VII and Clause VIII of Terms & Conditions of Supply as provided in Paragraph 7.14 of the Present Tariff Petition.



7.4 Irrigation & Agriculture Service (las)

7.4.1 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.

7.4.2 Service Character:

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

7.4.3 **Proposed Tariff:**

Consumer Category	Exi	sting tari	ff	Propose Previous	ed tariff- Petition	Proposed tariff- Current Petition		
	Fixed Charg	ges	Energy Charges	Fixed Charges	Energy Charges	Fixed Charges	Energy Charges	
	Unit	Rate	Rate (₹/kWh)	Rate	Rate (₹/kWh)	Rate	Rate (₹/kWh)	
All units	Rs./HP/Month	20	4.50	25	4.80	50	6.00	

- 7.4.4 **Delayed Payment Surcharge:** In accordance with Clause IV of Terms & Conditions of Supply as provided in Paragraph 7.14 of the Present Tariff Petition.
- 7.4.5 **Power Factor Penalty/Rebate:** In accordance with Clause II of Terms & Conditions of Supply as provided in Paragraph 7.14 of the Present Tariff Petition.
- 7.4.6 **Prompt Payment Rebate/ Rebate for online payment:** In accordance with Clause VII and Clause VIII of Terms & Conditions of Supply as provided in Paragraph 7.14 of the Present Tariff Petition.



7.5 Commercial Services (CS)

7.5.1 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.

7.5.2 Service Category:

- <u>Commercial Service Rural:</u> For Rural Areas not covered by area indicated for CS- Urban.
- <u>Commercial Service Urban:</u> For Urban areas covered by Nagar Nigam, Nagar Parishad,
 Nagar Panchayat.

7.5.3 Service Character:

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

7.5.4 **Proposed Tariff:**

Consumer	Existing tariff			•	tariff-Previous Petition	Proposed tariff- Current Petition	
Category	Fixed Charges Charg			Fixed Energy Charges Charges		Fixed Charges	Energy Charges
	Unit	Rate	Rate (₹/kWh)	Rate	Rate (₹/kWh)	Rate	Rate (₹/kWh)
All units	Rs. /Connection/ Month	100	6.25	105	6.70	210	7.00



- 7.5.5 **Delayed Payment Surcharge:** In accordance with Clause IV of Terms & Conditions of Supply as provided in Paragraph 7.14 of the Present Tariff Petition.
- 7.5.6 **Installation of Shunt Capacitors:** In accordance with Clause II of Terms & Conditions of Supply as provided in Paragraph 7.14 of the Present Tariff Petition.
- 7.5.7 **Prompt Payment Rebate/ Rebate for online payment:** In accordance with Clause VII and Clause VIII of Terms & Conditions of Supply as provided in Paragraph 7.14 of the Present Tariff Petition.



7.7 Industrial Services

7.7.1 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.

7.7.2 Service Character:

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

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

7.7.3 **Proposed Tariff:**

Consumor	Exi	sting tari	ff	Propose Previous	ed tariff- Petition	Proposed tariff- Current Petition			
Consumer Category	Fixed Charges Energy Charges			Fixed Charges	Energy Charges	Fixed Charges	Energy/K\	osed /AH based rges	
	Unit Rate		Rate (₹/kWh)	Rate	Rate (₹/kWh)	Rate	Rate (₹/kWh)	Rate (₹/KVAH)	
LTIS	Rs./kVA/ Month	100	5.00	110	5.35	165	5.60		
HTIS	Rs./kVA/ Month	320	6.30	340	6.75	440	7.00	6.79	

- 7.7.4 The Hon'ble Commission is requested to approve either kWh or KVAH based charges for HTIS consumers.
- 7.7.5 **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.
- 7.7.6 **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 Paragraph 7.14 of the Present Tariff Petition.
- 7.7.7 **Load Factor Rebate for HTIS:** In accordance with Clause IX of Terms & Conditions of Supply as provided in Paragraph 7.14 of the Present Tariff Petition.
- 7.7.8 **Voltage Rebate for HTIS:** In accordance with Clause VI of Terms & Conditions of Supply as provided in Paragraph 7.14 of the Present Tariff Petition.
- 7.7.9 **Delayed Payment Surcharge:** In accordance with Clause IV of Terms & Conditions of Supply as provided in Paragraph 7.14 of the Present Tariff Petition.
- 7.7.10 **Power Factor Penalty/Rebate for LTIS:** In accordance with Clause II of Terms & Conditions of Supply as provided in Paragraph 7.14 of the Present Tariff Petition.
- 7.7.11 **Installation of Shunt Capacitors for LTIS:** In accordance with Clause II of Terms & Conditions of Supply as provided in Paragraph 7.14 of the Present Tariff Petition.
 - Load factor rebate and power factor rebate shall not be allowed to consumers with outstanding arrears.
- 7.7.12 **Prompt Payment Rebate/ Rebate for online payment:** In accordance with Clause VII and Clause VIII of Terms & Conditions of Supply as provided in Paragraph 7.14 of the Present Tariff Petition.



7.9 Institutional Services

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

7.9.1 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)

7.9.2 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

7.9.3 **Proposed Tariff:**

	Ex	ixisting tariff		Proposed tariff- Previous Petition		Proposed tariff- Current Petition	
Consumer Category	Fixed Ch	arges	Energy Charges	Fixed Charges	Energy Charges	Fixed Charges	Energy Charges
	Unit	Rate	Rate (₹/kWh)	Rate	Rate (₹/kWh)	Rate	Rate (₹/kWh)
Street Light	Rs./Conn / Month	35	4.90	40	5.25	80	5.50
Railway Traction Services, Military Engineering Services and Other Distribution Licensees* (Excluding JUSCO)	Rs/KVA/ Month	350	6.00	375	6.40	440	6.70
JUSCO		We	eighted Avera	age Power F	Purchase Cos	t for FY 202	0-21

^{*}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 Paragraph 7.14 of the Present Tariff Petition.

7.9.4 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.

7.9.5 **Delayed Payment Surcharge:** In accordance with Clause IV of Terms & Conditions of Supply as provided in Paragraph 7.14 of the Present Tariff Petition.

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



7.11 Temporary Connections

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

7.11.2 Proposed Tariff:

Consumer Category		posed in Previous petition	Proposed tariff		
	Fixed Charges Energy Charges		Fixed Charges	Energy Charges	
		Rate(₹/kWh)		Rate(₹/kWh)	
	1.5 times of	1.5 times of	1.5 times of	1.5 times of	
All units	the applicable	the applicable	the applicable	the applicable	
	fixed charges	energy charges	fixed charges	energy charges	



7.13 Public Charging Infrastructure for Electric Vehicles (EV):

Government of India have undertaken multiple initiatives to promote manufacturing and adoption of electric vehicles in India. With support of the Government, electric vehicles have started penetrating the Indian market. However, availability of adequate charging stations is one of the key requirements for accelerated adoption of electric vehicles in India. Thus, it is proposed that TSL would lay down an enabling infrastructure for electric vehicles by setting up **5 Public Charging Stations** near its sub-station area in the Jamshedpur License Area as a promotional measure.

Also, as per the revised guidelines & standards for charging infrastructure for electric vehicles issues by Ministry of Power on 1st October, 2019:

- 1. Private charging at residences/offices shall be permitted. Distribution companies may facilitate the same.
- 2. Setting up of Public Charging Stations (PCS) shall be a de-licensed activity and any individual/entity is free to set up public charging stations provided that, such stations meet the technical, safety as well as performance standards and protocols laid down in the revised guidelines as well as any further norms/ standards/ specifications laid down by Ministry of Power and Central Electricity Authority (CEA) from time to time
 - a. Any person seeking to set up a Public Charging Station may apply for connectivity and he shall be provided connectivity on priority by the Distribution Company licensee to supply power in the area
 - b. Any Charging Station/ Chain of Charging Stations may also obtain electricity from any generation company through open access
 - c. For these guidelines, Electric Vehicle Supply Equipment (EVSE) shall mean an element in EV infrastructure that supplies electric energy for recharging the electric vehicles

Thus, the petitioner requests the Commission to create a separate tariff category for public electric vehicle charging stations.

The Petitioner expects to commission (capex and capitalization) the Public Electric Vehicle Charging Stations by FY 2020-21. Thus, it requests the Hon'ble Commission to consider the additional Capital Expenditure and Capitalization for setting up the Public EV Charging Stations in FY 2020-21 to the tune of Rs.2.50 Crs (apprx Rs.50 Lakhs per station). Since the capex and capitalization are not part of the original MYT plan, the petitioner is claiming this separately and requests Hon'ble Commission to approve the same along with the subsequent impact on Gross Fixed Assets balance, Depreciation, Interest on Loan, Return of Equity etc.

The petitioner proposes the below mentioned Tariff for FY 2020-21 only and would request the Commission to revisit and decide the Tariff for the category for future years later based on the progress and response from various stakeholders during implementation of the tariff.



For reference, the tariffs approved by various Commission in other States are provided in table below.

Name of State/ Utility	Latest Applicable Tariff Order	Applicable Consumer Category	Applicability Clause if separate category	Fixed Charges (Rs)	Energy Charges (Rs/kWh)
JBVNL /	Case no.8	Commercial	Part of Commercial	Rural –	Rural –
Ranchi	of 2018	Services	category	Rs/Conn/month	Rs.6.00/kWh
	dated			– Rs.40	
	28.02.2019				Urban –
				Urban –	Rs.6.25/kWh
				Rs/Conn/month	
				– Rs.150	
Chandigarh	Case	Electric	This tariff schedule shall	Rs/kW/month –	Rs.4.00/kWh
/ Electricity	no.267 of	Vehicle	apply to consumers that	Rs.100	
Department	2018 dated	Charging	have set up Public		
	20.05.2019	Station	Charging Stations (PCS)		
			in accordance with the		
			technical norms/		
			standards/specifications		
			laid down by the		
			Ministry of Power, Gol		
			and Central Electricity		
			Authority (CEA) from		
			time to time.		
			The tariff for domestic		
			consumption shall be		
			applicable for domestic		
			charging (LT/HT).		
MSEDCL	Case	LT - Electric	This Tariff category is	Demand	Rs.1.30/kWh
	no.195 of	Vehicle	applicable for Electric	Charge:	
	2017 dated	Charging	Vehicle Charging	Rs.70/kVA/	
	12.09.2018	Station	Station.	Month	
			In case the consumer		
			uses the electricity	Wheeling	
			supply for charging his	Charge:	
			own electric vehicle at	Rs.4.70/kWh	
		HT - Electric	his premises, the tariff	Demand	33kV -
		Vehicle	applicable shall be as per	Charge:	Rs.5.85/kWh
		Charging	the category of such	Rs.70/kVA	
		Station	premises.	Month	



Name of State/ Utility	Latest Applicable	Applicable Consumer	Applicability Clause if separate category	Fixed Charges (Rs)	Energy Charges (Rs/kWh)
State, Stiney	Tariff Order	Category	Separate category		(NS) KVVII)
			Electricity consumption		22kV -
			for other facilities at	Wheeling	Rs.5.62/kWh
			Charging Station such as	Charges:	
			restaurant, rest rooms,	33kV - Rs.0.15/kWh	11kV -
			convenience stores, etc.,	22kV - Rs.0.38/kWh 11kV - Rs.0.78/kWh	Rs.5.22/kWh
			shall be charged at tariff	1100 1000707001	
			applicable to		
			Commercial Category.		
Torrent -	Case	LT - Electric	This tariff is applicable to	Rs.25 / Month/	Rs.4.10/kWh
Ahmedabad	no.1764 of	Vehicle	consumers who use	Installation	
	2018 dated	Charging	electricity EXCLUSIVELY		
	24.4.2019	Station	for electric vehicle		
			charging installations.		
			Other consumers can		
			use their regular		
			electricity supply for		
			charging electric vehicle		
			under		
			same regular category		
			i.e. RGP, NRGP, LTMD		
			etc.		D 4 00 / 114
		HT - Electric	This tariff is applicable to	Demand	Rs.4.00/kWh
		Vehicle	consumers who use	Charges: For	
		Charging	electricity EXCLUSIVELY	billing demand	
		Station	for electric vehicle	upto contract	
			charging installations.	demand – Rs.25	
			Other consumers can	/ kW/ Month	
			use their regular	In Excess of	
			electricity supply for charging electric vehicle	contract	
			under	demand – Rs.50	
			same regular category	/ kW/ Month	
			i.e. HTMD-1, HTMD-2,	, 100, 101011011	
			HTMD-3 & NTCT.		
Tata Power	C9/2019 dt	LT	CHARGING STATIONS	_	Rs.4.50/kWh
Delhi	31.7.2019	HT	FOR E-RICKSHAW/E-	-	Rs.4.25/kVAH



Name of State/ Utility	Latest Applicable Tariff Order	Applicable Consumer Category	Applicability Clause if separate category	Fixed Charges (Rs)	Energy Charges (Rs/kWh)
			VEHICLE ON SINGLE POINT DELIVERY		

7.13.1 Public Electric Vehicle Charging Stations:

This schedule shall apply for all consumers using electrical energy for Public Electric Vehicles Charging Stations.

Service Character:

Rural: AC 50 Cycles, Single phase at 230 Volts.

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

Proposed Tariff:

	Category	Fixed C	Energy Charges	
Category Unit		Unit	Rate	Rate(₹/kWh)
	All Units	Rs./conn./month	150	6.25

Delayed Payment Surcharge: In accordance with Clause IV of Terms & Conditions of Supply as provided in Paragraph 7.14 of the Present Tariff Petition.

Prompt Payment Rebate/ Rebate for online payment: In accordance with Clause VII and Clause VIII of Terms & Conditions of Supply as provided in Paragraph 7.14 of the Present Tariff Petition.

The Commission may further define terms and conditions as may deem appropriate.

Further, the petitioner proposes that the Tariff applicable for **Domestic Category consumption** shall be applicable for **Domestic Charging of Electric Vehicles.** (In line with the Ministry of Power revised Guidelines on 1st October, 2019)



7.15 Terms and Conditions of Supply

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

Clause I: Billing Demand

In case the consumer's actual recorded demand exceeds 110% of the contract demand, then demand charges shall be levied at penal rate, which will be 150% of applicable Demand charges on full exceeded demand.

In cases where contract demand is exceeded in more than 3 billing months in a financial year, penal rate will be 200% of applicable demand on months exceeding 3 months.

Clause II: Power factor Penalty/Rebate

Power Factor Penalty (Kwh based billing):

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



do 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 (Kwh based billing):

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.

Power factor rebate and Power factor penalty will not be applicable in case KVAH based billing is approved and implemented.

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.

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%

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 (subject to maximum of Rs 250) shall be allowed. This rebate shall be in addition to rebate @ 0.5% for prompt payment. 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:

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.

Dishonored Cheques

In the event of dishonored cheque for payment against a particular bill, the Licensee shall charge a minimum of Rs. 300 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.



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 Regulation 6.59 to 6.65 of the Distribution Tariff Regulations, 2010 and Regulation 6.60 to 6.68 of the Distribution Tariff Regulations, 2015 and as amended by the Hon'ble Commission from time to time

7.16 Schedule of General and Miscellaneous Charges

No	Purpose	Scale of Charges	Proposed Charges	Manner in which payment will be realized
1	Application fee			
	Agriculture	10	No change	
	Street light	20	No change	
	Domestic	15 (Kutir Jyoti) 20 (Others)	No change	Payable with energy
	Commercial	20	No change	bill
	Other LT categories	50	No change	
	HTS	100	No change	
	HTSS, EHTS, RTS	100	No change	
2	Revision of estimate when a co	nsumer intimates	changes in his r	equirement subsequent
	to the preparation of service co	nnection estimate	e based on his or	riginal application
	Agriculture	10	No change	
	Domestic	30	No change	Payable with energy
	Commercial	30	No change	bill
	Other LT categories	50	No change	J
	HT Supply	150	No change	
3	Testing of consumers Installatio	n		
	First test and inspection free of			
	charge but should any further			Payable with energy
	test and inspection be	100	No change	bill
	necessitated by faults in the			Jiii
	installation or by not			



No	Purpose	Scale of Charges	Proposed Charges	Manner in which payment will be realized
	compliance with the			
	conditions of supply for each			
	extra test or inspection			
4	Meter test when accuracy dispu	ited by consumer		
	Single phase	40	No change	If the meter is found defective within the
	Three phase	100	No change	meaning of the Indian
	Trivector of special type meter	650	No change	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.
5	Removing/ Refixing of meter			
	Single phase	50	No change	Payable with energy
	Three phase	100	No change	bill
	Trivector of special type meter	300	No change	Dill
6	Changing of meter /meter equipose consumer/fixing of sub meter	oment/fixing of su	ub meter on the	request of the
	Single phase	50	No change	Payable with energy
	Three phase	100	No change	bill
	Trivector of special type meter	300	No change	5
7	Resealing of meter when seals a	re found broken		
	Single phase	25	No change	Payable with energy
	Three phase	50	No change	bill
	Trivector of special type meter	100	No change	
8	Replacement of meter card, if	10	No change	Payable with energy
	lost or damaged by consumer			bill
9	Fuse call – Replacement			
	Board fuse due to fault of consumer	15	No change	Payable with energy bill
	Consumer fuse	15	No change	DIII
10	Disconnection/ Reconnection			



No	Purpose	Scale of Charges	Proposed Charges	Manner in which payment will be realized				
	Single phase	40	200	Payable in cash in advance along with the				
	Three phase	100	350	request by the				
	LT Industrial Supply	400	700	consumer. If the same				
	HT Supply	700	1000	consumer is reconnected/ disconnected within 12 months of the last disconnection/ reconnection, 50% will be added to the charges				
11	Security Deposit			As per clause 8.2.8 - 8.2.20 of the JSERC (Electricity Supply code) Regulations, 2015				
12	Meter Rent/Month (As per clause 8.2.8 – 8.2.20 of the JSERC (Electricity Supply code)							
	Regulations, 2015)			, , , , , , , , , , , , , , , , , , , ,				
	Domestic Single Phase/ Three phase	Rs. 20/50	No change	Payable with energy bill				
	Domestic- HT	Rs 50	No change					
	Commercial Single Phase/ Three phase	Rs 20/105	No change					
	LT meter with CT	Rs. 250	No change					
	HT	Rs 700	No change					



Chapter 8. Proposal for Open Access Charges

8.1 Proposal for Open Access Charges

- 8.1.1 As per the provisions of Electricity Act 2003 the distribution utilities are mandated with Universal Service Obligation to consumers. Nationwide, the present tariff structure has cross subsidization mechanism whereby the tariff for some category of consumers are lower than cost of supply to them.
- 8.1.2 Open Access consumers are required to bear transmission charges, transmission losses, wheeling charges, wheeling losses, reactive charges, cross subsidy surcharge, additional surcharge, standby charges etc as may be applicable depending upon the voltage level at which open access power is availed and the charges as may be approved by Hon'ble Commission from time to time.
- 8.1.3 The Petitioner submits that Section 2 (47) of the Electricity Act 2003 defines "Open Access', while Section 42 of the said Act inter—alia mandates the Distribution Licensee to provide Open Access to eligible consumers, subject to payment of "Cross Subsidy Surcharge", "Additional Surcharge" & other applicable charges.
- 8.1.4 Section 42 (2) of the Electricity Act 2003 provides following provisions wherein the powers have been given to State Commissions for specifying cross subsidy surcharge. The relevant part of the same is reproduced as under:

"The State Commission shall introduce open access in such phases and subject to such conditions, (including the cross subsidies, and other operational constraints) as may be specified within one year of the appointed date by it and in specifying the extent of open access in successive phases and in determining the charges for wheeling, it shall have due regard to all relevant factors including such cross subsidies, and other operational constraints:

Provided that such open access shall be allowed on payment of a surcharge in addition to the charges for wheeling as may be determined by the State Commission:

Provided further that such surcharge shall be utilised to meet the requirements of current level of cross subsidy within the area of supply of the distribution licensee:

Provided also that such surcharge and cross subsidies shall be progressively reduced in the manner as may be specified by the State Commission:



Provided also that such surcharge shall not be leviable in case open access is provided to a person who has established a captive generating plant for carrying the electricity to the destination of his own use:"

"to provide non-discriminatory open access to its transmission system for use by(i) any licensee or generating company on payment of the transmission charges; or
(ii) any consumer as and when such open access is provided by the State Commission
under sub-section (2) of section 42, on payment of the transmission charges and a
surcharge thereon, as may be specified by the State Commission:

Provided that such surcharge shall be utilised for the purpose of meeting the requirement of current level cross-subsidy:

Provided further that such surcharge and cross subsidies shall be progressively reduced in the manner as may be specified by the State Commission:

Provided also that the manner of payment and utilisation of the surcharge shall be specified by the State Commission:

8.1.5 Section 86 deals with the functions of State Commission and its sub-section (1) (a) reads as follows:

"86. (1) The State Commission shall discharge the following functions, namely:
(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;"

8.1.6 As per Regulation 3.1 of the JSERC Distribution Tariff Regulations, 2015, the Hon'ble 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;"



- 8.1.7 As per the JSERC (Terms and Conditions for Intra-State Open Access) Regulations, 2016, the Open Access charges include wheeling charges, wheeling losses, Cross subsidy charges and additional surcharge apportioned volt-age wise at HT/ EHT and LT levels.
- 8.1.8 In line with the directions of the Hon'ble Commission, the Petitioner hereby submit its proposal for the determination of open access charges for the FY 2020-21.

8.2 Wheeling charges

8.2.1 The Petitioner hereby submits that it had provided the allocation ratio for Wheeling & Retail Supply business in line with Regulation 5.5 of Tariff Regulations 2015 and as approved by its Board of Directors; however, the Hon'ble Commission approved allocation ratios in accordance with JSERC (Power Regulatory Accounting) Regulations, 2015. Accordingly, the allocation for wire and supply business for each ARR component for FY 2020-21 is discussed in **Table 4-21**. The wheeling ARR segregated from total ARR was Rs. **131.62** Crs and the corresponding wheeling charges based on projected energy sales for FY 2020-21 works out to **Rs. 0.46 /kWh.** (Rs. **131.62** Crs/**2,838** MUs x 10 = Rs. **0.46** p.u.)

8.3 Cross Subsidy Surcharge

8.3.1 The Petitioner has determined the Cross-Subsidy Surcharge as per the methodology outlined in National Tariff Policy 2016. The methodology keeps the interest of distribution companies as well as consumers in mind while determining a mathematical formula, thus ensuring competition in electricity through open access is not constrained.

Surcharge formula:

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

Where

- S is the surcharge
- T is the tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation
- C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation
- D is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level
- L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level
- R is the per unit cost of carrying regulatory assets.



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

8.3.2 In line with the above formula and methodology adopted by Hon'ble Commission in previous tariff order, CSS for consumers connected to TSL is calculated as per table below based on proposed tariffs:

Consumer Categories	Voltage Level	T-Tariff Payable ABR (Rs/kWh)	C-Power Purchase Cost (Rs/kWh)	L-System losses for applicable voltage	D- Wheeling Charge	Cross Subsidy Surcharge (Rs/kWh)
Domestic	LT	5.46	5.10	11.00%	0.46	-
Commercial	LT	7.17	5.10	11.00%	0.46	1.60
Domestic - HT	HT	6.03	5.10	2.20%	0.46	0.46
	6.6 KV HT	7.55	5.10	2.20%	0.46	1.98
Industrial- HTIS	33 KV HT	7.55	5.10	1.95%	0.46	1.98
	130 KV HT	7.55	5.10	0.70%	0.46	1.98
Institutional services - Street Lighting & Utilities	LT	5.47	5.10	3.00%	0.46	-
Railway Traction Services,	LT	5.47	5.10	11.00%	0.46	-
Military Engineering	6.6 KV HT	5.47	5.10	2.20%	0.46	-
Services	33 KV HT	5.47	5.10	1.95%	0.46	-

Table 8-1: Cross Subsidy Surcharge calculation for FY 2020-21

8.4 Additional Surcharge:

- 8.4.1 Clause 8.5 of the National Tariff Policy 2016 provides following provision that deals with applicability of additional surcharge to be paid by open access consumers. "8.5.4 The additional surcharge for obligation to supply as per section 42(4) of the Act should become applicable only if it is conclusively demonstrated that the obligation of a licensee, in terms of existing power purchase commitments, has been and continues to be stranded, or there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract. The fixed costs related to network assets would be recovered through wheeling charges."
- 8.4.2 The Petitioner craves for determination of additional surcharge on case to case basis and reserves its right to approach Hon'ble Commission for the same at appropriate time within the given provisions of applicable regulations.

8.5 Regulatory Surcharge for Open Access Consumers

8.5.1 The Petitioner submits 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.

st Average Billing Rate for RTS & MES is assumed same as Institutional Services- Street Lighting & Utilities



8.5.2 The Petitioner has proposed liquidation of meagre amount of regulatory assets. Therefore, Petitioner has not calculated the category wise regulatory asset surcharge. However, the Petitioner requests the Hon'ble Commission to allow to charge the Regulatory Asset Surcharge as approved in the Order dated 18th May 2018 in case any Open Access consumer approaches the Petitioner or as may be determined by Commission in upcoming tariff orders of Tata Steel Ltd.



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