

Petition before

Hon'ble Jharkhand State Electricity Regulatory Commission for True Up of FY 2016-17 and FY 2017-18, Annual Performance Review of FY 2018-19, Revised Annual Revenue Requirement and Tariff Proposal for FY 2019-20 Of

> Tata Steel Limited TARIFF PETITION & FORMATS

Submitted to Jharkhand State Electricity Regulatory Commission, Ranchi

Ву



License Area – Jamshedpur TATA STEEL LIMITED JAMSHEDPUR May 2019



AFFIDAVIT

BEFORE THE JHARKHAND STATE ELECTRICITY REGULATORY COMMISSION, RANCHI

Filing No..... Case No.....

IN THE MATTER OF: Filing of the Petition for True-up of FY 2016-17 & FY 2017-18, Annual Performance Review for FY 2018-19, Revised Annual Revenue Requirement & Tariff Proposal for FY 2019-20 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

AFFIDAVIT VERIFYING THE PETITION

I, Amrendra Ranjan son of Sri Shyam Kishore, aged 59 years residing at 8, Park Road, Northern Town, Bistupur, Jamshedpur do hereby solemnly affirm and state as follows:

1. That 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 am duly authorised by the said Petitioner to swear this affidavit.



- 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 2016-17 and FY 2017-18, Annual Performance Review for FY 2018-19, Revised Annual Revenue Requirement for FY 2019-20 and Tariff Proposal for FY 2019-20.
- 3. I further say that the statements made and financial data presented in the Petition are as per records of the Company and on the information received, from the concerned officials, and believed to be true to the best of my knowledge. All the statements and financial data related to April 1st, 2016 to March 31st, 2018 are based on audited accounts and the information related to Annual Performance Review for FY 2018-19 for is based on provisional actual and correct to the best of my belief.
- 4. That I solemnly affirm at...Jamshedpur...... on this day of... May'2019.... 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) That the statements made in paragraphs..... of the petition are true to my knowledge and those made in paragraphs..... are based on information derived from the records of the case which I believe to be true and rest of the paragraphs are by way of submissions.
- 5. Further, to my knowledge and belief, no material information has been concealed in this Petition.

DEPONENT

IDENTIFIED BEFORE ME BY:

I, ______, solemnly affirm that the contents of above affidavit are true to the best of my knowledge and nothing has been concealed there from.

Verified at Jamshedpur on this _____ day of _____, 2019.

DEPONENT

Witness



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 2016-17 and FY
2017-18, Annual Performance Review for FY 2018-19,
Revised Annual Revenue Requirement for FY 2019-20 and
Tariff Proposal for FY 2019-20 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.
- 2. Pursuant to the enactment of the Electricity Act, 2003, Tata Steel Limited is required to submit its Aggregate Revenue Requirement (ARR) and Tariff Petitions as per procedures outlined in section 61, 62 and 64, of Electricity Act 2003, and the governing regulations thereof.
- 3. The Petitioner is now filing this petition for True up of FY 2016-17 and FY 2017-18, Annual Performance Review for FY 2018-19, Revised Annual Revenue Requirement for FY 2019-20 and Tariff Proposal for FY 2019-20.
- 4. TSL along with this petition is submitting the regulatory formats with data & information to the extent applicable and would make available any further information/ additional data required by the Hon'ble Commission during the course of tariff determination process.



Prayers to the Hon'ble 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. 1,400.74 Crs** for FY 2016-17 which is incurred by TSL for serving its consumers.
- c) Pass suitable orders with respect to its claim based on regulations and audited accounts for the True-up of ARR of **Rs. 1,500.55 Crs** for FY 2017-18 which is incurred by TSL for serving its consumers.
- Pass suitable orders with respect to its claim based on regulations and provisional perfommace (latest available unaudited) FY 2018-19 for ARR of Rs. 1,658.31 Crs for FY 2018-19;
- e) Pass suitable orders with respect to its claim based on regulations and revised Annual Revenue Requirement (ARR) for FY 2019-20 for **Rs. 1,659.75 Crs;**
- Pass suitable orders with respect to the Tariff Proposal submitted by the Petitioner;
- g) Condone the delay in filing this petition as this has happened due to our efforts to comply with the latest regulations and submit the petition along with the audited power accounts of FY18. Audited Power accounts of FY18 took more time as new statutory auditors also took relatively more time for checking and validation . Audited accounts was signed in May'2019, after which this petition is being made. We request te Hon'ble Commission to kindly condone this delay in filing and assure the Hon'ble Commission that such delay will not happen in future.
- h) 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;
- i) Pass such further, as the Hon'ble Commission may deem fit and appropriate keeping in view the facts and circumstances of the case;



TATA STEEL LIMITED Petitioner

Jamshedpur Dated: _____ 2019



TABLE OF CONTENTS

СНАРТЕ	R 1.	INTRODUCTION	11
1.1	Васк	GROUND	11
1.2	Pres	ENT PETITION	12
СНАРТЕ	R 2.	TRUE-UP OF FY 2016-17	13
2.1	Back	GROUND	13
2.2		s, Consumers and Connected Load	
2.3		GY BALANCE	
2.4		er Purchase Cost	
2.5	Oper	ATION AND MAINTENANCE EXPENSES	20
2.6	CAPI	TAL WORK IN PROGRESS, GFA AND DEPRECIATION	30
2.7	INTER	REST AND FINANCE CHARGES	32
2.8	Retu	RN ON EQUITY	39
2.9	Non	-Tariff Income	41
2.10	١١	ICOME TAX ON RETURN ON EQUITY FOR PAST PERIODS	41
2.11	R	EVENUE FROM EXISTING TARIFF FOR FY 2016-17	43
2.12	A	GGREGATE REVENUE REQUIREMENT AND REVENUE GAP FOR FY 2016-17	44
СНАРТЕ	R 3.	TRUE-UP OF FY 2017-18	46
3.1	Васк	GROUND	46
3.2	SALE	s, Consumers and Connected Load	46
3.3	Ener	GY BALANCE	47
3.4	Pow	ER PURCHASE COST	49
3.5	OPER	ATION AND MAINTENANCE EXPENSES	54
3.6	Сарг	TAL WORK IN PROGRESS, GFA AND DEPRECIATION	63
3.7	INTER	REST AND FINANCE CHARGES	64
3.8	Retu	RN ON EQUITY	69
3.9	Non	-Tariff Income	70
3.10		EVENUE FROM EXISTING TARIFF FOR FY 2017-18	
3.11	A	GGREGATE REVENUE REQUIREMENT AND REVENUE GAP FOR FY 2017-18	71
СНАРТЕ	R 4.	ANNUAL PERFORMANCE REVIEW OF FY 2018-19	74
4.1	Васк	GROUND	74
4.2	SALES	s, Consumers and Connected Load	74
4.3	Ener	GY BALANCE	75
4.4	Pow	er Purchase Cost	77
4.5	OPEF	ATION AND MAINTENANCE EXPENSES FOR FY 2018-19	80
4.6	Сарг	TAL WORK IN PROGRESS, GROSS FIXED ASSETS AND DEPRECIATION	84
4.7	INTER	REST AND FINANCE CHARGES	86
4.8	Retu	RN ON EQUITY	91
4.9	Non	-Tariff Income	92
4.10		EVENUE FROM SALE OF POWER	-
4.11	A	GGREGATE REVENUE REQUIREMENT AND REVENUE GAP FOR FY 2018-19	93
CHAPTE	R 5.	REVISED ANNUAL REVENUE REQUIREMENT FOR FY 2019-20	95
5.1	Revis	SED ARR FOR FY 2019-20	95
5.2	Reve	NUE FROM SALE OF POWER AT EXISTING TARIFF FOR FY 2019-20	95



5.3	ENERGY BALANCE FOR FY 2019-20	
5.4	Power Purchase costs for FY 2019-20	
5.5	AGGREGATE REVENUE REQUIREMENT FOR FY 2019-20	
5.6	REVENUE FROM EXISTING TARIFF	
5.7	WHEELING AND SUPPLY ARR AND REVENUE GAP/ (SURPLUS) FOR FY 2019-20	
СНАРТЕ	R 6. CUMULATIVE GAP/ (SURPLUS)	105
6.1	CUMULATIVE GAP / (SURPLUS) TILL FY 2019-20	105
СНАРТЕ	R 7. TARIFF PHILOSOPHY	108
7.1	TARIFF PHILOSOPHY	
7.2	ANALYSIS OF FIXED AND VARIABLE COSTS OF LICENSEE & TARIFF RATIONALISATION	
7.3	PROPOSED CHANGES IN TARIFF SCHEDULE	
7.4	REVENUE FROM SALE OF POWER AT PROPOSED TARIFF	
7.5	REVENUE GAP AT PROPOSED TARIFF	
СНАРТЕ	R 8. TARIFF PROPOSAL	112
8.1	TARIFF PHILOSOPHY AND PROPOSED TARIFF SCHEDULE	
8.2	Domestic Service	
8.3	IRRIGATION & AGRICULTURE SERVICE (IAS)	
8.4	COMMERCIAL SERVICES (CS)	
8.5	Industrial Services	115
8.6	INSTITUTIONAL SERVICES	116
8.7	TEMPORARY CONNECTIONS	
8.8	TERMS AND CONDITIONS OF SUPPLY	
8.9	SCHEDULE OF GENERAL AND MISCELLANEOUS CHARGES	
СНАРТЕ	R 9. PROPOSAL FOR OPEN ACCESS CHARGES	127
9.1	PROPOSAL FOR OPEN ACCESS CHARGES	
9.2	WHEELING CHARGES	129
9.3	CROSS SUBSIDY SURCHARGE	130
9.4	Additional Surcharge:	131
9.5	REGULATORY SURCHARGE FOR OPEN ACCESS CONSUMERS	132
СНАРТЕ	R 10. COMPLIANCE TO DIRECTIVES	133
10.1	Compliance to Directives	

LIST OF TABLES

Table 2-1: Consumers, Connected Load & Actual Sales – FY 2016-17	13
Table 2-2: Energy Balance for FY 2016-17	14
Table 2-3: Power Purchase Cost for FY 2016-17	16
Table 2-4: Carry forward of past year RPO target to FY 2016-17	18
Table 2-5: RPO to be fulfilled for FY 2016-17	19
Table 2-6: Summary of RPO Obligation met during FY 2016-17	19
Table 2-7: Actual RECs purchased and Procurement Cost for FY 2016-17	20
Table 2-8: Computation of Inflation Factor for FY2016-17	21
Table 2-9: Employee Expenses as per Actuals for FY 2016-17	22
Table 2-10: Comparison of Fees as per CBR 2012 & CBR 2016	23



Table 2-11: Statutory / Change in Law payments for FY 2016-17	
Table 2-12: Break-up of R&M Expenses for FY 2016-17	25
Table 2-13: Normative revised approval of employee costs for FY 2015-16	26
Table 2-14: Computation of Normative Employee Cost for FY2016-17	27
Table 2-15: Computation of Normative A&G Cost for FY 2016-17	
Table 2-16: Computation of Normative R&M Cost for FY 2016-17	
Table 2-17: Summary of O&M Expense for FY 2016-17	
Table 2-18: Sharing of Gains/ Loss – O&M Expenses for FY 2016-17	
Table 2-19: Details of O&M Expenses of similar utilities for FY 2016-17	
Table 2-20: CWIP, GFA and Depreciation for FY 2016-17	
Table 2-21: Computation of Net Depreciation for FY 2016-17	
Table 2-22: Computation of GFA & Accumulated Depreciation (Own Assets) FY 2016-17	
Table 2-23: Computation of Opening Normative Debt & Equity balance for FY 2016-17	
Table 2-24: Addition to Loan and Equity for FY 2016-17	
Table 2-25: Normative Interest on Loan for FY 2016-17	
Table 2-25. Normative interest on Loan for FY 2016-17 Table 2-26: Interest on Working Capital for FY 2016-17	
Table 2-27: Interest on Working Capital (Wheeling & Retail) for FY 2016-17	
Table 2-28: Interest on Security Deposit for FY 2016-17.	
Table 2-29: Summary of Total Interest & Finance charges for FY 2016-17	
Table 2-30: Computation of Income Tax Rate for FY 2016-17	
Table 2-31: Normative Equity & Return on Equity for FY 2016-17	
Table 2-32: Revenue from Existing Tariff for FY 2016-17 (Rs.Crs)	
Table 2-33: ARR for FY 2016-17	
Table 3-1: Consumers, Connected Load & Actual Sales – FY 2017-18	
Table 3-2: Energy Balance for FY 2017-18	
Table 3-3: Power Purchase Cost for FY 2017-18	
Table 3-4: Carry forward of past year RPO target to FY 2017-18	
Table 3-5: RPO to be fulfilled for FY 2017-18	
Table 3-6: Summary of RPO Obligation met during FY 2017-18	53
Table 3-7: Actual RECs purchased and Procurement Cost for FY 2017-18	
Table 3-8: Computation of Inflation Factor for FY2017-18	
Table 3-9: Employee Expenses as per Actuals for FY 2017-18	56
Table 3-10: Comparison of Fees as per CBR 2012 & CBR 2016	57
Table 3-11: Statutory / Change in Law payments for FY 2017-18	58
Table 3-12: Break-up of R&M Expenses for FY 2017-18	59
Table 3-13: Computation of Normative Employee Cost for FY2017-18	60
Table 3-14: Computation of Normative A&G Cost for FY 2017-18	60
Table 3-15: Computation of Normative R&M Cost for FY 2017-18	61
Table 3-16: Operation and Maintenance Expenses for FY 2017-18	62
Table 3-17: Sharing of Gains/ Loss – O&M Expenses for FY 2017-18	62
Table 3-18: CWIP, GFA and Depreciation for FY 2017-18	63
Table 3-19: Computation of Net Depreciation for FY 2017-18	64
Table 3-20: Computation of GFA & Accumulated Depreciation (Own Assets) FY 2017-18	
Table 3-21: Computation of Opening Normative Debt & Equity balance for FY 2017-18	
Table 3-22: Addition to Loan and Equity for FY 2017-18	
Table 3-23: Normative Interest on Loan for FY 2017-18	
Table 3-24: Interest on Working Capital (Wheeling & Retail) for FY 2017-18	
Table 3-25: Interest on Security Deposit for FY 2017-18	
Table 3-26: Summary of Total Interest & Finance charges for FY 2017-18	

Table 3-27: Computation of Income Tax Rate for FY 2017-18	69
Table 3-28: Normative Equity & Return on Equity for FY 2017-18	70
Table 3-29: Revenue from Existing Tariff for FY 2017-18	71
Table 3-30: ARR for FY 2017-18	73
Table 4-1: Consumers, Connected Load & Sales – FY 2018-19	75
Table 4-2: Energy Balance for FY 2018-19 (MUs)	76
Table 4-3: Total Power Purchase Cost FY 2018-19	77
Table 4-4: Carry forward of past year RPO target to FY 2018-19 (MUs)	78
Table 4-5: RPO Computations for FY 2018-19	
Table 4-6: REC Cost for FY 2018-19	79
Table 4-7: REC carry forward to FY 2019-20	79
Table 4-8: Computation of Inflation Factor for FY 18-19	81
Table 4-9: Computation of Revised Estimated O&M expenses for FY 2018-19	82
Table 4-10: Computation of Normative O&M expenses for FY 2018-19	83
Table 4-11: Summary of O&M Expenses for FY 2018-19	84
Table 4-12: Summary of CWIP, GFA and Depreciation for FY 2018-19	85
Table 4-13: Computation of Net Depreciation for FY 2018-19	86
Table 4-14: Computation of GFA & Accumulated Depreciation (Own Assets) FY 2018-19	
Table 4-15: Computation of Opening Normative Debt & Equity balance for FY 2018-19	87
Table 4-16: Normative Loan & Equity added during FY 2018-19	88
Table 4-17: Interest on Normative Loan – FY 2018-19	
Table 4-18: Computation of Interest on Working Capital for FY 2018-19	89
Table 4-19: Interest on Security Deposit for FY 2018-19	
Table 4-20: Total Interest and Finance Charges for FY 2018-19	
Table 4-21: Return on Equity for FY 2018-19	
Table 4-22: Revenue from Sale of Power for FY 2018-19	
Table 4-23: ARR for FY 2018-19	94
Table 5-1: ARR for FY 2019-20	95
Table 5-2: Sales projections for FY 2019-20	96
Table 5-3 : Projected Energy Balance for FY 2019-20	
Table 5-4: Cost of RECs for the Obligated units (2649.45 MUs)	
Table 5-5: Power purchase cost for FY 2019-20	
Table 5-6: ARR for FY 2019-20 (Rs Crs)	
Table 5-7: Revenue from Sale of Power at Existing Tariff for FY 2019-20	
Table 5-8: Break up of Wheeling and Retail ARR	
Table 5-9: Wheeling & Retail ARR and Revenue Gap/ (Surplus) for FY 2019-20	
Table 5-10: Revenue Gap/(Surplus) at existing tariffs for FY 2019-20	
Table 6-1: Cumulative Revenue gap/ (surplus) as per T.O. dated 18.05.2018	
Table 6-2: Revised Revenue Gap / (surplus) for FY 2016-17 as per Review Order dated 11.09.2018	
Table 6-3: Revised Revenue Gap / (surplus) for FY 2017-18 as per Review Order dated 11.09.2018	
Table 6-4: Cumulative Revenue gap/ (surplus) at existing tariff till FY 2019-20	
Table 7-1: Calculation of Fixed & Variable component of ARR & Revenue for FY 2019-20	
7.4.1 Based on above philosophy and proposal, the Petitioner hereby submits the revenue from sa	
power at proposed tariff for FY 2019-20 as under: Table 7-2: Revenue from Sale of Power at Proposed	
Tariff for FY 2019-20	
Table 7-3: Cumulative Revenue Gap at prposed tariff till FY 2019 - 20	
Table 9-1: Allocation and Wheeling charges for FY 2019-20	
Table 9-2: Cross Subsidy Surcharge calculation for FY 2019-20	



List of Annexure (Book 2 – Book 6)

Annexure 1: Annual Audited Accounts for FY 2016-17Page N0 1 to 11
Annexure 2: Power regulatory accounts manual and Annual Audited Accounts for FY 2017-18 Page No
12 to 38
Annexure 3: Tata Power Monthly Purchase Bills for FY 2016-17 Page No 39 to 222
Annexure 4: DVC-132 kV source Monthly Power Purchase Bills for FY 2016-17 Page No223 to 260
Annexure 5: DVC-400 kV source Monthly Power Purchase Bills for FY 2016-17 Page No 261 to 409
Annexure 6: TSL-Captive works source Monthly Power Purchase Bills for FY 2016-17 . Page No 410 to 412
Annexure 7: REC Certificates for FY 2016-17 Page No 413 to 418
Annexure 8: Open Access source Monthly Power Purchase Bills for FY 2016-17 Page No 419 to 458
Annexure 9: Certificate from JUSCO for payment of Outsourcing Cost for FY 2016-17. Page No 459 to 460
Annexure 10: Inspection report and its Compliance letter of CGRF TSL Page No 461 to 465
Annexure 11: Scheme wise Capital Expenditure & Capitalization from FY 2016-17 to FY 2019-20
Page No 466 to 467
Annexure 12: Income Tax paid challans for FY 2016-17 Page No 468 to 469
Annexure 13: Tata Power Monthly Purchase Bills for FY 2017-18 Page No 470 to 662
Annexure 14: DVC-132 kV source Monthly Power Purchase Bills for FY 2017-18 Page No 623 to 711
Annexure 15: DVC-400 kV source Monthly Power Purchase Bills for FY 2017-18 Page No 712 to 914
Annexure 16: TSL-Captive works source Monthly Power Purchase Bills for FY 2017-18
Page No 915 to 916
Annexure 17: REC Certificates for FY 2017-18 Page No 917 to 930
Annexure 18: Open Access source Monthly Power Purchase Bills for FY 2017-18 Page No 931 to 1788
Annexure 19: Certificate from JUSCO for payment of Outsourcing Cost for FY 2017-18
Page No 1789 to1790
Annexure 20: Income Tax paid challans for FY 2017-18 Page No1791 to 1792
Annexure 21: Monthly Power Purchase Expenses for FY 18-19 Page No1793 to 1804
Annexure 22: correspondence with DVC to get NOC for 400KV power sale through
ExchangePage No 1805 to 1822



List of Abbreviations				
Abbreviation Description				
A&G	Administration and General			
APR	Annual Performance Review			
ARR	Annual Revenue Requirement			
AS	Accounting Standard			
CAGR	Compounded Average Growth Rate			
CAPEX	Capital Expenditure			
CERC	Central Electricity Regulatory Commission			
CGRF	Consumer Grievance Redressal Forum			
Ckt Km	Circuit Kilo Meter			
СРІ	Consumer Price Index			
Crs	Crores			
СТU	Central Transmission Utility			
CWIP	Capital Works In Progress			
DF	Distribution Franchisee			
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	Finance & Accounts			
FY	Financial Year			
GFA	Gross Fixed Assets			
HP	Horse Power			
HR	Human Resources			
HT	High Tension			
HTS	High Tension Service			
HTSS	High Tension Special Service			
IAS	Irrigation & Agriculture Service			
IT	Income Tax			
IT	Information Technology			
JSERC	Jharkhand State Electricity Regulatory Commission			
JTS	Jamshedpur Town Services			
JUSCO	Jamshedpur Utilities and Service Company Limited			
KV	Kilo Volt			
KVA	Kilo Volt Ampere			
KW	Kilo Watt			
kWh	Kilo Watt Hours			
LF	Load Factor			
LT	Low Tension			
LTIS	Low Tension Industrial and Medium Power			
MD	Maximum Demand			



List of Abbreviations				
Abbreviation	Description			
MU	Million Units			
MVA	Mega Volt Ampere			
MW	Megawatt			
MYT	Multi Year Tariff			
NDS	Non-Domestic Service			
0&M	Operation and Maintenance			
PF	Power Factor			
PLR	Prime Lending Rate			
PPA	Power Purchase Agreement			
PSD	Power Services Division			
R&M	Repairs and Maintenance			
RoE	Return on Equity			
Rs.	Rupees			
SBI	State Bank of India			
SERC	State Electricity Regulatory Commission			
SLM	Straight Line Method			
STU	State Transmission Utility			
TOD	Time Of the Day			
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 it's 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 issued JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2015 (*hereinafter to be referred as "Tariff Regulations 2015"*) which is 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 supposed to file their petition by 30th November of each year of the Control period.



1.2 Present Petition

1.2.1 The Hon'ble Commission in the recent tariff order 18.05.2018 has directed Petitioner to file the consolidated petition. The relevant extract is as under:

13.8 The Commission directs the Petitioner to file a consolidated Petition for determination of ARR and Tariff for FY 2018-19 and FY 2019-20 along with the Trueup 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 is now filing Petition for True-up of FY 2016-17 and FY 2017-18, Annual Performance Review for FY 2018-19, Revised Annual Revenue Requirement for FY 2019-20 and Tariff Proposal for FY 2019-20.

The True-up of FY 2016-17 and FY 2017-18, is based upon the annual audited accounts annexed at **Annexure 1 & Annexure 2** respectively of this petition.

- 1.2.3 The annual performance review of FY 2018-19 is based on available provisional actual data for first six months (Apr'18 to Sep'18) w.r.t power purchase, sales, O&M costs and capital expenditure and capitalisation of Assets. The balance six months performance is re-estimated to arrive at APR figures for FY 2018-19.
- 1.2.4 Similarly based on audited accounts and APR figures, the ARR figures for FY 2019-20 are revised and Tariff Proposal for FY 2019-20 is submitted.



Chapter 2. True-up of FY 2016-17

2.1 Background

- 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 The Hon'ble Commission has trued-up performance for FY 2015-16 in the Tariff Order dated 18th May 2018. Thereafter aggrieved with some O&M cost approvals in the tariff order, the Petitioner filed the Review Petition against the said order vide letter dated 15th June 2018 and the Hon'ble Commission issued the ruling on the same vide order dated 11.09.2018 in Case no.9 of 2018. The impact of the same has been considered wherever applicable in this chapter of true-up for FY 2016-17 and FY 2017-18.
- 2.1.3 TSL hereby submits the financial performance for FY 2016-17 based on audited accounts and the provisions of Tariff Regulations 2015 for true-up purpose. The following sections summarise each of the components of ARR for FY 2016-17. A comparison of figures approved by the Hon'ble Commission in APR order dated 18th May, 2018 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 category wise number of consumers, connected load, actual sales and approved sales for FY 2016-17.

Consumer Category	No. of Consumers	Connected Load	Energy Sales	
	Nos.	kVA/kW	MUs	
Domestic	36296	185934	199.94	
Domestic - DSHT	8784	43935	91.52	
Commercial	137	48811	65.32	
High Tension I	79	18745	29.37	
High Tension II	21	33623	111.83	
High Tension III	14	300225	1883.33	
High Tension IV	1	110000	130.82	
Utilities/Street Light	393	16932	84.13	
Temporary Supply	97	214	1.79	
Sale to Other				
Licensee	1	50000	279.29	
Total	45823	808419	2877.34	

Table 2-1: Consumers, Connected Load & Actual Sales – FY 2016-17



2.2.2 The actual sales for FY 2016-17 is line with approval of Hon'ble Commission. TSL requests the Hon'ble Commission to approve the sales of **2,877.34** MUs for FY 2016-17.

2.3 Energy Balance

2.3.1 The Energy Balance of TSL for FY 2016-17 is provided in the table below:

Energy Balance for FY 2016-17 (MUs)			
Sr No	Particulars	ARR Approved in T.O. dt 18.5.2018	Actual Audited
Α	ENERGY REQUIREMENT		
1	Sales to Other Licensees	279.29	279.29
2	Distribution Losses on Sales to Other Licensees (%)	0.00%	0.00%
3	Unit Lost on Sales to Other Licensees		-
4	Energy Requirement for Sales to Other Licensees	279.29	279.29
5	Sales to HT - IV Category	130.82	130.82
6	Distribution Losses to HT - IV (%)	0.00%	0.00%
7	Unit lost on Sales to HT - IV	-	-
8	Energy Requirement for HT - IV Category	130.82	130.82
9	Sales to LT Consumers (Dom + Comm + Street light + Temp)	350.38	351.19
10	Sales to HT Consumers (Other than HT - IV) (DSHT + HT-I + HT-II + HT-III)	2,116.84	2,116.04
11	Total Sales to Consumers other than HT-IV & JUSCO (9 + 10)	2,467.23	2,467.23
12	Distribution Losses on Sales to Consumers other than HT-IV & JUSCO (%)	3.54%	3.54%
13	Unit Lost on Sales to Consumers other than HT-IV & JUSCO	90.42	90.44
14	Energy Requirement for Sales to Consumers other than HT-IV & JUSCO	2,557.65	2,557.67
15	Overall Sales (4 + 8 +11)	2,877.34	2,877.34
16	Overall Distribution Losses (%)	3.05%	3.05%
17	Overall Distribution Losses	90.42	90.44
18	Total Energy Requirement	2,967.76	2,967.79
В	ENERGY AVAILABILITY		
1	Tata Power Company Limited	1,423.92	1,423.92
а	Unit - II	716.98	716.98
b	Unit - III	706.94	706.94
2	Damodar Valley Corporation	1,459.18	1,459.21
а	132 kV	308.07	308.09
b	400 kV	1,151.11	1,151.11
3	TSW Captive	76.51	76.52
4	Open access / Other Sources	8.15	8.15
19	Total Pooled Energy Availability	2,967.76	2,967.79

Table 2-2: Energy Balance for FY 2016-17



2.3.2 The Petitioner submits that figures submitted in APR petition were actuals and hence the figures approved in APR order dated 18.05.2008 and now submitted in this petition based on audited accounts are almost same. It is requested to Hon'ble Commission to kindly approve the energy balance as per the actual basis as submitted in above table.

2.4 Power Purchase Cost

- 2.4.1 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 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 Power purchase cost claim is **Rs. 1,227.68 Crs** as against Rs.1227.67 Crs approved by Hon'ble Commission in APR order. The table below depicts the actual power purchase cost and approved cost by Hon'ble Commission in the APR Order dated 18th May 2018.



Table 2-3: Power Purchase C	Cost for FY 2016-17
-----------------------------	---------------------

Power Purchase - MUs				
Particulars		ARR Approved in T.O. dt 18.5.2018 FY 2016-17	Actual Audited FY 2016-17	Claimed in this Petition FY 2016-17
Tata Power Company Ltd	(A)	FT 2010-17	FT 2010-17	FT 2010-17
. ,	Unit-II	716.98	716.98	716.98
Power Purchase - MUs	Unit -III	706.94	706.94	706.94
	Total	1,423.92	1,423.92	1,423.92
	Unit-II	3.72	3.72	, 3.72
Rate - Rs/kWh	Unit -III	3.61	3.61	3.61
	Total	3.67	3.6679	3.6679
	Unit-II	263.58	263.58	263.58
	Unit-II (Credit for FY13,FY14 & FY15)	3.1650	3.1650	3.1650
	Total Unit II	266.75	266.74	266.74
Cost - Rs.Crores	Unit -III	251.80	251.80	251.80
	Unit -III (Credit for FY13, FY14 & FY15)	3.73	3.7300	3.7300
	Total Unit III	255.53	255.53	255.53
	Total	522.27	522.27	522.27
Damodar Valley Corporat	ion 132 KV (B)			
Power Purchase - MUs		308	308.09	308.09
Rate - Rs/kWh		5.14	5.1369	5.1369
Cost - Rs.Crores		158.26	158.26	158.26
Damodar Valley Corporat	ion 400 kV (C)		Π	
Power Purchase - MUs		1,151.11	1,151.11	1,151.11
Rate - Rs/kWh		4.43	4.4274	4.4274
Cost - Rs.Crores		509.64	509.64	509.64
TSW- Captive (D)				
Power Purchase - MUs		76.51	76.52	76.52
Rate - Rs/kWh		3.67	3.9537	3.6679
Cost - Rs.Crores		28.06	30.25	28.06
RPO (E)				
REC Cost - Rs.Crores		7.64	7.64	7.64
Other / Open Access (F)		0.45	0.45	0.45
Power Purchase - MUs		8.15	8.15	8.15
Rate - Rs/kWh		2.20	2.1958	2.1958
Cost - Rs.Crores		1.79	1.79	1.79
Total Pooled Power Purchase (F= A+B+C+D+E+F) Total Cost - Rs.Crores 1,227.67 1,229.86 1,227.68				
Power Purchase - MUs		1,227.67 2,967.78	1,229.86 2,967.79	1,227.68 2,967.79
Rate - Rs/kWh		4.14	4.1440	4.1367
		4.14	4.1440	4.130/



- 2.4.3 **Power Purchase from Tata Power Company Ltd (TPCL):** TSL purchased **1,423.92** MUs at a total cost of Rs. **522.27** Crs, which works out to average rate of Rs. **3.6679** per unit for FY 2016-17.
- 2.4.4 Total cost of Rs. **522.27** Crs includes part of the previous years debit notes which are duly recognised and approved by Hon'ble Commission, vide APR Order dated 18.05.2018.
- 2.4.5 The Petitioner requests the Hon'ble Commission to kindly approve the total cost of Rs.522.27 Crs for purchase of power from Tata Power.
- 2.4.6 The actual Power Purchase Bills (for all sources) paid by TSL for FY 2016-17 are enclosed with Annexure 3.
- 2.4.7 Power Purchase from DVC Source 132 kV: TSL purchased about 308.09 MUs for an amount of Rs. 158.26 Crs which works out to average power purchase cost of Rs. 5.1369 per unit for FY 2016-17. The total cost approved by Commission in APR Tariff order is same i.e.Rs.158.26 Crores.
- 2.4.8 The Hon'ble commission is requested to kindly approve the total power purchase cost of Rs. **158.26** Crs from DVC 132 kV for FY 2016-17.
- 2.4.9 The actual Power Purchase Bills (for all sources) paid by DVC Source 132 kV for FY 2016-17 are enclosed with Annexure 4.
- 2.4.10 **Power Purchase from DVC Source 400 kV:** TSL purchased **1,151.11** MUs from DVC at 400 kV at a total cost of Rs. **509.64** Crs which comes out to average rate of Rs. **4.4274** per unit. The total cost approved by Commission in APR Tariff order is same i.e.Rs.509.64 Crores.
- 2.4.11 The Hon'ble commission is requested to kindly approve the total power purchase cost of Rs. **509.64** Crs from DVC 400 kV for FY 2016-17.
- 2.4.12 The actual Power Purchase Bills (for all sources) paid by DVC Source 400 kV for FY 2016-17 are enclosed with Annexure 5.
- 2.4.13 Power Purchase from TSL Captive: TSL licensee purchased 76.52 MUs from TSL Captive during FY 2016-17. The total cost considering actual power purchase from TSL Captive is Rs. 30.25 Crs at a rate of Rs. 3.9537 per unit. The Hon'ble Commission had been allowing this power purchase at the average rate of TPCL units, which is the

lowest cost, source of power from TSL Licensee. The total cost approved by Commission in APR Tariff order is same i.e.Rs.28.06 Crores.

- 2.4.14 Accordingly the Petitioner is claiming power purchase cost for TSL captive works based on lowest cost of all sources i.e.TPCL Rs. **3.6679** per unit. The Hon'ble commission is requested to kindly approve the total power purchase cost of Rs. **28.06** Crs from TSL captive source for FY 2016-17 as per principles approved in previous tariff orders.
- 2.4.15 The actual Power Purchase Bills (for all sources) paid by TSL captive source for FY 2016-17 are enclosed with **Annexure 6**
- 2.4.16 **REC Procurement:** 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 The Petitioner would first like to discuss carry forward RPO obligation from FY 2015-16 and thereafter discuss the RPO fulfilment for FY 2016-17. The details are presented in the table below:

			111105
Particulars	Target	Actual achieved	Surplus carryover to FY 2016-17
Total RPO	163.42	165.50	-2.08
Non-Solar	115.08	116.61	-1.53
Solar	48.34	48.89	-0.55

Table 2-4: Carry forward of past year RPO target to FY 2016-17

- 2.4.18 Apart from the above surplus achievement of RPO target in FY 2015-16, there is a standalone RPO obligation to be met for FY 2016-17.
- 2.4.19 The details of RPO to be fulfilled for FY 2016-17 by the Petitioner are provided in the table below:

in MUS



				in MUs		
RPO Computations for FY 2016-17						
Particulars	Obligation as % of total energy requirement	Obligation for FY 16-17	Carried Forward from 2015-16	Total to be met during FY 2016-17		
Total Energy Requirement - MUs		2,967.79				
Less: Exempt source DVC 132 kV		308.09				
Net Energy Reqt for RPO Compliance purpose - MUs		2,659.69				
RPO Energy - MUs	5.30%	140.96	(2.08)	138.88		
Non-Solar	3.50%	93.09	(1.53)	91.56		
Solar	1.80%	47.87	(0.55)	47.32		
Equivalent RECs		1,40,964	(2,080)	1,38,884		
Non-Solar		93,089	(1,530)	91,559		
Solar		47,875	(550)	47,325		

Table 2-5: RPO to be fulfilled for FY 2016-17

- 2.4.20 The Petitioner submits that RPO is applicable on all sources other than DVC 132 kV source, since the power purchase cost of DVC 132 kV is approved by Hon'ble Commission taking into account its Renewable Purchase Obligation. Accordingly, the Petitioner has computed RPO on its energy requirement excluding DVC 132 kV source.
- 2.4.21 The status of RPO Obligation for FY 2016-17 is provided in the table below:

Table 2-6: Summary of RPO Obligation met during FY 2016-17

in MUs

Particulars	Cumulative RPO to be met (A)	RECs procured (B)	Carried forward to FY 2017-18 (A-B)
Solar RPO for FY 2016-17	47.32	0.00	47.32
Non-Solar RPO for FY 2016- 17	91.56	50.00	41.56
Total RPO	138.88	50.00	88.88

2.4.22 The month-wise details of purchase of Non-Solar RECs along with quantum and cost are provided in the table below:

Month	Particulars	MUs	Rate	Amount (Rs Crs)
	Non Solar	50	1500	7.50
Feb-17 _ Actual	Commission to IEX			0.10
purchased	TPTCL Success fee			0.03
	Taxes			0.02
	Total	50		7.64

 Table 2-7: Actual RECs purchased and Procurement Cost for FY 2016-17

- 2.4.23 The total cost of RECs shown in audited accounts and claimed in this petition for FY 2016-17 is Rs. 7.64 Crs. The copies of bills / certificates for RECs purchased in FY 2016-17 are provided at Annexure 7.
- 2.4.24 **Reason for deferment of RPO:** In order to fulfil RPO Compliance for FY 2016-17, TSL purchased 50,000 numbers of non-Solar RECs in February 2017. In the meantime Hon'ble CERC invited public comments through their Order dated 28.02.2017 in petition no. 02/SKP/2017 for determination of Forbearance & Floor price REC framework to be applicable from 1st April 2017, where CERC proposed the price of Solar RECs significantly lower than existing prices. In view of the expected lower prices, TSL deferred it's plan to procure RECs to FY 2017-18, and subsequently purchased the same. Petitioner requests Hon'ble Commission to kindly consider the same and allow subsequent purchase (as carry forward over next year) for meeting the RPO target.
- 2.4.25 Power Purchase from Open Access: During outage of DVC 400 kV source between July-16 to September-16, the Petitioner purchased power from open access to meet it's requirements. The Petitioner has purchased about 8.15 MUs at a total cost of Rs.
 1.79 Crs is costing Rs. 2.1958 per unit. The copy of bills are attached as Annexure 8 for purchase of short term open access power through TPTCL for FY 2016-17.
- 2.4.26 **Total Power Purchase Cost:** The Petitioner requests the Hon'ble Commission to approve the total power purchase cost for FY 2016-17 at Rs. **1,227.68** Crs for purchase of **2,967.79** MUs at average rate of Rs. **4.13** per unit.

2.5 Operation and Maintenance Expenses

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&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;



WPI Inflation

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

b) EMP**n** (excluding terminal liabilities) + A&G**n** = (EMP**n-1** + A&G**n-1**)*(INDX**n**/ INDX**n-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 INDX**n** /INDXn-1 value shall be used for all years of the control period. However, the Commission will consider the actual values in the INDX**n** /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 2016-17 as per above Note 1 of Tariff Regulations 2015.

Month/Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Average
FY 2016-17	177.80	180.20	182.90	184.20	183.30	183.20	183.60	183.50	183.30	185.10	185.50	185.80	183.20
FY 2015-16	176.40	178.00	179.10	177.60	176.50	176.50	176.90	177.50	176.80	175.40	174.10	175.30	176.68
http://eaindustr	http://eaindustry.nic.in/indx_download_0405/month2.xls Annual Increase over FY15-16							3.69%					
									Weighta	ge of 45%	'n		1.66%
CPI Inflation													
Month/Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Average
FY2016-17	271.00	275.00	277.00	280.00	278.00	277.00	278.00	277.00	275.00	275.00	275.00	275.00	276.08
FY2015-16	256.00	258.00	261.00	263.00	264.00	266.00	269.00	270.00	269.00	269.00	267.00	268.00	265.00
http://labourbure	eau.nic.in/	/indtab.htr	<u>nl</u>						Annual II	ncrease o	ver FY15-	16	4.18%
									Weighta	ge of 55%	, D		2.30%
									Total Infl	ation WP	PI + CPI		3.96%

Table 2-8: Computation of Inflation Factor for FY2016-17



- 2.5.3 Accordingly the Inflation Factor for FY 2016-17 works out to **3.96%**, which need to be considered for true-up purpose as against the inflation value of 3.05% considered while projecting the Employee and A&G costs in last tariff order.
- 2.5.4 The Hon'ble Commission had approved the component-wise O&M costs only provisionally, and the estimates were subject to true up based on the actual break-up of O&M cost provided in audited accounts.
- 2.5.5 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 and certain changes in statutory payments/ Change in Law. Majority of the Expenses related to the O&M activities of the licensed operations of TSL are undertaken by JUSCO.
- 2.5.5.1 Actual Employee Expenses: The Petitioner would like to submit that employee expenses have two components viz Direct Employee and Outsourced Employee expenses. The direct expenses are expenses booked by Petitioner for the employees on its payroll; whereas the outsourcing cost (payable to JUSCO) pertaining to employee expenses are termed as Outsourced Employee expenses. It is submitted that direct employee expense as per audited account Note 8 is Rs. 2.83 Crs for FY 2016-17 and mainly includes Salaries & Wages, Contribution to Provident and other funds and Staff welfare expenses. The total direct and indirect employee cost for FY 2016-17 is Rs. 19.82 Crs. The indirect employee cost is outsourcing cost paid to JUSCO towards employee cost.

Particulars	Audited (Rs.Crs)
	FY 2016-17
Direct Employees expenses of TSL	2.83
Add: Outsourcing cost paid to JUSCO towards Employees Expense	16.99
Total Employee Expenses to be claimed	19.82

2.5.5.2 Actual A&G Expenses: It is submitted that A&G expense as per audited account Note 9 is Rs. 24.17 Crs for FY 2016-17 and mainly includes Rent, Travelling & Conveyance, Consultancy charges, Advertisement expenses, Security Charges, Vehicle hiring charges etc. However the Petitioner would like to submit that fees/ payments to Consumer Grievance Redressal Forum (CGRF), Hon'ble Commission towards enhanced license/ petition fees and Compliance to various Regulations issued after 20th January 2016 have increased. The Petitioner requests Hon'ble Commission to consider such payments under Change in Law and allow separately to the Petitioner as discussed under.

Change in Law -

2.5.5.3 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..."

2.5.5.4 The comparison of fees to be charged on Licensees as per Conduct of Business Regulations 2012 and Conduct of Business Regulations 2016 for major filings are tabulated below:

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

Table 2-10: Comparison of Fees as per CBR 2012 & CBR 2016



2.5.5.5 Allowance of additional increase in Consumer Grievance Redresal 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 2016-17 and FY 2017-18 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 2016-17 on CGRF was Rs. 15,66,778/-. To comply to the order of Hon'ble Commission, the CGRF office was required to be revamped. In addition order was also to appoint appropriate staffs and members. Subsequently, works related to all the directions completed, like books and almirah for library purchased, record room created, available room was made like hearing hall, Honour boards installed, signboard installed at 3 places outside the CGRF office, etc. Copy of the visit plan, inspection report of the Hon'ble Commission, and the compliance report from TSL is enclosed with this petition as Annexure 10.

There had also been wage revision by the Pay Commission which was also applicable for the Chairperson of the TSL CGRF. All these has resulted in an increase in CGRF expenses (Consumables, operations & maintenance and remuneration) from Rs. 12.85 Lakhs to Rs. 15.67 Lakhs from FY 2015-16 to FY 2016-17. We request Hon'ble Commission to also consider this increase in cost under Change in Law or under any other provisions of the regulations as the normal increase of the normative A&G costs are inadequate to cover these expenses.

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 are may be necessary for ends of justice to meet or to prevent abuses of the process of the Commission..."

2.5.5.6 The table below depicts that the expense under Petition filing fees and CGRF expense have increased from **Rs. 27.61 Lakhs** to **Rs. 73.34 Lakhs** i.e an increase of **165%**, whereas the normative A&G will have increase at only **3.96%**. 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. 44.64 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).

Particulars	Actual FY 2015- 16 (Rs.Lacs)	Normative value for FY16-17 considering inflation of 3.96%	Actual FY 2016-17 (Rs.Lacs)	Balance part to be allowed under Change in Law (Rs.Lacs)
Petition for True up FY15, APR FY16	14.75			
MYT petition FY17 to FY21 to JSERC			39.60	
True-up Petition License fee for FY 2015-16			18.07	
CGRF Expenses (Rent and Remuneration)	12.86		15.67	
Total	27.61	28.70	73.34	44.64

Table 2-11: Statutory / Change in Law payments for FY 2016-17

2.5.5.7 Actual R&M Expenses: The outsourcing cost for O&M activities carried out by JUSCO are captured under R&M head of audited accounts. Total R&M cost is approx. Rs. 45.30 Crs, out of which amount paid to JUSCO is approx. Rs.40.94 Crs. Out of this Rs. 40.94 Crs, Rs. 16.99 Crs is of the nature of employee expense of JUSCO. The same is added to the employee expense and deducted from R&M expense of TSL accounts to arrive at an employee cost and R&M expense for FY 2016-17. The details are given in the table below:

Particulars	Audited (Rs.Crs) FY 2016-17
R&M expenses by TSL	4.36
Outsourcing cost paid to JUSCO towards Employees Expenses	16.99
Outsourcing cost paid to JUSCO towards R&M Expenses	23.95
Total R&M expenses shown in books of accounts	45.30
Less: Outsourcing cost paid to JUSCO towards Employees Expense	16.99
Net R&M Expenses to be claimed	28.31

- 2.5.5.8 The outsourcing cost paid to JUSCO for employee related is given in Audited Accounts Note 3. The certificate received from JUSCO for amount paid towards total outsourcing cost is also attached as **Annexure 9.**
- 2.5.6 **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.



- 2.5.6.1 **Normative Employee Cost:** The Petitioner submits that Commission in previous tariff order dated 18.05.2018 erred in considering impact of arrears of Rs.2.02 Crs of FY 2015-16 while taking as base figure for FY 2016-17. Aggrieved with this, review petition was filed by Petitioner on which Hon'ble Commission passed the Review Order dated 11.09.2018.
- 2.5.6.2 The Hon'ble Commission allowed review of normative employee cost considering the arrears impact and inflation factor. The normative employee cost revised by Hon'ble Commission for FY 2016-17 is extracted from the review order dated 11.09.2018 as under:

Table 2-13: Normative revised approval of employee costs for FY 2015-16

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

Particulars	Approved in Order dated 18.05.2018	Approved Now
Employee Expenses	19.07	21.17
R&M Expenses	24.98	24.98
A&G Expenses	24.79	24.79
Total O & M Expenses	68.84	70.93

2.5.6.3 It is submitted that Hon'ble Commission in MYT order dated 28.02.2017 in Table 54 had approved Additional Manpower Cost on account of increase in Connected Load/Consumer Base for each year of control period; however the same was not factored in the APR order dated 18.05.2018 and even missed out in Review order dated 11.09.2018. The Petitioner now submits computation of normative employee cost for FY 2016-17 based on provisions of Tariff Regulations 2015 and MYT order principles i.e. including Inflation and Growth factor.

Financial year	Units	Approved in Review Order dated 11.09.2018 FY 2016-17	Normative Computatio n FY 2016-17
Employee Cost approved in True-up of FY 2015-16 in review order dated 11.9.2018	Rs.Crs	20.54	20.54
Connected Load in FY 2015-16	kVA		7,76,910
Emp. cost per kVA for FY 2015-16	Rs/kVA		264.38
Weighted avg. inflation factor for FY 2016-17	%	3.02%	3.96%
Emp. cost per kVA for FY 2015-16 with Inflation Facto	Rs/kVA		274.86
Connected Load in FY 2016-17	kVA		8,08,419
Employee Cost as per normative basis for FY 2016- 17	Rs.Crs	21.17	22.22

 Table 2-14: Computation of Normative Employee Cost for FY2016-17

- 2.5.6.4 We therefore request the Hon'ble Commission to kindly approve the normative employee cost of Rs. **22.22** Crs based on normative principles.
- 2.5.6.5 **Normative A&G Expenses:** The normative A&G expenses are allowed with inflation factor over previous year approved figures. The Hon'ble Commission had considered Rs.24.05 Crs of FY 2015-16 and inflation of 3.05% and projected Rs.24.79 Crs as normative A&G expenses for FY 2016-17 in tariff order dated 18.05.2018. It is submitted that inflation factor for FY 2016-17 based on actual indices is 3.96% as against 3.05% considered in order dated 18.05.2018. Accordingly normative A&G expenses for FY 2016-17 has got revised as tabulated below:

Particulars	As per T.O.	Normative
	dated	Calculation
	18.05.2018	
	FY 2016-17	FY 2016-17
	(Rs.Crs)	(Rs.Crs)
Normative A&G Cost Calculation		
A&G Costs for FY 2015-16	24.05	24.05
Add: Inflation factor for FY16-17	3.02%	3.96%
Normative A&G Cost for FY 2016-17	24.79	25.01

 Table 2-15: Computation of Normative A&G Cost for FY 2016-17

- 2.5.6.6 **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% which was derived based on figures of FY 2014-15 (preceding year to base year).
- 2.5.6.7 The computation of R&M Expenses for FY 2016-17 on normative principles is given below:

Particulars	As per T.O. dated	Normative Calculation
	18.05.2018	Calculation
	FY 2016-17	FY 2016-17
	(Rs.Crs)	(Rs.Crs)
Normative R&M Cost Calculation		
Opening GFA as on 1.4.2016	520.33	520.32
K Factor as per MYT Order	4.80%	4.80%
Normative R&M Cost for FY2016-17	24.98	24.98

Table 2-16: Computation of Normative R&M Cost for FY 2016-17

- 2.5.6.8 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. We would request the Hon'ble Commission to also include inflationary adjustment while approving the normative R&M expense.
- 2.5.6.9 The Petitioner would like to submit that following major State Regulatory Commission are allowing Inflation factor for R&M expenses.
 - Maharashtra Allows Inflation on total O&M expenses (WPI-30% & CPI-70% on 5 years average increase)
 - ➤ Gujarat Provides 5.72% on annual basis on O&M expenses of previous year
 - Odisha Allows 5.4% on GFA plus special allowance to undertake critical activities of loss reduction, energy audit etc.
- 2.5.7 **Revision of O&M approved normative figures:** The Petitioner requests Hon'ble Commission to revise the approved figures of A&G and R&M Expenses for the MYT Control Period FY 2016-17 onwards taking into consideration normative principles and the issues raised by the Petitioner as under:
 - a) Employee Cost considering Load Growth + Inflation
 - b) A&G Expenses considering Load Growth + Inflation
 - c) Allow Additional fees due to amendment in Conduct of Business Regulations 2016 and additional CGRF expenses due to Commission order under Change in Law as separate element under O&M head
- 2.5.8 **Summary of O&M Expenses:** The A&G expenses as per audited accounts is presented exclusive of additional expense towards statutory / change in law payments for the



purpose of sharing of gains/ losses. The summary of O&M expenses with respect to approved, actual audited and normative computation is given in the table below:

	FY 2016-17		
Particulars	Approved in APR dt. 18.05.18 (Rs.Crs)*	Audited Accounts (Rs.Crs)	Normative Amount (Rs.Crs)
A&G Costs	24.79	24.17	25.01
R&M Expenses	24.98	28.31	24.98
Employee Cost	21.17	19.82	22.22
Total O&M expenses for the purpose of Sharing of Gains/ Losses	70.93	72.29	72.20
Add: Additional expenses due to Statutory/ Change in Law payments		0.45	0.45
Total Expenses	70.93	72.74	72.65

* As revised in Review Order dated 11.9.2018

- 2.5.9 **Sharing of Gains/ (Loss):** According to JSERC Distribution tariff Regulations, 2015, O&M Expense is a "controllable" item.
- 2.5.9.1 The Petitioner has considered the actual figures excluding additional impact due to change in law for the purpose of sharing of gains and losses.
- 2.5.9.2 After the computations of sharing of gains/ losses, the Petitioner has added Change in law claim of Rs.**0.45** Crs and accordingly total O&M expenses has been claimed.
- 2.5.9.3 The computation of Sharing of Gains/ Losses on account of Controllable parameter as per provisions of Tariff Regulations 2015 is given below:

Table 2-18: Sharing of Gains/ Loss – O&M Expenses for FY 2016-17

Particulars	FY 2016-17
	(Rs.Crs)
	Sharings
	Calculation
Normative O&M Expenses - a	72.20
Actual O&M Epxenses - b	72.29
Sharing of Gains/ (Loss) c=a-b	-0.09
Sharing of Gain - 60% to be retained	-0.09
by Licensee - d	
Add: Additional expenses due to Statutory/ Change in Law payments - e	0.45
Total O&M Claim of TSL f=b+d+e	72.65

2.5.9.4 As can be seen, the actual expenses are higher than normative mainly due to Higher actual R&M expenses. Accordingly, the Petitioner requests Hon'ble Commission to approve total O&M expenses of **Rs.72.65 Crs** for FY 2016-17 on normative basis



including treatment on account of sharing of gains and statutory / change in law payments.

2.5.9.5 The Petitioner would like to submit the O&M cost comparison of other similar licensees for FY 2016-17 for reference purpose. The O&M cost of Petitioner is Rs.
 0.25 /kWh for FY 2016-17 whereas the same cost for other utilities is much higher.

Name of Utility	FY 2016- 17 (Approved) Rs/kWh	Source
BYPL	0.74	http://www.derc.gov.in/ordersPetitions/orders/Tariff/Tariff%20Order/Tariff%20Order%20for%20FY%202018-19/Tariff%20Order/BYPLTariff%20Order%20FY%202018-19.pdf
TDDPL	0.65	http://www.derc.gov.in/ordersPetitions/orders/Tariff/Tariff%20Order/Tariff%20Order%20for%20FY%202018-19/Tariff%20Order/TPDDL%20Tariff%20Order%20FY%202018-19.pdf
BRPL	0.56	http://www.derc.gov.in/ordersPetitions/orders/Tariff/Tariff%20Order/Tariff%20Order%20for%20FY%202018-19/Tariff%20Order/BRPL%20Tariff%20Order%20FY%202018-19.pdf
TPL- Ahmd	0.44	http://www.gercin.org/uploaded/document/ddb5dd3c-32fd-4b13-b18f-daa284c5be38.pdf
TPL- Surat	0.37	http://www.gercin.org/uploaded/document/ea429fc0-03ce-4b71-81a3-b558482ae739.pdf
Noida Power	0.34	http://www.uperc.org/App_File/NPCLDraftOrderFY2016-17-August1,2016-pdf81201633539PM.pdf
CESC Kolkata	1.37	http://wberc.net/wberc/tariff/Cesc/Tariff/ordnpet2001/CESC_PDF.pdf
Tata Mumba i	0.63	http://www.mercindia.org.in/pdf/Order%2058%2042/Order-47%20of%202016-21102016.pdf

Table 2-19: Details of O&M Expenses of similar utilities for FY 2016-17

2.5.9.6 It is submitted that Petitioner has made loss on account of lower R&M expenses, non consideration of load growth in Employee and A&G expenses. We request the Hon'ble Commission to kindly consider the same and allow O&M expense accordingly at Rs.**72.65** Crs as discussed earlier.

2.6 Capital Work in Progress, GFA and Depreciation

2.6.1 The Capital Work in Progress (CWIP), Gross Fixed Assets (GFA) and the depreciation on GFA for FY 2016-17 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)			
Particulars	Approved in T.O. dt 18.5.2018 (APR)	Actual Audited	
	FY 2016-17	FY 2016-17	
Capital Works in Progress (CWIP)			
Opening CWIP	5.37	5.37	
Add: Capex during year	8.46	8.46	
Total CWIP	13.83	13.83	
Less: Trfd to GFA	4.91	4.91	
Closing CWIP	8.92	8.92	
Gross Fixed Assets (GFA)			
Opening GFA	520.33	520.32	
Add: Trfd from CWIP including obsolete / discarded assets	4.87	4.87	
Closing GFA	525.20	525.19	
Depreciation			
Depreciation for the FY	37.80	36.24	
Less: Depreciation on Assets created out of consumer contribution	4.00	3.90	
Net Depreciation	33.80	32.34	

Table 2-20: CWIP, GFA and Depreciation for FY 2016-17

2.6.2 **Capital Works in Progress (CWIP):** The Petitioner has considered Opening and Closing CWIP as Balance sheet statement of FY 2016-17. The assets transferred to GFA are considered from Note 3 of the Audited Accounts statement.

It is submitted that Petitioner has done capital expenditure and resultant capitalization as per plan. The scheme wise details of Capital Expenditure and Capitalisation are provided at **Annexure 11.**

- 2.6.3 The Petitioner therefore requests the Hon'ble Commission to kindly review the Capital expenditure and Capitalization for FY 2016-17 as presented above which are based on audited accounts for FY 2016-17 and approve the same.
- 2.6.4 **Consumer Contribution:** The details of the Opening Consumer Contribution are taken from Note 1- Capital Contribution and amount received during the year is added. The Consumer contribution amount received during the year is Rs.5.77 Crs and closing consumer contribution amount for FY 2016-17 as per audited accounts is Rs. **56.53** Crs (refer Note 1 of audited accounts). Further no ROE is claimed by Petitioner in consumer contribution amount.

	As at 31st March 2017 (₹)
Note 1 : CAPITAL CONTRIBUTION	
Contrbution for Capital expendiure :	
Opening Balance	5075,92,372
Add : Amount received during the year	576,80,364
	5652,72,736
Less : Transfer to Profit and Loss Account	a 1
Closing Balance	5652,72,736

- 2.6.5 **Gross Fixed Assets:** The class wise asset details of opening balance and closing balance of the GFA are provided at Note 3 of Audited Accounts. The net capitalisation after adjustments to disposal/ discarded assets is Rs. **4.87** Crs for FY 2016-17 and closing GFA as per Note 3 of Audited Accounts is Rs. **525.19** Crs.
- 2.6.6 **Depreciation:** As per the methodology approved by Hon'ble Commission, the depreciation costs proportionate to the extent of fixed assets being funded through Consumer Contribution have been deducted from the total depreciation in order to arrive at the net depreciation to be charged in the ARR. The total depreciation for FY 2016-17 as per audited accounts is Rs. **36.24** Crs (Refer P&L and Note 3 of Audited Accounts)
- 2.6.7 The computation of net depreciation to be claimed in true-up for FY 2016-17 is as follows:-

Computation of Net Depreciation for FY 2016-17 (Rs.Crs)		
Closing GFA (A)	525.19	
Closing Consumer Contribution capitalised (B)	56.53	
Gross Depreciation FY 2016-17 (C)	36.24	
Depreciation on Consumer Contribution (D=C/A*B)	3.90	
Net Depreciation to be charged in ARR (E=C-D)	32.34	

 Table 2-21: Computation of Net Depreciation for FY 2016-17

2.6.8 The Petitioner requests Hon'ble Commission to approve the net depreciation amount of Rs. **32.34** Crores for FY 2016-17 under truing-up purpose.

2.7 Interest and Finance Charges

2.7.1 The Petitioner has considered the same methodology as approved by the Hon'ble Commission in MYT/ APR order. The deemed additions to the loan has been considered @70% of fixed asset addition after reducing assets created from consumer contribution amount received during the year. {(Total Assets Additions to GFA during the year – Assets Additions from Consumer Contribution during the year) x 70%}

2.7.2 **Opening Normative Loan and Equity:** The Computation of GFA and Accumulated Depreciation on Own assets and Sources of Funding for the purpose of normative Debt &Equity for FY 2016-17 are provided in the table below:

Computation of GFA & Accumlated Depreciation (OWN Assets) Rs.Crs			
Total Opening GFA	(a)	520.32	
Less: Opening Consumer Contribution	(b)	50.76	
Opening GFA (Own contribution)	(c=a-b)	469.56	
Percentage GFA (own) of total GFA	(d=c/a)	90.24%	
Opening Accumulated Depreciation	(e)	197.51	
Accumulated Depreciation (Own)	(f=dxe)	178.24	
Accumulated Depreciation (Consumer)	(g=e-f)	19.27	

Table 2-22: Computation of GFA & Accumulated Depreciation (Own Assets) FY 2016-17

Source: Audited Accounts for FY 17

Table 2-23: Computation of Opening Normative Debt & Equity balance for FY 2016-17

Opening Balances of Debt & Equity Component (Rs.Crs)		
Particulars	Audited Accounts/ Normative	
	FY 2016-17	
Opening Gross fixed assets	520.32	
Less:Opening Accumulated Depreciation (own assets)	178.24	
Net Fixed Assets	342.08	
Sources of Funding (Normative computation)		
Opening Consumer Contribution	50.76	
Equity [30% * (GFA - Contribution)]	140.87	
Debt [70% of (GFA - Consumer Contribution) - Accumulated Depn]	150.45	
Total Sources of Funding	342.08	

2.7.3 Additions to Loan & Equity during the year: The computation of addition to loan and equity for the purpose of normative interest on loan and return on equity is shown in the table below. There is no additions to loan and equity in this year as capitalisation amount is less than consumer contribution.

Table 2-24: Addition to Loan and Equity for FY 2016-17

Addition to Loan & Equity (Rs.Crs)		
Transferred To GFA (A)	4.91	
Consumer Contribution (B)	5.77	
GFA (own) (C=A-B; if A is higher)	-	
Debt (D= C x 70%)	-	
Equity (E= C x 30%)	-	

- 2.7.4 During the year, the Petitioner has received Rs. 5.77 Crs as consumer contribution.
- 2.7.5 **Repayments of Loan:** As per the methodolocy adopted in previous tariff orders and provisions of Tariff Regulations 2015, the deemed repayment has been considered equivalent of the net depreciation cost for the financial year.
- 2.7.6 <u>Interest on Normative Loan</u> 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 2015-16 as approved in the true-up of FY 2015-16. 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, 2016 i.e. 11.30%. The normative interest

comes to Rs. **15.17** Crs as against Rs.15.09 Crs approved by Hon'ble Commission in Tariff order dated 18.05.2018. The table below provides calculation of Interest on Normative Loan for FY 2016-17:

Particulars	Approved in T.O. dt 18.5.2018 (APR) - Rs.Crs FY 2016-17	Normative Claim (Rs.Crs) FY 2016-17
Opening Balance of Normative Loan	150.43	150.45
Add: Deemed Additions during the FY	0.00	0.00
Less: Deemed Repayments	33.80	32.34
Closing Balance of Normative Loans	116.64	118.11
Average Balance of Normative Loans	133.54	134.28
SBI base Rate+200 bp as on 1st April	11.30%	11.30%
Normative Interest Amount	15.09	15.17

Table 2-25: Normative Interest	on Loan for FY 2016-17
--------------------------------	------------------------

- 2.7.7 The Hon'ble Commission is requested to kindly approve the Interest on normative loan balance of Rs. **15.17** Crs as given in table above.
- 2.7.8 <u>Working Capital and Interest on Working Capital</u> The Petitioner has arrived at the Working Capital based on the JSERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2015.
- 2.7.9 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 2016 plus 350 basis points i.e. 12.80%. The computation of interest on working capital is given below:

Particulars	Approved in T.O. dt 18.5.2018 (APR) Rs.Crs *	Normative Claim (Rs.Crs)
O&M Expenses (1 Month) *	5.91	6.02
Maintainence Spares (1% of Opening GFA)	5.20	5.20
Expected Revenue at Existing Tariff (2 Months)	254.68	250.42
Less:		
Power Purchase Cost (1 Month)	102.31	102.31
Average Security Deposit	17.81	17.81
Total Working Capital	145.67	141.53
SBI Base rate + 350 basis points	12.80%	12.80%
Total Interest on Working Capital *	18.65	18.11

Table 2-26: Interest on Working Capital for FY 2016-17

2.7.10 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 2-33 which is used for computation of below interest on working capital.

Particulars	Approved in T.O. dt 18.5.2018 (APR) Rs.Crs *	Wheeling Normative Claim (Rs.Crs)	Retail Normative Claim (Rs.Crs)	Total Normative Claim (Rs.Crs)
O&M Expenses @ 1 Month for Wheeling / Retail business		4.03	1.99	
Maintainence Spares @1% of Opening GFA for Wheeling / Retail business in ratio of 90:10		4.68	0.52	
Receivables for 2 months' Revenue @ existing Tariff from Wheeling / Retail business		23.22	227.20	
Sub-Total	-	31.92	229.71	-
Less: Security Deposit			17.81	
Less: Power Purchase cost for 1 month			102.31	
Total Working Capital	-	31.92	109.59	-
SBI Base rate + 350 basis points	12.80%	12.80%	12.80%	
Total Interest on Working Capital *	18.65	4.09	14.03	18.11

Table 2-27: Interest on Working Capital (Wheeling & Retail) for FY 2016-17

- 2.7.11 The Hon'ble Commission is requested to kindly approve the Interest on working capital of Rs. **18.11** Crs for FY 2016-17.
- 2.7.12 Interest on Security Deposit In accordance with Regulation 8.2.16 of the JSERC Supply Code Regulations 2015, interest on security deposit (SD) has to be paid as per SBI Base Rate prevailing on the 1st of April of the particular year. Accordingly, TSL paid the interest on security deposit at 9.30% p.a. for the FY 2016-17 based on SBI prevailing rate on 01st April 2016. The interest on security deposit is paid based on the amount of SD added during the year and period of SD held etc.
- 2.7.13 The details of security deposit is taken from Note 7 of audited accounts and interest on security deposit is taken from P&L statement. The Petitioner hereunder provides the detail of actual interest on security deposit amount for FY 2016-17:

Interest on Security Deposit (Rs Cr)			
Particulars	Approved in T.O. dt 18.5.2018	Audited Accounts	
	FY 2016-17	FY 2016-17	
Opening Security Deposit		15.32	
Security Deposit received		4.97	
Closing Security Deposit		20.30	
Average Security Deposit		17.81	
Rate of Interest : Bank Rate			
Interest on Secuity Deposit	1.26	1.26	

Table 2-28: Interest on Security Deposit for FY 2016-17

2.7.14 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.."

- 2.7.15 The Petitioner submits that apart from cash security deposit mentioned in above table, it has not received any BG from customers as Seurity Deposit during the FY 2016-17.
- 2.7.16 The Hon'ble Commission is requested to approve Interest on security deposit for an amount of Rs. **1.26** Crs as per the annual accounts for FY 2016-17.
- 2.7.17 The Normative Loan and Interest and Finance Charges approved by the Hon'ble Commission in APR Order for FY 2016-17 and as per audited accounts and/ normative figures for FY 2016-17 are summarised in the table below.

Interest and Finance Charges (Rs Cr)			
Particulars	Approved in T.O. dt 18.5.2018	Audited / Normative Claim	
	FY 2016-17	FY 2016-17	
Interest on Normative Loan	15.09	15.17	
Interest on Working Capital	18.65	18.12	
Interest on Security Deposit	1.26	1.26	
Total Interest & Finance Charges	35.00	34.55	

Table 2-29: Summary of Total Interest & Finance charges for FY 2016-17



2.7.18 Accordingly, the Hon'ble Commission is requested to kindly approve the Interest and Finance Charges of Rs. **34.55** Crs for FY 2016-17.

2.8 Return on Equity

2.8.1 The Petitioner has considered the same methodology as approved by Hon'ble Commission in earlier MYT orders. The deemed additions to the equity has been considered @30% of total fixed asset addition after reducing assets additions from consumer contribution amount received during the year. {(Total Additions to GFA during the year – Assets Addition from Consumer Contribution during the year) x 30%}. Please refer



- 2.8.2 Table 2-23 provided in preceeding paragraphs. The normative return on equity is claimed @ **15.5%** which is the return prescribed under the Distribution Tariff Regulation 2015.
- 2.8.3 **Income Tax:** It is submitted that Petitioner has paid actual income tax for FY 2016-17. The income tax challan paid are provided at **Annexure 11.** 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.
- 2.8.4 It is submitted that Petitioner has paid Normal Tax Rate and accordingly the computation of composite Tax Rate for FY 2016-17 is as below:

Income Tax		FY2016-17
Normal Tax Rate	А	30.00%
Add: Surcharge	В	12.00%
Normal Tax Rate with Surcharge	C=Ax(1+B)	33.60%
Add: Education Cess	D	3.00%
Composite Tax Rate	E=Cx(1+D)	34.608%

 Table 2-30: Computation of Income Tax Rate for FY 2016-17

2.8.5 The computation of ROE based on normative approach including income tax for FY 2016-17 is shown in the below table.

Return on Equity (Rs Cr)			
Particulars	Approved in T.O. dt 18.5.2018 (APR)	Normative Claim	
	FY 2016-17	FY 2016-17	
Opening Balance of Normative Equity	140.87	140.87	
Add: Deemed Additions during the FY 2016-17	-	-	
Closing Balance of Normative Equity	140.87	140.87	
Average Balance of Normative Equity	140.87	140.87	
Rate of Return on Equity	15.50%	15.50%	
Normative ROE Amount -(A)	21.83	21.83	
Income Tax Rate - (B)		34.608%	
Normative ROE Amount with Income tax C=A/(1-B)	21.83	33.39	

Table 2-31: Normative Equity & Return on Equity for FY 2016-17

2.8.6 Accordingly, the Hon'ble Commission is requested to kindly approve the Return on Equity of Rs. **33.39** Crs for FY 2016-17.



2.9 Non-Tariff Income

2.9.1 Non-Tariff Income includes Meter Rent, Delayed Payment Surcharge, service charges, Supervision Charges and miscellaneous charges etc. The amount of Non-Tariff Income for FY 2016-17, as per actuals is Rs.**5.38** Crs and Hon'ble Commission is requested to kindly approve the same.

2.10 Income Tax on Return on Equity for Past Periods

We would like to provide details of our submission and Commissions' order for recovery of Income tax of past periods when TSL licensee was in Loss, and income tax on Return on Equity was not allowed by the Hon'ble Commission. In subsequent years when past gaps were being recovered, the income tax due to recovery of past gaps was considered by the Hon'ble Commission and the same was allowed in FY 2015-16 true up order dated 18.05.2018.

The relavant part of Hon'ble Commission's order on the same, as given in pages 34 and 35, clauses 5.51 to 5.59 of TSL Tariff Order dated 18.05.2018.

Quote – "

"Commission's Analysis

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

Table 21: Impact of True-up on RoE

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

5.54 In accordance with the Distribution Tariff Regulations, 2010, the Commission has considered the equity base to be equal to 30% of GFA. The GFA has been considered net of consumer contribution received.

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

5.56 The following table summarizes the return on equity as approved in the MYT Tariff Order dated June 4, 2014, revised estimates approved in the Tariff Order dated 28th April 2008, actual now submitted by the Petitioner and approved by the Commission for FY 2015-16:

Particulars	Approved in APR	Submitted by the Petitioner	Approved in True up order
Opening Balance of Normative Equity	136.46	136.46	136.46
Deemed Additions	4.00	4.41	4.41
Closing Balance of Normative Equity	140.46	140.87	140.87
Average Equity	138.46	138.67	138.67
RoE (%)	15.50%	15.50%	15.50%
RoE	21.46	21.49	21.49

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

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

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

Table 23 Cumulativ	e RoE approved by t	he Commission FY	2015-16 (Rs Cr)

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

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

– Unquote



- 2.10.1 In view of the above submissions of TSL Licensee, and the Commission's order for the same, we would now request the Hon'ble Commission to allow the balance amount of Rs. 5.51 Crs, as additional income tax on ROE.
- 2.10.2 This amount of Rs. 5.51 Crs shall come in the additional amount in the ARR calculation of FY 2016-17, as the income tax has been paid during FY 2016-17.
- 2.10.3 Total income tax paid on the PBT of FY 2016-17 of Rs. 168.22 Crs. is Rs. 58.21 Crs (being 34.608% of PBT) during FY 2016-17, which is in excess of Rs. 17.07 Crs (Rs. 11.56 Crs as Income tax on ROE of FY 2016-17 + Rs. 5.51 crs of Income tax of previous years balance).
- 2.10.4 So, we request the Hon'ble Commission to include **Rs. 5.51 Crs** as Income tax on ROEs of previous years, as an allowable expenses during FY 2016-17.

2.11 Revenue from Existing Tariff for FY 2016-17

2.11.1 The consumer category-wise Revenue from Existing Tariff for FY 2016-17 as per actual figures is given under:

Category wise Sales and Revenue FY 2016-17							
Consumer Category	No. of Consumers	Connected Load	Energy Sales	Fixed/ Demand Charges	Energy Charges & FPPPA Charges	Rebate and Surcharges (PF , LF , Voltage ,others adjust.)	Total Revenue
	Nos.	kVA/kW	MUs	Rs. Crs	Rs. Crs	Rs. Crs	Rs. Crs
Domestic	36296	185934	199.94	0.56	67.91	-0.51	67.96
Domestic - DSHT	8784	43935	91.52	0.06	38.97	-0.17	38.87
Commercial	137	48811	65.32	0.51	38.21	-0.22	38.50
High Tension I	79	18745	29.37	4.70	15.44	0.19	20.33
High Tension II	21	33623	111.83	9.17	59.12	-2.04	66.25
High Tension III	14	300225	1883.33	91.38	987.27	-66.57	1012.07
High Tension IV	1	110000	130.82	34.10	67.71	-2.65	99.17
Utilities/Street Light	393	16932	84.13	0.01	34.51	-0.21	34.32
Temporary Supply	97	214	1.79	0.00	1.04	0.00	1.04
Sale to JUSCO	1	50000	279.29	0.00	123.99	0.00	123.99
Total	45823	808419	2877.34	140.50	1434.18	-72.19	1502.50
				Total Tariff I		(In Rupees)	15024984205
				a) Meter Hire	U U		16648105
				a) Service Ch	arges		35799474
				b) Others			1306305
Total Tariff & Non Tariff Income					come	53753884	
	Total Tariff & Non Tariff Income					15,07,87,38,089	

Table 2-32: Revenue from Existing Tariff for FY 2016-17 (Rs.Crs)

Catagory wise Sales and Poyonue EV 2016 17

2.11.2 The Revenue from Sale of Power is **Rs. 1,502.50 Crs** as against Rs.1528.09 Crs approved by Hon'ble Commission for FY 2016-17 at existing tariff in APR Order.



Accordingly the Hon'ble Commission is requested to approve the revenue from sale of power as per audited accounts and as claimed in this petition for FY 2016-17.

2.12 Aggregate Revenue Requirement and Revenue Gap for FY 2016-17

2.12.1 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:

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%
б	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%

2.12.2 In line with the cost allocation approved by the Hon'ble Commission in APR Order, the ARR for FY 2016-17 based on audited accounts and / normative claim is summarised below:



		Summary	of ARR (Rs.	Crs)			
Sr No	Particulars		Wheel	ing and Re	tail ARR for F	Y 2016-17	
		Approved in T.O. dt 18.5.2018 Rs.Crs *	Wheeling %	Retail %	Wheeling ARR (Rs.Crs)	Retail ARR (Rs.Crs)	Total Audited / Normative Claim
1	Power Purchase Cost	1,227.67	0%	100%	-	1,227.68	1,227.68
2	Employee Expenses	21.17	60%	40%	13.33	8.89	22.22
3	A&G Expenses	24.79	50%	50%	12.50	12.50	25.01
4	R&M Expenses	24.98	90%	10%	22.48	2.50	24.98
6	Statutory / Change in Law payments	-	50%	50%	0.23	0.23	0.45
7	Interest on Loan	15.09	90%	10%	13.66	1.52	15.17
8	Interest on Working Capital	18.65	10%	90%	4.09	14.03	18.11
9	Interest on Security Deposit	1.26	0%	100%	-	1.26	1.26
10	Depreciation	33.80	90%	10%	29.11	3.23	32.34
11	Return on Equity	21.83	90%	10%	30.05	3.34	33.39
12	Gross Aggregate Revenue Requirement (1 to 11)	1,389.24			125.44	1,275.17	1,400.61
13	Less: Non Tariff Income	5.86	10%	90%	0.54	4.84	5.38
13A	Add: Income tax on past period RoE		90%	10%	4.96	0.55	5.51
14	Aggregate Revenue Requirement (12-13)	1,383.37			129.86	1,270.88	1,400.74
15	Less: Revenue from Sale of Power @ Existing Tariff	1,528.09	Wheeling ARR Ratio	Retail ARR	139.29	1,363.20	1,502.50
16	Revenue Gap / (Surplus) (14- 15)	(144.72)					(101.76)
17	Add/ Less: Impact of Sharing of Gains/ (Loss) on O&M Expenses						(0.09)
18	Revenue Gap / (Surplus) after Sharing of Gains/ Loss (16- 17)	(144.72)					(101.85)

Table 2-33: ARR for FY 2016-17

* as revised in Review order dated 11.9.2018

2.12.3 Accordingly, the Petitioner requests the Hon'ble Commission to kindly approve the estimated revenue gap/ (surplus) of Rs. **(101.85)** Crs for FY 2016-17.

Chapter 3. True-up of FY 2017-18

3.1 Background

- 3.1.1 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. The Hon'ble Commission in the Tariff Order dated 18th May 2018 has also approved ARR/ APR for FY 2017-18.
- 3.1.2 The Hon'ble Commission has trued-up performance for FY 2015-16 in the Tariff Order dated 18th May 2018. Thereafter aggrieved with some O&M cost approvals in the tariff order, the Petitioner filed the Review Petition against the said order vide letter dated 15th June 2018 and the Hon'ble Commission issued the ruling on the same vide order dated 11.09.2018 in Case no.9 of 2018. The impact of the same has been considered wherever applicable in this chapter of true-up for FY 2016-17 and FY 2017-18.
- 3.1.3 TSL hereby submits the financial performance for FY 2017-18 based on audited accounts and the provisions of Tariff Regulations 2015 for true-up purpose. The following sections summarise each of the components of ARR for FY 2017-18. A comparison of figures approved by the Hon'ble Commission in APR order dated 18th May, 2018 and figures based on audited accounts & / normative claims are shown under relevant sections discussed herewith.

3.2 Sales, Consumers and Connected Load

3.2.1 The table below provides the details of category wise number of consumers, connected load, actual sales and approved sales for FY 2017-18.

Consumer Category	No. of Consumers	Connected Load	Actual Sales (FY17-18)
	(Nos)	(KW/KVA/HP)	(MUs)
Domestic	37,336	1,89,124	199
Domestic - DSHT	139	46,565	91
Commercial	8,846	46,779	67
Temporary Supply	70	129	2
High Tension I	78	17,593	28
High Tension II	22	33,373	109
High Tension III	14	3,00,589	1,913
High Tension IV	1	1,10,000	197
Utilities/Street Light	393	17,020	82
Sale to Other Licensee	1	50,000	315
Total	46,900	8,11,171	3,003

Table 3-1: Consumers, Connected Load & Actual Sales – FY 2017-18

3.2.2 The actual sales for FY 2017-18 is line with approval of Hon'ble Commission. TSL requests the Hon'ble Commission to approve the sales of **3,003** MUs for FY 2017-18 as per actual audited acounts.

3.3 Energy Balance

3.3.1 The Energy Balance of TSL for FY 2017-18 is provided in the table below:



Table 3-2: Energy Balance for FY 2017-18

	Energy Balance for FY 2017-18 (MUs)					
Sr No	Particulars	ARR Approved in T.O. dt 18.5.2018 FY 2017-18	Actual Audited FY 2017-18			
А	ENERGY REQUIREMENT	112017 10	11 2017 10			
1	Sales to Other Licensees	302.64	314.56			
2	Distribution Losses on Sales to Other Licensees (%)	0.00%	0.00%			
3	Unit Lost on Sales to Other Licensees	0.0070	-			
4	Energy Requirement for Sales to Other Licensees	302.64	314.56			
5	Sales to Steel Work HT - IV Category	133.15	196.96			
6	Distribution Losses to HT - IV (%)	0.00%	0.00%			
7	Unit lost on Sales to HT - IV	-	-			
8	Energy Requirement for HT - IV Category	133.15	196.96			
9	Sales to LT Consumers (Dom + Comm + Street light + Temp)	361.83	349.60			
10	Sales to HT Consumers (Other than HT - IV) (DSHT + HT-I + HT-II + HT-III)	2,201.40	2,141.91			
11	Total Sales to Consumers other than HT-IV & JUSCO (9 + 10)	2,563.23	2,491.51			
12	Distribution Losses on Sales to Consumers other than HT-IV & JUSCO (%)	4.06%	2.75%			
13	Unit Lost on Sales to Consumers other than HT-IV & JUSCO	104.07	70.55			
14	Energy Requirement for Sales to Consumers other than HT-IV & JUSCO	2,667.30	2,562.06			
15	Overall Sales (4 + 8 +11)	2,999.62	3,003.04			
16	Overall Distribution Losses (%)	3.35%	-			
17	Overall Distribution Losses	104.07	70.55			
18	Total Energy Requirement	3,103.69				
В	ENERGY AVAILABILITY					
1	Tata Power Company Limited	1,469.45	1,475.76			
а	Unit - II	724.00	743.73			
b	Unit - III	745.45	732.03			
2	Damodar Valley Corporation	1,570.87	1,451.33			
а	132 kV	394.09	404.28			
b	400 kV	1,176.78	1,047.05			
3	TSW Captive	23.77	17.76			
4	RPO	-	-			
4	Open access / Other Sources	128.93	128.73			
19	Total Pooled Energy Availability	3,193.02	3,073.59			
20	Surplus / (Deficit)	89.33	-			



3.3.2 It is requested to Hon'ble Commission to kindly approve the energy balance as per the actual basis as submitted in above table.

3.4 Power Purchase Cost

- 3.4.1 Tata Steel Limited procures 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 and procurement of RECs for meeting Renewable Purchase Obligation.
- 3.4.2 This cost is a function of the energy requirement and price of available power from the different source for meeting the requirement. The Power purchase cost claim is Rs. 1,334.68 Crs as against Rs.1301.97 Crs approved by Hon'ble Commission in APR order. The table below depicts the actual power purchase cost, approved cost by Hon'ble Commission in the APR Order dated 18th May 2018 and claimed by Petitioner.



	Power Purchase	- MUs		
Particu		ARR Approved in T.O. dt 18.5.2018	Actual Audited	Claimed in this Petition
		FY 2017-18	FY 2017-18	FY 2017-18
Tata Power Company Ltd (A				
Power Purchase - MUs	Unit-II	724.00	743.73	743.73
	Unit -III	745.45	732.03	732.03
	Total	1,469.45	1,475.76	1,475.76
Rate - Rs/kWh	Unit-II	3.72	4.1314	4.1314
	Unit -III	3.61	4.0410	4.0410
	Total	3.84	4.0866	4.0866
Cost - Rs.Crores	Unit-II	283.85	291.44	291.44
	Unit-II (Credit for		15.83	15.83
	FY13,FY14 & FY15)			
	Total Unit II	283.85	307.27	307.27
	Unit -III	281.06	277.16	277.16
	Unit -III (Credit for		18.65	18.65
	FY13, FY14 & FY15) Total Unit III	201.00	205.04	205.04
		281.06	295.81	295.81
	Total	564.91	603.08	603.08
Damodar Valley Corporatio Power Purchase - MUs	n 132 KV (B)	394	404.28	404.29
Rate - Rs/kWh				404.28
Cost - Rs.Crores		4.90	4.8944	4.8944
Damodar Valley Corporatio	n = 400 k (c)	193.21	197.87	197.87
Power Purchase - MUs	11 400 KV (C)	1,176.78	1,047.05	1,047.05
Rate - Rs/kWh		4.00	4.3458	4.3458
Cost - Rs.Crores		4.00 470.86	4 .3438 455.02	4 .3438 455.02
TSW- Captive (D)		470.80	455.02	455.02
Power Purchase - MUs		23.77	17.76	17.76
Rate - Rs/kWh		3.79	3.9854	4.0866
Cost - Rs.Crores		9.01	7.08	7.26
RPO (E)		5.01	7.00	7.20
REC Cost - Rs.Crores		14.00	21.59	21.59
Other / Open Access (F)				
Power Purchase - MUs		128.93	128.73	128.73
Rate - Rs/kWh		3.88	3.8733	3.8733
Cost - Rs.Crores		49.98	49.86	49.86
Total Pooled Power Purcha	se (F= A+B+C+D+E+F)			
Total Cost - Rs.Crores		1,301.97	1,334.50	1,334.68
Less: Revenue from sale of S	urplus Power	36.42		
Total Cost - Rs.Crores		1,265.55	1,334.50	1,334.68
Power Purchase - MUs		3,193.02	3,073.59	3,073.59
Rate - Rs/kWh		4.08	4.3418	4.3424

Table 3-3: Power Purchase Cost for FY 2017-18



- 3.4.3 **Power Purchase from Tata Power Company Ltd (TPCL):** TSL purchased **1,475.76** MUs at a total cost of Rs. **603.08** Crs, which works out to average rate of Rs. **4.0866** per unit for FY 2017-18.
- 3.4.4 The Petitioner requests the Hon'ble Commission to kindly approve the total cost of Rs.603.08 Crs for purchase of power from Tata Power.
- 3.4.5 The actual Power Purchase Bills (for all sources) paid by TSL for FY 2017-18 are enclosed with **Annexure 12.**
- 3.4.6 Power Purchase from DVC Source 132 kV: TSL purchased about 404.28 MUs for an amount of Rs. 197.87 Crs which works out to average power purchase cost of Rs. 4.8944 per unit for FY 2017-18.
- 3.4.7 The Hon'ble commission is requested to kindly approve the total power purchase cost of Rs. **197.87** Crs from DVC 132 kV for FY 2017-18.
- 3.4.8 The actual Power Purchase Bills (for all sources) paid by DVC Source 132 kV for FY 2017-18 are enclosed with **Annexure 13**
- 3.4.9 **Power Purchase from DVC Source 400 kV:** TSL purchased **1,047.05** MUs from DVC at 400 kV at a total cost of Rs. **455.02** Crs which comes out to average rate of Rs. **4.3458** per unit.
- 3.4.10 The Hon'ble commission is requested to kindly approve the total power purchase cost of Rs. **455.02** Crs from DVC 400 kV for FY 2017-18.
- 3.4.11 The actual Power Purchase Bills (for all sources) paid by DVC Source 400 kV for FY 2017-18 are enclosed with **Annexure 14.**
- 3.4.12 **Power Purchase from TSL Captive:** TSL licensee purchased **17.76** MUs from TSL Captive during FY 2017-18. The Hon'ble Commission had been allowing this power purchase at the average rate of TPCL units, which is the lowest cost, source of power from TSL Licensee. The total cost considering actual power purchase from TSL Captive is Rs. **7.26** Crs at a rate of Rs. **4.0866** per unit.
- 3.4.13 The average power purchase rate of TPCL units is Rs. **4.0866** per unit which is lowest cost amongst sources approved by Commission in MYT order (TPCL, DVC 132 kV and

DVC 400 kV, Table 52 of MYT order) and accordingly the power purchase cost works out to Rs. **7.26** Crs for FY 2017-18. The Hon'ble commission is requested to kindly approve the total power purchase cost of Rs. **7.26** Crs from TSL captive source for FY 2017-18 as per principles approved in previous tariff orders.

- 3.4.14 The actual Power Purchase Bills (for all sources) paid by TSL captive source for FY 2017-18 are enclosed with **Annexure 15**.
- 3.4.15 **REC Procurement:** As per JSERC (Renewable Purchase Obligation and its Compliance) Regulations, 2016 the Petitioner needs to purchase specified quantum of power from Renewable Energy Sources.
- 3.4.16 The Petitioner would first like to discuss carry forward RPO obligation from FY 2016-17 and thereafter discuss the RPO fulfilment for FY 2017-18. The details are presented in the table below:

Particulars	Target (FY16-17)	Actual achieved (FY16-17)	Deficit carryover to FY 2017-18
Total RPO	138.88	50.00	88.88
Non-Solar	91.56	50.00	41.56
Solar	47.32	0.00	47.32

Table 3-4: Carry forward of past year RPO target to FY 2017-18

in MU**S**

- 3.4.17 Apart from the above carry forward deficit of RPO target in FY 2017-18, there is a standalone RPO obligation to be met for FY 2017-18.
- 3.4.18 The details of RPO to be fulfilled for FY 2017-18 by the Petitioner are provided in the table below:

RPO Computations for FY 2017-18							
Particulars	Obligation as % of total energy requirement	Obligation for FY 17-18	Carried Forward from 2016- 17	Total to be met during FY 2017-18			
Total Energy Requirement - MUs		3,073.59					
Less: Exempt source DVC 132 kV		404.28					
Net Energy Reqt for RPO Compliance purpose - MUs		2,669.30					
RPO Energy - MUs	7.75%	206.87	88.88	295.75			
Non-Solar	4.00%	106.77	41.56	148.33			
Solar	3.75%	100.10	47.32	147.42			
Equivalent RECs		2,06,871	88,884	2,95,755			
Non-Solar		1,06,772	41,559	1,48,331			
Solar		1,00,099	47,325	1,47,423			

Table 3-5: RPO to be fulfilled for FY 2017-18

- 3.4.19 The Petitioner submits that RPO is applicable on all sources other than DVC 132 kV source, since the power purchase cost of DVC 132 kV is approved by Hon'ble Commission taking into account its Renewable Purchase Obligation. Accordingly, the Petitioner has computed RPO on its energy requirement excluding DVC 132 kV source.
- 3.4.20 The status of RPO Obligation for FY 2017-18 is provided in the table below:

Table 3-6: Summary of RPO Obligation met during FY 201	7-18
--	------

			in MUs
Particulars	Cumulative RPO to be met (A)	RECs procured (B)	Carried forward to FY 2018-19 (A-B)
Solar RPO for FY 2017-18	147.42	0.00	147.42
Non-Solar RPO for FY 2017-18	148.33	137.527	10.80
Total RPO	295.75	137.53	158.23

3.4.21 The month-wise details of purchase of Solar / Non-Solar RECs along with quantum and cost are provided in the table below:

	No. of	RECs	Cost at	GST on			Success	
Month	Non Solar	Solar	MCP	REC Values	IEX Fee	GST	Fee incl. GST	Total
Dec-17	41,531	0	62296500		8,30,620	1,49,512	2,45,033	63521665
Feb-18	50,000	0	75000000		10,00,000	1,80,000	2,95,000	76475000
Mar-18	45,996	0	68994000	55,19,520	9,19,920	1,65,586	2,71,376	75870402
Total	1,37,527					Total in	Rs. Crs	21.587

- 3.4.22 The total cost of RECs shown in audited accounts and claimed in this petition for FY 2017-18 is Rs. 21.59 Crs. The copies of bills / certificates for RECs purchased in FY 2017-18 are provided at Annexure 16.
- 3.4.23 Power Purchase from Open Access: During outage of DVC 400 kV source between July-16 to September-16, in order to ensure uninterrupted power supply to the consumers, the Petitioner purchased power from open access to meet it's requirements. The Petitioner has purchased about 128.73 MUs at a total cost of Rs. 49.86 Crs at a cost of Rs. 3.8733 per unit. The copy of bills are attached as Annexure 17 for purchase of short term open access power for FY 2017-18 & Communication to Hon'bel Commission.
- 3.4.24 **Total Power Purchase Cost:** The Petitioner requests the Hon'ble Commission to approve the total power purchase cost for FY 2017-18 at Rs. **1,334.68** Crs for purchase of **3,073.59** MUs at average rate of Rs. **4.34** per unit.

3.5 Operation and Maintenance Expenses

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&M**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**n** (excluding terminal liabilities) + A&G**n** = (EMP**n-1** + A&G**n-1**)*(INDX**n**/ INDX**n-1**) + Gn

Where,



WPI Inflation

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) INDX**n** = 0.55*CPI**n** +0.45*WPI**n**;

Note 1: For the purpose of estimation, the same INDX**n** /INDXn-1 value shall be used for all years of the control period. However, the Commission will consider the actual values in the INDX**n** /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 2017-18 as per above Note 1 of Tariff Regulations 2015.

Month/Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Average	Increase	WPI*45%
FY2017-18	113.20	112.90	112.70	113.90	114.80	114.90	115.60	116.40	115.70	116.00	116.10	116.30	114.88	2.92%	1.31%
FY2016-17	109.00	110.40	111.70	111.80	111.20	111.40	111.50	111.90	111.70	112.60	113.00	113.20	111.62	1.73%	0.78%
http://dbie.rbi.or	http://dbie.rbi.org.in/OpenDocument/opendoc/openDocument.jsp Annual Increase over FY16-17 2.92%														
									Weighta	ge of 45%	5		1.31%		
CPI Inflation															
CPI Inflation															
CPI Inflation Month/Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Average	Increase	CPI*55%
	Apr 277.00	May 278.00	Jun 280.00	Jul 285.00	Aug 285.00	Sep 285.00	Oct 287.00	Nov 288.00	Dec 286.00	Jan 288.00	Feb 287.00	Mar 287.00	Average 284.42	Increase 3.08%	CPI*55% 1.69%
Month/Year								-				-			1.69%
Month/Year FY2017-18	277.00 271.00	278.00 275.00	280.00 277.00	285.00	285.00	285.00	287.00	288.00	286.00 275.00	288.00	287.00 274.00	287.00 275.00	284.42	3.08% 4.12%	1.69%

Table 3-8: Computation of Inflation Factor for FY2017-18

3.5.3 Accordingly the Inflation Factor for FY 2017-18 works out to **3.01%**, which need to be considered for true-up purpose as against the inflation value of 3.05% considered while projecting the Employee and A&G costs in last tariff order.

Total Inflation WPI + CPI

3.01%

3.5.4 The Hon'ble Commission had approved the component-wise O&M costs only provisionally, and the estimates were subject to true up based on the actual break-up of O&M cost provided in audited accounts.



- 3.5.5 Actual O&M Expenses: The Petitioner would first like to discuss and present the expenses based on 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 and certain changes in statutory payments/ Change in Law. Majority of the Expenses related to the O&M activities of the licensed operations of TSL are undertaken by JUSCO.
- 3.5.5.1 Actual Employee Expenses: The Petitioner would like to submit that employee expenses have two components viz Direct Employee and Outsourced Employee expenses. The direct expenses are expenses booked by Petitioner for the employees on its payroll; whereas the outsourcing cost (payable to JUSCO) pertaining to employee expenses are termed as Outsourced Employee expenses. It is submitted that direct employee expense as per audited account Note 8 is Rs. 2.82 Crs for FY 2017-18 and mainly includes Salaries & Wages, Contribution to Provident and other funds and Staff welfare expenses. The total direct and indirect employee cost (Outsoucing cost) paid to JUSCO for FY 2017-18 is Rs. 18.36 Crs. The indirect employee cost is coutsourcing cost paid to JUSCO towards employee cost.

Particulars	Audited
	(Rs.Crs)
	FY 2017-18
Direct Employees expenses of TSL	2.82
Add: Outsourcing cost paid to JUSCO towards Employ	18.36
Total Employee Expenses to be claimed	21.18

Table 3-9: Employee Expenses as per Actuals for FY 2017-18

3.5.5.2 Actual A&G Expenses: It is submitted that A&G expense as per audited account Note 9 is Rs. 20.22 Crs for FY 2017-18 and mainly includes Rent, Travelling & Conveyance, Consultancy charges, Advertisement expenses, Security Charges, Vehicle hiring charges etc. However the Petitioner would like to submit that fees/ payments to Consumer Grievance Redressal Forum (CGRF), Hon'ble Commission towards enhanced license/ petition fees and Compliance to various Regulations issued after 20th January 2016 have increased. The Petitioner requests Hon'ble Commission to consider such payments under Change in Law and allow separately to the Petitioner as discussed under.

Change in Law -

3.5.5.3 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 amended 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..."

3.5.5.4 The comparison of fees to be charged on Licensees as per Conduct of Business Regulations 2012 and Conduct of Business Regulations 2016 for major filings are tabulated below:

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

Table 3-10: Comparison of Fees as per CBR 2012 & CBR 2016

3.5.5.5 Allowance of additional increase in Consumer Grievance Redresal 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 2016-17 and FY 2017-18 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 2016-17 on CGRF was Rs. 15,66,778/-. To comply to the order of Hon'ble Commission, the CGRF office was required to be revamped.



In addition order was also to appoint appropriate staffs and members. Subsequently, works related to all the directions completed, like books and almirah for library purchased, record room created, available room was made like hearing hall, Honour boards installed, signboard installed at 3 places outside the CGRF office, etc.

There had also been wage revision by the Pay Commission which was also applicable for the Chairperson of the TSL CGRF. All these has resulted in an increase in CGRF expenses (Consumables, operations & maintenance and remuneration) from Rs. 12.85 Lakhs to Rs. 15.66 Lakhs from FY 2015-16 to FY 2016-17 and from Rs.15.66 Lakhs to Rs. 25.85 Lakhs from FY 2016-17 to FY 2017-18. We request Hon'ble Commission to also consider this increase in cost under Change in Law or under any other provisions of the regulations as the normal increase of the normative A&G costs are inadequate to cover these expenses.

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 are may be necessary for ends of justice to meet or to prevent abuses of the process of the Commission..."

3.5.5.6 The table below depicts that the expense under Petition filing fees and CGRF expense have increased to Rs. 45.55 Lakhs whereas the normative A&G will have increase at only 3.01%. 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. 14.58 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).

Particulars	Actual FY 2015-16 (Rs.Lacs)	Normative value for FY16-17 considering inflation of 3.96%	Normative value for FY17-18 considering inflation of 3.01%	Actual FY 2017-18 (Rs.Lacs)	Balance part to be allowed under Change in Law (Rs.Lacs)
Petition for True up FY15, APR FY16	14.75				

Table 3-11: Statutory /	Change in Law payments for FY 2017-18
-------------------------	---------------------------------------

Particulars	Actual FY 2015-16 (Rs.Lacs)	Normative value for FY16-17 considering inflation of 3.96%	Normative value for FY17-18 considering inflation of 3.01%	Actual FY 2017-18 (Rs.Lacs)	Balance part to be allowed under Change in Law (Rs.Lacs)
True-up Petition and License fee for FY 2015-16				18.07	
Business Plan petition				0.10	
CGRF Expenses (Rent and Remuneration)	12.86			25.84	
Total	27.61	28.70	29.56	44.01	14.58

3.5.5.7 Actual R&M Expenses: The outsourcing cost for O&M activities carried out by JUSCO are captured under R&M head of audited accounts. Total R&M cost is Rs. 50.72 Crs, out of which amount paid to JUSCO is approx. Rs. 44.74 Crs. Out of this Rs. 44.74 Crs, Rs. 18.36 Crs is of the nature of employee expense of JUSCO. The same is added to the employee expense and deducted from R&M expense of TSL accounts to arrive at an employee cost and R&M expense for FY 2017-18. The details are given in the table below:

Particulars	Audited (Rs.Crs)
	FY 2017-18
R&M expenses by TSL	5.98
Outsourcing cost paid to JUSCO towards Employees Expenses	18.36
Outsourcing cost paid to JUSCO towards R&M Expenses	26.38
Total R&M expenses shown in books of accounts	50.72
Less: Outsourcing cost paid to JUSCO towards Employees Expense	18.36
Net R&M Expenses to be claimed	32.36

Table 3-12: Break-up of R&M Expenses for FY 2017-18

- 3.5.5.8 The outsourcing cost paid to JUSCO for employee related is given in Audited Accounts Note 3. The certificate received from JUSCO for amount paid towards total outsourcing cost is also attached as **Annexure 18.**
- 3.5.6 **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.
- 3.5.7 **Normative Employee Cost:** The Petitioner submits that as per approved principles in MYT order and as explained in earlier chapter of True-up of FY 2016-17, the normative employee cost is computed and given in the table below:



Particulars	Units	Normative Computation
		FY 2017-18
Employee Cost as per normative basis for FY 2016- 17	Rs.Crs	22.22
Connected Load in FY 2016-17	kVA	8,08,419
Emp. cost per kVA for FY 2016-17	Rs/kVA	274.86
Weighted avg. inflation factor for FY 2017-18	%	3.01%
Emp. cost per kVA for FY 2016-17 with Inflation Factor	Rs/kVA	283.12
Connected Load in FY 2017-18	kVA	8,11,171
Employee Cost as per normative basis for FY 2017- 18	Rs.Crs	22.97

 Table 3-13: Computation of Normative Employee Cost for FY2017-18

- 3.5.7.1 We therefore request the Hon'ble Commission to kindly approve the normative employee cost of Rs. **22.97** Crs based on normative principles.
- 3.5.7.2 **Normative A&G Expenses:** The normative A&G expenses are allowed with inflation factor over previous year approved figures. The Hon'ble Commission had considered Rs.24.79 Crs of FY 2016-17 and inflation factor of 3.05% and projected Rs.25.54 Crs as normative A&G expenses for FY 2017-18 in tariff order dated 18.05.2018. It is submitted that inflation factor for FY 2017-18 based on actual indices is 3.01% as against 3.05% considered in order dated 18.05.2018. Accordingly normative A&G expenses for FY 2017-18 has got revised as tabulated below:

Particulars	Normative
	Calculation
	FY 2017-18
	(Rs.Crs)
Normative A&G Cost Calculation	
A&G Costs for FY 2016-17	25.01
Add: Inflation factor for FY17-18	3.01%
Normative A&G Cost for FY 2017-18	25.76

Table 3-14: Computation of Normative A&G Cost for FY 2017-18

- 3.5.7.3 **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% which was derived based on figures of FY 2014-15 (preceding year to base year).
- 3.5.7.4 The Hon'ble Commission had approved Opening GFA of Rs.525.20 Crs for FY 2017-18 in T.O. dated 18.05.2018 and applied 'K' factor to arrive at R&M expenses of

Rs.25.21 Crs for FY 2017-18. The computation of R&M Expenses for FY 2017-18 on normative principles is given below:

Particulars	Normative
	Calculation
	FY 2017-18
	(Rs.Crs)
Normative R&M Cost Calculation	
Opening GFA as on 1.4.2017	525.19
K Factor as per MYT Order	4.80%
Normative R&M Cost for FY2017-18	25.21

Table 3-15: Com	putation of Norm	native R&M Cost	for FY 2017-18
10010 3 13. 0011	putation of Norm	iative notivi cost	101112017 10

- 3.5.7.5 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. We would request the Hon'ble Commission to also include inflationary adjustment while approving the normative R&M expense.
- 3.5.7.6 The Petitioner would like to submit that following major State Regulatory Commission are allowing Inflation factor for R&M expenses.
 - Maharashtra Allows Inflation on total O&M expenses (WPI-30% & CPI-70% on 5 years average increase)
 - Gujarat Provides 5.72% on annual basis on O&M expenses of previous year
 - Odisha Allows 5.4% on GFA plus special allowance to undertake critical activities of loss reduction, energy audit etc.
- 3.5.8 **Revision of O&M approved normative figures:** The Petitioner requests Hon'ble Commission to revise the approved figures of A&G and R&M Expenses for the MYT Control Period FY 2017-18 onwards taking into consideration normative principles and the issues raised by the Petitioner as under:
 - d) Employee Cost considering Load Growth + Inflation
 - e) A&G Expenses considering Load Growth + Inflation
 - Allow Additional fees due to amendment in Conduct of Business Regulations 2016 and additional CGRF expenses due to Commission order under Change in Law as separate element under O&M head



3.5.9 **Summary of O&M Expenses:** The A&G expenses as per audited accounts is presented exclusive of additional expenses towards statutory / change in law payments for the purpose of sharing of gains/ losses. The summary of O&M expenses with respect to approved, actual audited and normative computation is given in the table below:

O&M Expenses (Rs. Crs)				
Particulars	FY 2017-18			
	Approved	Normativ		
	in APR dt.	Accounts	е	
	18.05.18	(Rs.Crs)	Amount	
	(Rs.Crs)*		(Rs.Crs)	
A&G Costs	25.54	20.22	25.76	
R&M Expenses	25.21	32.36	25.21	
Employee Cost	21.81	21.18	22.97	
Total O&M expenses for the purpose of	72.56	73.76	73.93	
Sharing of Gains/ Losses				
Add: Additional expenses due to		0.00	0.15	
Statutory / Change in Law payments				
Total Expenses	72.56	73.76	74.08	

 Table 3-16: Operation and Maintenance Expenses for FY 2017-18

* As revised in Review Order dated 11.9.2018

- 3.5.10 **Sharing of Gains/ (Loss):** According to JSERC Distribution tariff Regulations, 2015, O&M Expense is a "controllable" item.
- 3.5.10.1 The Petitioner has considered the actual figures excluding additional impact due to change in law for the purpose of sharing of gains and losses.
- 3.5.10.2 After the computations of sharing of gains/ losses, the Petitioner has added Change in law claim of Rs.**0.15** Crs and accordingly total O&M expenses has been claimed.
- 3.5.10.3 The computation of Sharing of Gains/ Losses on account of Controllable parameter as per provisions of Tariff Regulations 2015 is given below:

Particulars	FY 2017-18 (Rs.Crs)
	Sharings
	Calculation
Normative O&M Expenses - a	73.93
Actual O&M Epxenses - b	73.76
Sharing of Gains/ (Loss) c=a-b	0.17
Sharing of Gain - 60% to be retained by	0.10
Licensee - d	
Add: Additional expenses due to	0.15
Statutory/ Change in Law payments - e	
Total O&M Claim of TSL f=b+d+e	74.01

3.5.10.4 The Petitioner requests Hon'ble Commission to approve total O&M expenses of Rs.
 74.01 Crs for FY 2017-18 on normative basis including treatment on account of sharing of gains and statutory / change in law payments.



3.5.11 The Petitioner submits that its O&M expenses for FY 2017-18 in terms of paisa per unit is Rs. **0.24** / kWh whereas other similar utilities have O&M expenses much higher than Petitioner as demonstrated in earlier chapter.

3.6 Capital Work in Progress, GFA and Depreciation

The Capital Work in Progress (CWIP), Gross Fixed Assets (GFA) and the depreciation on GFA for FY 2017-18 are discussed hereunder. The figures of CWIP and GFA have been derived from closing balances of FY 2016-17. 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)			
Particulars	Actual		
	in T.O. dt	Audited	
	18.5.2018		
	(APR)		
	FY 2017-18	FY 2017-18	
Capital Works in Progress (CWIP)	1 1		
Opening CWIP	Not	8.92	
Add: Capex during year	Approved	13.13	
Total CWIP		22.05	
Less: Trfd to GFA		18.05	
Closing CWIP		4.00	
Gross Fixed Assets (GFA)			
Opening GFA	525.20	525.19	
Add: Trfd from CWIP excluding discarded	14.89	18.05	
assets			
Closing GFA	540.08	543.24	
Depreciation			
Depreciation for the FY	33.29	31.43	
Less: Depreciation on Assets created out	3.46	3.54	
of consumer contribution			
Net Depreciation	29.83	27.90	

Table 3-18: CWIP, GFA and Depreciation for FY 2017-18

- 3.6.1 **Capital Works in Progress (CWIP):** The Petitioner has considered Opening and Closing CWIP as Balance sheet statement of FY 2017-18. The assets transferred to GFA are considered from Note 3 of the Audited Accounts statement.
- 3.6.2 It is submitted that Petitioner has done capital expenditure and resultant capitalization as per plan. The scheme wise details of Capital Expenditure and Capitalisation are provided at **Annexure 10.**



- 3.6.3 The Petitioner therefore requests the Hon'ble Commission to kindly approve the Capital expenditure and Capitalization for FY 2017-18 as presented above which are based on audited accounts for FY 2017-18 and approve the same.
- 3.6.4 **Consumer Contribution:** The details of the Opening Consumer Contribution are taken from previous year computation and amount received during the year is added. The Consumer contribution amount received during the year is **Rs.4.65 Crs** and no ROE is claimed by Petitioner on this consumer contribution amount. The closing consumer contribution amount received as on 31st March 2018 is Rs. **61.18** Crs as per audited accounts.
- 3.6.5 **Gross Fixed Assets:** The class wise asset details of opening balance and closing balance of the GFA are provided Note 3 of Audited Accounts. The net capitalisation after adjustments to disposal/ discarded assets is Rs. **18.05** Crs for FY 2017-18 and closing GFA as per Note 3 of Audited Accounts is Rs. **543.24** Crs.
- 3.6.6 **Depreciation:** As per the methodology approved by Hon'ble Commission, the depreciation costs proportionate to the extent of fixed assets being funded through Consumer Contribution have been deducted from the total depreciation in order to arrive at the net depreciation to be charged in the ARR. The total depreciation for FY 2017-18 as per audited accounts is Rs. **31.43** Crs.
- 3.6.7 The computation of net depreciation to be claimed in true-up for FY 2017-18 is as follows:-

Computation of Net Depreciation for FY 2017-18 (Rs.Crs)		
Closing GFA (A)	543.69	
Closing Consumer Contribution capitalised (B)	61.18	
Gross Depreciation FY 2017-18 (C)	31.43	
Depreciation on Consumer Contribution (D=C/A*B)	3.54	
Net Depreciation to be charged in ARR (E=C-D)	27.90	

 Table 3-19: Computation of Net Depreciation for FY 2017-18

3.6.8 The Petitioner requests Hon'ble Commission to approve the net depreciation amount of Rs. **27.90** Crores for FY 2017-18.

3.7 Interest and Finance Charges

3.7.1 The Petitioner has considered the same methodology as approved by the Hon'ble Commission in MYT order. The deemed additions to the loan has been considered @70% of fixed asset addition after reducing assets created from consumer contribution amount received during the year. {(Total Assets Additions to GFA during the year – Assets Additions from Consumer Contribution during the year) x 70%}



3.7.2 **Opening Normative Loan and Equity:** The Computation of GFA and Accumulated Depreciation on Own assets and Sources of Funding for the purpose of normative Debt &Equity for FY 2017-18 are provided in the table below:

Computation of GFA & Accumlated Depreciation (OWN Assets) Rs.Crs			
Total Opening GFA	(a)	525.19	
Less: Opening Consumer Contribution	(b)	56.53	
Opening GFA (Own contribution)	(c=a-b)	468.67	
Percentage GFA (own) of total GFA	(d=c/a)	89.24%	
Opening Accumulated Depreciation	(e)	233.75	
Accumulated Depreciation (Own)	(f=dxe)	208.59	
Accumulated Depreciation (Consumer)	(g=e-f)	25.16	

Table 3-20: Computation of GFA & Accumulated Depreciation (Own Assets) FY 2017-18

Opening Balances of Debt & Equity Component (Rs.Crs)		
Particulars	Audited	
	Accounts/	
	Normative	
	FY 2017-18	
Opening Gross fixed assets	525.19	
Less:Opening Accumulated Depreciation (own assets)	208.59	
Net Fixed Assets	316.60	
Sources of Funding (Normative computation)		
Opening Consumer Contribution	56.53	
Equity [30% * (GFA - Contribution)]	140.60	
Debt [70% of (GFA - Consumer Contribution) -	119.47	
Accumulated Depn]		
Total Sources of Funding	316.60	

3.7.3 Additions to Loan & Equity during the year: The computation of addition to loan and equity for the purpose of normative interest on loan and return on equity is shown in the table below. There is no additions to loan and equity in this year.

Addition to Loan & Equity (Rs.Crs)		
Transferred To GFA (A)	18.05	
Consumer Contribution Receved(B)	4.65	
GFA (own) (C=A-B; if A is higher)	13.40	
Debt (D= C x 70%)	9.38	
Equity (E= C x 30%)	4.02	

Table 3-22: Addition to Loan and Equity for FY 2017-18

- 3.7.4 **Repayments of Loan:** As per the methodology adopted in previous tariff orders and provisions of Tariff Regulations 2015, the deemed repayment has been considered equivalent of the net depreciation cost for the financial year.
- 3.7.5 <u>Interest on Normative Loan</u> 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 2016-17. 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, 2017 i.e. 11.10%. The normative interest comes to Rs. **12.08** Crs as against Rs.11.87 Crs approved by Hon'ble Commission in Tariff order dated 18.05.2018. The table below provides calculation of Interest on Normative Loan for FY 2017-18:

Particulars	Approved in T.O. dt 18.5.2018 (APR) - Rs.Crs	Normative Claim (Rs.Crs)
	FY 2017-18	FY 2017-18
Opening Balance of Normative Loan	116.64	118.11
Add: Deemed Additions during the FY	10.42	9.38
Less: Deemed Repayments	29.83	27.90
Closing Balance of Normative Loans	97.23	99.59
Average Balance of Normative Loans	106.94	108.85
Interest Rate (SBI base Rate+200 bp)	11.10%	11.10%
Normative Interest Amount	11.87	12.08

Table 3-23: Normative Interest on Loan for FY 2017-18

- 3.7.6 The Hon'ble Commission is requested to kindly approve the Interest on normative loan balance of Rs. **12.08** Crs as given in table above.
- 3.7.7 *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.
- 3.7.8 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 2017 plus 350 basis points i.e. 12.60%
- 3.7.9 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 3-30** which is used for computation of below interest on working capital.

Particulars	Approved in T.O. dt 18.5.2018	Wheeling Normative Claim	Retail Normative Claim	Total Normative Claim
	(APR) Rs.Crs *	(Rs.Crs)	(Rs.Crs)	(Rs.Crs)
O&M Expenses @ 1 Month for Wheeling / Retail business		4.33	1.82	
Maintainence Spares @1% of Opening GFA for Wheeling / Retail business in ratio of 90:10		4.73	0.53	
Receivables for 2 months' Revenue @ existing Tariff from Wheeling / Retail business		24.57	277.67	
Sub-Total	-	33.62	280.01	-
Less: Security Deposit			21.36	
Less: Power Purchase cost for 1 month			111.22	
Total Working Capital	-	33.62	147.43	-
SBI Base rate + 350 basis points	12.60%	12.60%	12.60%	
Total Interest on Working Capital *	14.86	4.24	18.58	22.81

Table 3-24: Interest on Working Capital (Wheeling & Retail) for FY 2017-18	;
Table 3-24: Interest on working capital (wheeling & Retail) for 11 2017-10	,

* Figures as approved under Review Order dated 11.9.2018

- 3.7.10 The Hon'ble Commission is requested to kindly approve the Interest on working capital of Rs. **22.81** Crs for FY 2017-18.
- 3.7.11 Interest on Security Deposit In accordance with Regulation 8.2.16 of the JSERC Supply Code Regulations 2015, interest on security deposit (SD) has to be paid as per SBI Base Rate prevailing on the 1st of April of the particular year. Accordingly, TSL paid the interest on security deposit for the FY 2017-18 based on SBI prevailing rate on 01st April 2017. The interest on security deposit is paid based on the amount of SD added during the year and period of SD held etc.
- 3.7.12 The details of security deposit is taken from Note 2 of audited accounts and interest on security deposit is P&L statement. The Petitioner hereunder provides the detail of actual interest on security deposit amount for FY 2017-18.

Interest on Security Deposit (Rs Cr)			
Particulars	Approved Audited		
	in T.O. dt	Accounts	
	18.5.2018		
	FY 2017-18	FY 2017-18	
Opening Security Deposit	20.30	20.30	
Security Deposit received	-	2.11	
Closing Security Deposit	20.30	22.41	
Average Security Deposit	20.30	21.36	
Rate of Interest : Bank Rate	9.10%		
Interest on Secuity Deposit	1.85	2.03	

Table 3-25: Interest on Security Deposit for FY 2017-18

3.7.13 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.."

- 3.7.14 The Petitioner submits that apart from cash security deposit mentioned in above table, it has not received any BG from customers during the FY 2017-18.
- 3.7.15 The Hon'ble Commission is requested to approve Interest on security deposit for an amount of Rs. **2.03** Crs as per the annual accounts for FY 2017-18.
- 3.7.16 The Normative Loan and Interest and Finance Charges approved by the Hon'ble Commission in APR Order for FY 2017-18 and as per audited accounts and/ normative figures for FY 2017-18 are summarised in the table below.

Interest and Finance Charges (Rs Cr)			
Particulars	Approved	Audited /	
	in T.O. dt	Normative	
	18.5.2018	Claim	
	FY 2017-18	FY 2017-18	
Interest on Normative Loan	11.87	12.08	
Interest on Working Capital	14.86	22.81	
Interest on Security Deposit	1.85	2.03	
Total Interest & Finance Charge	28.58	36.93	

Table 3-26: Summary of Total Interest & Finance charges for FY 2017	-18

3.7.17 Accordingly, the Hon'ble Commission is requested to kindly approve the Interest and Finance Charges of Rs. **36.99** Crs for FY 2017-18.



3.8 Return on Equity

- 3.8.1 The Petitioner has considered the same methodology as approved by Hon'ble Commission in earlier MYT orders. The deemed additions to the equity has been considered @30% of total fixed asset addition after reducing assets additions from consumer contribution amount received during the year. {(Total Additions to GFA during the year Assets Addition from Consumer Contribution during the year) x 30%}. Please refer **Table 3-21** provided in preceeding paragraphs.
- 3.8.2 **Income Tax:** It is submitted that Petitioner has paid actual income tax for FY 2017-18. The income tax challan paid are provided at **Annexure 19**. 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.
- 3.8.3 It is submitted that Petitioner has paid Normal Tax Rate and accordingly the computation of composite Tax Rate for FY 2017-18 is as below:

Income Tax		FY2017-18
Normal Tax Rate	А	30.00%
Add: Surcharge	В	12.00%
Normal Tax Rate with Surcharge	C=Ax(1+B)	33.60%
Add: Education Cess	D	3.00%
Composite Tax Rate	E=Cx(1+D)	34.608%

Table 3-27: Computation of Income Tax Rate for FY 2017-18

3.8.4 The Normative Equity Capital and Return on Equity approved in APR order and normative claim for FY 2017-18 are as shown in the below table.



Return on Equity (Rs Cr		
Particulars	Approved in	Normative
	T.O. dt	Claim
	18.5.2018	
	(APR)	
	FY 2017-18	FY 2017-18
Opening Balance of Normative Equity	140.87	140.87
Add: Deemed Additions during the FY 2016-17	4.47	4.02
Closing Balance of Normative Equity	145.34	144.89
Average Balance of Normative Equity	143.11	142.88
Rate of Return on Equity	15.50%	15.50%
Normative ROE Amount -(A)	22.18	22.15
Income Tax Rate - (B)		34.608%
Normative ROE Amount with Income tax C=A/(1-	22.18	33.87

Table 3-28: Normative Equity & Return on Equity for FY 2017-18

3.8.5 Accordingly, the Hon'ble Commission is requested to kindly approve the Return on Equity of Rs. **33.87** Crs for FY 2017-18.

3.9 Non-Tariff Income

3.9.1 Non-Tariff Income includes Meter Rent, Delayed Payment Surcharge, service charges, Supervision Charges and miscellaneous charges etc. The amount of Non-Tariff Income for FY 2017-18, as per actuals is Rs. **6.58** Crs and Hon'ble Commission is requested to kindly approve the same.

3.10 Revenue from Existing Tariff for FY 2017-18

3.10.1 The consumer category-wise Revenue from Existing Tariff for FY 2017-18 as per actual figures is given under:

	Statem	ent of Sales,	nos. of consu	mer, Load & Re	evenue for FY'2	017-18	
Consumer Category	No. of Consumers	Connected Load	Sales	Fixed/ Demand Charges	Energy Charges & FPPPA Charges	PF / LF / Voltage inc/Sur & others	Total Revenue
	Nos.	kVA/kW	MUs	Rs. Crs	Rs. Crs	Rs. Crs	Rs. Crs
Domestic	37,336	1,89,124	199.49	0.60	74.17	-0.08	74.69
Domestic - DSHT	139	46,565	91.48	0.07	41.90	-0.04	41.93
Commercial	8,846	46,779	66.52	0.67	42.41	-0.01	43.07
High Tension I	78	17,593	28.11	5.37	18.00	0.14	23.50
High Tension II	22	33,373	108.96	9.74	68.27	-2.66	75.36
High Tension III	14	3,00,589	1913.35	107.17	1190.18	-76.10	1221.26
High Tension IV	1	1,10,000	196.96	43.72	122.82	-5.30	161.24
Utilities/Street Light	393	17,020	81.82	0.00	39.98	-0.04	39.95
Temporary Supply	70	129	1.78	0.00	0.68	0.09	0.78
Sale to Other	1	50,000	314.56	0.00	131.65	0.00	131.65
Licensee	T	50,000	514.50	0.00	151.05	0.00	151.05
Total	46900	811171	3003.04	167.36	1730.07	-84.00	1813.43
				Total Tariff Ind	come_Rs.		18134309091
				Fixed charges	& Meter charge	s_Rs.	21618513.00
				Service charge	s_Rs.		41757614.34
				Other charges	_Rs.		2451079.21
				Total Non tari	ff Income_Rs.		65829020
				Total Tariff &	Non Tariff Inco	me	18200138111

Table 3-29: Revenue from Existing Tariff for FY 2017-18

- 3.10.2 The Revenue from Operations and other income as per audited accounts is Rs.
 1,820.01 Crs(1813.43 Crs of Tariff income + 6.58 Crs of Non-Tariff income) as against Rs.1872.52 Crs approved by Hon'ble Commission for FY 2017-18 at existing tariff in APR Order. Accordingly the Hon'ble Commission is requested to approve the revenue from sale of power as per audited accounts and as claimed in this petition for FY 2017-18.
- 3.10.3 As per the Audited Accounts, the total nontariff income is Rs.6.58 Cr.

3.11 Aggregate Revenue Requirement and Revenue Gap for FY 2017-18

3.11.1 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:



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%
б	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%

3.11.2 In line with the cost allocation approved by the Hon'ble Commission in APR Order, the ARR for FY 2017-18 based on audited accounts and / normative claim is summarised below:



		Summary	of ARR (R	s.Crs)			
Sr No	Particulars		Wheeli	ng and R	etail ARR for	r FY 2017-18	
		Approved in	Wheeling	Retail	Wheeling	Retail ARR	Total
		T.O. dt	%	%	ARR	(Rs.Crs)	Audited /
		18.5.2018			(Rs.Crs)		Normative
		Rs.Crs *					Claim
1	Power Purchase Cost	1,265.55	0%	100%	-	1,334.68	1,334.68
2	Employee Expenses	21.81	60%	40%	12.71	8.47	21.18
3	A&G Expenses	25.54	50%	50%	10.11	10.11	20.22
4	R&M Expenses	25.21	90%	10%	29.13	3.24	32.36
5	Employee Terminal benefits	-	60%	40%	-	-	-
6	Statutory / Change in Law payments	-	50%	50%	-	-	-
7	Interest on Loan	11.87	90%	10%	10.87	1.21	12.08
8	Interest on Working Capital	14.86	10%	90%	4.24	18.58	22.81
9	Interest on Security Deposit	1.85	0%	100%	-	2.03	2.03
10	Depreciation	29.83	90%	10%	25.11	2.79	27.90
11	Return on Equity	22.18	90%	10%	30.48	3.39	33.87
12	Gross Aggregate Revenue Requirement (1 to 11)	1,418.70			122.64	1,384.49	1,507.14
13	Less: Non Tariff Income	5.86	10%	90%	0.66	5.92	6.58
14	Aggregate Revenue Requirement (12-13)	1,412.84			121.98	1,378.57	1,500.55
-	Less: Revenue from Sale of Power @ Existing Tariff	1,872.52	Wheeling ARR Ratio	Retail ARR Ratio	147.42	1,666.01	1,813.43
16	Revenue Gap / (Surplus) (14- 15)	(459.68)					(312.88)
17	Add/ Less: Impact of Sharing of Gains/ (Loss) on O&M Expenses						0.17
18	Revenue Gap / (Surplus) after Sharing of Gains/ Loss (16- 17)	(459.68)					(312.71)
19	Average Cost of Supply (14/Sales)	4.71					5.00

Table 3-30: ARR for FY 2017-18

* as revised in Review order dated 11.9.2018

3.11.3 Accordingly, the Petitioner requests the Hon'ble Commission to kindly approve the estimated revenue gap/ (surplus) of Rs. **(312.71)** Crs for FY 2017-18.



Chapter 4. Annual Performance Review of FY 2018-19

4.1 Background

4.1.1 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 <u>The Licensee shall submit the Annual Performance Review report as part of annual</u> review on actual performance as per the timelines specified in the Section 11 of these <u>Regulations, to assess the performance vis-à-vis the targets approved by the</u> <u>Commission at the beginning of the Control Period.</u> 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;

.....″

- 4.1.2 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. The Hon'ble Commission in the said Tariff Order dated 18th May 2018 has also approved ARR for FY 2018-19.
- 4.1.3 TSL hereby submits the annual performance review (APR) for FY 2018-19 based on provisional performance (latest available unaudited information) for FY 2018-19. The following sections summarise each of the components of APR for FY 2018-19. 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.

4.2 Sales, Consumers and Connected Load

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



	No. o	f Consumers, Loa	d and Sales fo	r FY 2018-19		
Consumer Category	Estimate	s Approved in MY 28.2.2017	'T Order dt	Revise	d Estimates for	FY 2018-19
	No. of Consumer s	Connected Load (kW/ kVA)	Sales (MUs)	No. of Consumers	Connected Load (kW/ kVA)	Sales (MUs)
Domestic Rural & Urban	40,936	2,01,203	256	37,406	2,08,638	197.38
Domestic Service - DSHT	151	53,203	119	132	47,729	85.50
Commercial Services	9,230	41,545	76	9,490	56,021	71.23
Temporary Connections	-	-	2	77	129	2.44
HT Industrial Services (HTIS)					
High Tension I	95	21,256	39			
High Tension II	21	34,816	168	125	4,33,071	2,081.10
High Tension III	14	3,10,981	2,014			
High Tension IV	1	1,10,000	100			
Institutional Services - Utilities/ Streetlight	393	19,278	89	393	18,215	89.11
Sale to Other Licensee (JUSCO)	1	70,000	338	1	70,000	408.39
Total	50,842	8,62,283	3,202	47,624	8,33,802	2,935

Table 4-1: Consumers, Connected Load & Sales – FY 2018-19

4.2.2 The Petitioner submits that several consumers have optimised their contract demad. The overall sales though higher than FY18 is lower than the approved estimates in MYT order, due to proliferation of energy efficient appliances and devices across all category of consumers.

4.3 Energy Balance

- 4.3.1 The Petitioner has considered provisional performance (latest available unaudited information) for FY 2018-19. The Distribution loss has been estimated at **3.18%** which is lower than approved in MYT order.
- 4.3.2 Similarly Power Purchase is also based on the provisional performance (latest available unaudited information) for FY 2018-19. The Energy requirement for FY 2018-19 is provided in the table below:



	Energy Balance for FY 2018	-19 (MUs)	
Sr No	Particulars	Estimates Approved in MYT Order dt 28.2.2017	APR Figure (H1 + H2)
		FY 2018-19	FY 2018-19
Α	ENERGY REQUIREMENT		
1	Sales to Other Licensees	337.95	408.39
2	Distribution Losses on Sales to Other Licensees (%)	0.00%	0.00%
3	Unit Lost on Sales to Other Licensees		-
4	Energy Requirement for Sales to Other Licensees	337.95	408.39
5	Sales to Steel Work HT - IV Category	100.00	171.51
6	Distribution Losses to HT - IV (%)	0.00%	0.00%
7	Unit lost on Sales to HT - IV	-	-
8	Energy Requirement for HT - IV Category	100.00	171.51
9	Sales to LT Consumers (Dom + Comm + Street light + Temp)	423.36	360.16
10	Sales to HT Consumers (DSHT + HTIS)	2,340.85	-
11	Total Sales to Consumers other than HT-IV & JUSCO (9 + 10)	2,764.21	2,355.25
12	Distribution Losses on Sales to Consumers other than JUSCO (%)	4.00%	2.50%
13	Unit Lost on Sales to Consumers other than JUSCO	115.18	58.88
14	Energy Requirement for Sales to Consumers other than JUSCO	2,879.39	2,414.14
15	Overall Sales (4 + 8 +11)	3,202.16	2,935.15
16	Overall Distribution Losses (%)	3.47%	1.97%
17	Overall Distribution Losses	115.18	58.88
18	Total Energy Requirement	3,317.34	2,994.04
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	-	-
5	Open access / Other Sources	-	126.97
19	Total Pooled Energy Availability	3,317.34	3,013.47

Table 4-2: Energy Balance for FY 2018-19 (MUs)



4.3.3 The Petitioner requests Hon'ble Commission to approve the energy balance as tabulated above for FY 2018-19.

4.4 Power Purchase Cost

- 4.4.1 The Petitioner has considered the provisional performance (latest available unaudited information) for FY 2018-19.
- 4.4.2 The details of power purchase quantity and cost for FY 2018-19 is given in table below:

		Power Pu	rchase Exp	enses for FY 20	018-19		
Particul	ars	Estimates A 28.2.20	pproved vi 17 for FY 20		APR	for FY 201	8-19
		MUs	Per Unit	Cost	MUs	Per Unit	Cost
			Cost	(Rs.Crs)		Cost	(Rs.Crs)
Tata Power Com	pany Ltd (A)					
Power Purchase	Unit-II	804.17	4.00	321.37	698.18	4.82	336.57
	Unit -III	804.17	3.89	312.73	702.77	4.66	327.51
	Total	1,608.34	3.94	634.10	1,400.95	4.74	664.08
Damodar Valley	Corporation	n 132 KV (B)					
Power Purchase		289.16	5.27	152.30	393.07	4.64	182.29
Damodar Valley	Corporation	n 400 kV (C)					
Power Purchase		1,399.85	3.83	536.02	1,073.34	4.26	457.01
TSW- Captive (D)						
Power Purchase		20.00	3.83	7.66	19.14	4.23	8.09
RPO (E)							
REC Purchase		-	-	78.73	-	-	56.71
Other / Open Ad	ccess (F)						
Power Purchase		-	-	-	126.97	9.59	121.80
Total Pooled Po Purchase	wer	3,317.34	4.25	1,408.81	3,013.47	4.94	1,489.98

Table 4-3: Total Power Purchase Cost FY 2018-19

- 4.4.3 **Power Purchase cost from TSL** The monthly breakup of TPCL U II and U III source for power purchase quantum and cost are given at **Annexure 21**
- 4.4.4 **Power purchase cost from DVC** The monthly breakup of DVC 132 and 400 kV source for power purchase quantum and cost are given at **Annexure 21**
- 4.4.5 **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.
- 4.4.6 The Petitioner would first like to discuss carry forward RPO obligation from FY 2017- 18 and thereafter discuss the RPO fulfilment for FY 2018-19. The details are presented in the table below:

Particulars	Cumulative RPO to be met (A)	RECs procured (B)	Carried forward to FY 2018-19 (A-B)
Solar RPO for FY 2017-18	147.42	0.00	147.42
Non-Solar RPO for FY 2017-18	148.33	137.527	10.80
Total RPO	295.75	137.53	158.23

Table 4-4: Carry forward of past year RPO target to FY 2018-19 (MUs)

4.4.7 Apart from the above carry forward deficit of RPO target in FY 2018-19, there is 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:

RPO Cor	nputations f	or FY 2018-19		
Particulars	Obligation as % of total energy requirement	Obligation for FY18-19	Carried Forward from FY17-18	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	158.23	420.27
Non-Solar	4.50%	117.92	10.80	128.72
Solar	5.50%	144.12	147.42	291.55
Equivalent RECs		2,62,040	1,58,228	4,20,268
Non-Solar		1,17,918	10,804	1,28,723
Solar		1,44,122	1,47,423	2,91,546

Table 4-5: RPO Computations for FY 2018-19

- 4.4.8 The Petitioner submits that RPO is applicable on all sources other than DVC 132 kV source, since the power purchase cost of DVC 132 kV is approved by Hon'ble Commission taking into account its Renewable Purchase Obligation. Accordingly, the Petitioner has computed RPO on its energy requirement excluding DVC 132 kV source.
- 4.4.9 Conisdering the above, REC requirement and prevailing market cost, the expected REC cost for FY 2018-19 is computed as shown in the following table.



Month	Solar Units	Solar Rate	Non- Solar Units	Non- Solar Rate	Non- Solar Old Units	Non- Solar Old Units Rate	GST On REC Units	GST On TPTCL & IEX/PXIL REC Fee	Amount
Jul-18	75000	1000	0	0	0	0	90,00,000	2212500	8,40,00,000
Aug-18	72403	1000	10771	1101	0	0	1,01,11,425	2453633	9,68,26,929
Sep-18	35000	1000	0	0	0	0	42,00,000	1032500	3,92,00,000
Oct-18	37596	1001	50000	1251	0	0	1,20,22,032	2584082	11,22,05,628
Dec-18	0	0	26335	1320	0	0	41,71,464	776883	3,89,33,664
Jan-19	4763	1750	10553	1500	20000	1500	52,99,770	1041822	6,05,06,342
Feb-19	32500	1500	2500	1395	5000	1500	68,68,500	1180000	6,77,86,000
Feb-19	20022	1908	1969	1555	0	0	49,51,653	648735	4,62,15,424
Mar-19	4272	2000	643	1500	0	0	11,41,020	144923	1,06,49,520
GST Pertai	ning to 201	7-18 paid ir	ו FY 19						10735080
Total	2,81,556	11,159	1,02,771	9,622	25,000	3,000	5,77,65,863	1,20,75,077	56,70,58,586
								Total Rs. Crs	56.71

Table 4-6: REC Cost for FY 2018-19

Table 4-7: REC carry forward to FY 2019-20

Particulars	Cumulative RPO to be met (A)	RECs procured/Sol ar power procured (B)	Carried forward to FY 2019-20 (A-B)
Solar RPO for FY 2018-19	291.55	281.56	9.62
Non-Solar RPO for FY 2018-19	128.72	127.77	0.95
RE Generation Solar Rooftop		0.37	
Total RPO	420.27	409.70	10.57

4.4.10 The existing RPO regulation – JSERC (Rooftop Solar PV Grid Interactive Systems and Net/Gross Metering), Regualtions 2015 provides that solar energy generated through solar rooftop installations shall be considered towards renewable energy obligation of the licensee.

Quote –

" 12.1. In case of gross metering scheme the quantum of electricity generation by eligible consumer, who is not defined as Obligated entity, from the rooftop solar PV system shall qualify towards compliance of Renewable Purchase Obligation (RPO) for the Distribution Licensee in whose area of supply the eligible consumer is located.

12.2. In case of net metering scheme the total quantum of solar electricity generated under the net metering arrangement for eligible consumer, who is not defined as Obligated entity,

shall qualify towards deemed Renewable Purchase Obligation (RPO) for the Distribution Licensee in whose area of supply the eligible consumer is located."

-Unquote

4.4.11 The Petitioner thus request the Hon'ble Commission to approve the total power purchase cost at Rs. **1,489.98** Crs for FY 2018-19.

4.5 Operation and Maintenance Expenses for FY 2018-19

4.5.1 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) EMP**n** (excluding terminal liabilities) + A&G**n** = (EMP**n-1** + A&G**n-1**)*(INDX**n**/

INDX**n-1**) + Gn

Where,

INDXn – 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.

- 4.5.2 **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. Since the financial year is in progress, the inflation rate applicable for FY 2017-18 is considered for FY 2018-19.
- 4.5.3 The Inflation Factor for FY 2018-19 is considered at **4.77%** as per the table given below, and would be subject to actual change in inflation indices at the time of truing-up purpose.

WPI Inflation															
Month/Year	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Average	Increase	WPI*45%
FY2018-19	117.30	118.30	119.10	119.90	120.10	120.90	122.00	121.60	119.70	119.20	119.50	120.00	119.80	4.29%	1.93%
FY2017-18	113.20	112.90	112.70	113.90	114.80	114.90	115.60	116.40	115.70	116.00	116.10	116.30	114.88		
http://dbie.rbi.o	rg.in/Open	Document/	opendoc/o	penDocum	ent.jsp				https://eai	ndustry.nic.	.in/display_	data_2011	12.asp		
CPI Inflation															
CPI Inflation Month/Year	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Νον	Dec	Jan	Feb	Mar	Average	Increase	CPI*55%
	Apr 288.00	May 289.00	Jun 291.00	Jul 301.00	Aug 301.00	Sep 301.00	Oct 302.00	Nov 302.00	Dec 301.00	Jan 307.00	Feb 307.00	Mar	Average 299.09	Increase 5.16%	
Month/Year					J			-				Mar 287.00	v		
Month/Year FY2018-19	288.00 277.00	289.00 278.00	291.00 280.00	301.00	301.00	301.00	302.00	302.00 288.00	301.00 286.00	307.00	307.00 287.00		299.09	5.16%	
Month/Year FY2018-19 FY2017-18	288.00 277.00 eau.nic.in/i	289.00 278.00 ndtab.html	291.00 280.00	301.00 285.00	301.00 285.00	301.00 285.00	302.00	302.00 288.00	301.00 286.00 For FY 201	307.00 288.00	307.00 287.00 * WPI)		299.09 284.42	5.16%	

Table 4-8: Computation of Inflation Factor for FY 18-19

4.5.4 **Revised Estimates for O&M:** The revised estimated O&M expenses based on date avaialbel at this point of time and estimates approved by Commission in MYT order for FY 2018-19 are tabulated below:



Revised Estimated O&M Expenses FY 2018-19 (Rs. Crs)			
Particulars	As approved in MYT & review order	Estimates (APR FY 2018-19)	
Employee Cost			
Direct Employees expenses of TSL		3.00	
Add: Outsourcing cost paid to JUSCO towards Employees Expenses		20.20	
Total Employee Cost	24.90	23.20	
A&G Expenses			
Gross A&G Expenses		23.72	
Add: Additional expenses due to Change in Law/ Statutory		0.50	
A&G Costs	24.19	24.22	
R&M Expenses			
R&M expenses by TSL		2.00	
Outsourcing cost paid to JUSCO towards Employees Expenses		20.20	
Outsourcing cost paid to JUSCO towards R&M Expenses		30.04	
Sub-Total R&M expenses		52.24	
Less: Outsourcing cost paid to JUSCO towards Employees Expenses		20.20	
Net R&M Expenses to be claimed	15.78	32.04	
Net O&M Expenses	64.87	79.46	

Table 4-9: Computation of Revised Estimated O&M expenses for FY 2018-19	
Table 4 5. compatation of Revised Estimated Odim expenses for 11 2010 15	

4.5.5 **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 2016-17 and FY 2017-18. The Normative O&M expenses for FY 2018-19 are tabulated below:



Particulars	Units	Normative Computatio n
Normative Employee Cost Calculation		FY 2018-19
Employee Cost as per normative basis for FY 2017-18 (a)	Rs.Crs	22.97
Connected Load in FY 2017-18 (b)	kVA	8,11,171
Emp. cost per kVA for FY 2017-18 (c=a/b)	Rs/kVA	283.12
Weighted avg. inflation factor for FY 2018-19 (d)	%	4.77%
Emp. cost per kVA for FY 2018-19 with Inflation Factor (e=cx(1+d))	Rs/kVA	296.63
Connected Load in FY 2018-19 (f)	kVA	8,33,802
Employee Cost as per normative basis for FY 2018-19 (g=exf)	Rs.Crs	24.73
Normative A&G Cost Calculation		
Normative A&G Costs for FY 2017-18	Rs.Crs	25.76
Add: Inflation factor for FY18-19	%	4.77%
Sub-total	Rs.Crs	26.99
Add: Load Growth Factor for FY 2018-19	%	2.79%
Normative A&G Cost for FY 2018-19	Rs.Crs	27.74
Normative R&M Cost Calculation		
Opening GFA as on 1.4.2018	Rs.Crs	543.24
K Factor as per MYT Order	%	4.80%
Normative R&M Cost for FY2018-19	Rs.Crs	26.08
Normative O&M Cost for FY2018-19	Rs.Crs	78.55

Table 4-10: Computation of Normative O&M expenses for FY 2018-19

4.5.6 **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)			
Particulars	FY 2018-19		
	Estimates	Actual /	Normativ
	Approved in	Estimated	е
	ARR dt.	(Rs.Crs)	amount
	28.02.17		(Rs Crs)
A&G Costs	23.18	24.22	27.74
R&M Expenses	25.88	32.04	26.08
Employee Cost	22.74	23.20	24.73
impact of wage revision costs approved vide order dated 11.09.2018	2.16		
Total Expenses	73.96	79.46	78.55

Table 4-11: Summary of O&M Expenses for FY 2018-19

* Impact of review order on additional employee cost due to wage revision with inflationary adjustment for FY17 and FY18 has been @ 3.96% and 3.01% has been considered.

4.5.7 The Petitioner would like to submit that actual O&M expense is expected to be much above the value arrived through normative principles as normative principles are not appropriate to cover the yearly increase in maintenance costs required to deliver uninterrupted power supply.

4.6 Capital Work in Progress, Gross Fixed Assets and Depreciation

4.6.1 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, Capitalisation of Assets and depreciation expected for the year based on latest available data and information.

CWIP, GFA & Depreciation (Rs.Crs)				
Particulars	Estimates Approved in ARR dt. 28.02.17 (Rs.Crs)	Rev.Est / Normative Claim (Rs.Crs) FY 2018-19		
Capital Works in Progress (CWIP)				
Opening CWIP	15.06	4.00		
Add: Capex during year	20.00	33.07		
Total CWIP	35.06	37.07		
Less: Trfd to GFA	23.59	7.13		
Closing CWIP	11.48	29.94		
Gross Fixed Assets (GFA)				
Opening GFA	538.71	543.24		
Add: Trfd from CWIP excluding discarded assets	23.59	7.13		
Closing GFA	562.30	550.37		
Depreciation				
Depreciation for the FY	35.78	32.17		
Less: Depreciation on Assets created out of consumer contribution	3.70	3.87		
Net Depreciation	32.08	28.30		

Table 4-12: Summary of CWIP, GFA and Depreciation for FY 2018-19

- 4.6.2 Capital Works in Progress (CWIP): The Petitioner has considered Opening CWIP for FY 2018-19 as closing CWIP of FY 2017-18 from Balance sheet statement of FY 2017-18. The Capital expenditure and Capitalization for FY 2018-19 is as latest available data .
- 4.6.3 The scheme wise details of Capital Expenditure and Capitalisation are provided in Annexure 10.
- 4.6.4 It is submitted that Petitioner is undertaking capital expenditure and resultant capitalization as per plan. Any variation in the capital expenditure and capitalisation is only to meet the growing demand of consumers and to serve them with reliable power supply.
- 4.6.5 The Petitioner therefore requests the Hon'ble Commission to approve the Capital expenditure and Capitalization for FY 2018-19 for APR purpose subject to trueup.
- 4.6.6 **Consumer Contribution:** Similar to approach adopted in previous year, the consumer contribution received is added to closing of FY 2017-18 to arrive at total consumer contribution for FY 2018-19. The Consumer contribution amount received during the year as per latest available data is estimated at Rs. **5.00** Crs and no ROE is claimed by



Petitioner on this consumer contribution amount. The closing consumer contribution amount expected as on 31st March 2019 is Rs. **66.18** Crs.

- 4.6.7 Gross Fixed Assets: The total GFA amount at the end of FY 2018-19 is estimated at Rs.550.37 Crs as per latest available data.
- 4.6.8 Depreciation: The gross depreciation is computed based on weighted average rate of 5.88% (Rs.30.77 Crs/ Average GFA of FY 2017-18 Rs.534.222 Crs) for FY 2017-18 and computed on pro-rata basis for assets created out of consumer contribution (last year figures of consumer contribution and depreciation). The computation of net depreciation to be claimed in APR for FY 2018-19 is as follows:-

Particulars	Estimates Approved in ARR dt. 28.02.17 (Rs.Crs)	Approved in ARR dt. Claim 28.02.17 (Rs.Crs)	
	FY 2018-19	FY 2018-19	
Closing GFA (A)		550.37	
Closing Consumer Contribution capitalised (B)		66.18	
Gross Depreciation FY 2018-19 (C)	35.78	32.17	
Depreciation on Consumer Contribution (D=C/A*B)	3.70	3.87	
Net Depreciation to be charged in ARR (E=C-D)	32.08	28.30	

 Table 4-13: Computation of Net Depreciation for FY 2018-19

4.6.9 Accordingly, the net depreciation to be charged for FY 2018-19 works out to be Rs.
28.30 Crs as against Rs. 32.08 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 APR purpose subject to true up.

4.7 Interest and Finance Charges

- 4.7.1 The Petitioner has considered the same methodology as approved by the Hon'ble Commission in MYT order. The deemed additions to the loan has been considered @70% of fixed asset addition after reducing assets created from consumer contribution amount received during the year. {(Total Assets Additions to GFA during the year Assets Additions from Consumer Contribution during the year) x 70%}. The deemed repayment has been considered equivalent of the net depreciation cost for the financial year.
- 4.7.2 **Opening Normative Loan and Equity:** The Computation of GFA and Accumulated Depreciation on Own assets and Sources of Funding for the purpose of normative Debt &Equity for FY 2018-19 are provided in the table below:

Table 4-14: Computation of GFA & Accumulated Depreciation (Own Assets) FY 2018-19

Computation of GFA & Accumlated Depreciation (OWN Assets)		
Particulars	Rev.Est /	
	Normative Claim	
	FY 2018-19	
Total Opening GFA	543.69	
Less: Opening Consumer Contribution	61.18	
Opening GFA (Own contribution)	482.51	
Percentage GFA (own) of total GFA	88.75%	
Opening Accumulated Depreciation	233.75	
Accumulated Depreciation (Own)	207.45	
Accumulated Depreciation (Consumer)	26.30	

Table 4-15: Computation of Opening Normative Debt 8	& Equity balance for FY 2018-19
---	---------------------------------

Opening Balances of Debt & Equity Component			
Particulars	Estimates	Rev.Est /	
	Approved in	Normative	
	ARR dt.	Claim	
	28.02.17	(Rs.Crs)	
	(Rs.Crs)		
	FY 2018-19	FY 2018-19	
Opening Gross fixed assets		543.69	
Less:Opening Accumulated Depreciation (own assets	;)	207.45	
Net Fixed Assets		336.24	
Sources of Funding (Normative computation)	Sources of Funding (Normative computation)		
Opening Consumer Contribution		61.18	
Equity [30% * (GFA - Contribution)]		144.75	
Debt [70% of (GFA - Consumer Contribution) -		130.31	
Accumulated Depn]			
Total Sources of Funding		336.24	

4.7.3 Additions to Loan & Equity during the year: The computation of addition to loan and equity for the purpose of normative interest on loan and return on equity is shown in the table below.

Addition to Loan & Equity during year		
Particulars	Rev.Est / Normative Claim (Rs.Crs)	
	FY 2018-19	
Transferred To GFA during year (A)	7.13	
Consumer Contribution received during year	5.00	
GFA (own) (C=A-B; if A is higher)	2.13	
Debt (D= C x 70%)	1.49	
Equity (E= C x 30%)	0.64	

Table 4-16: Normative Loan & Equity added during FY 2018-19

- 4.7.4 **Repayments of Loan:** As per the methodology adopted in previous tariff orders and provisions of Tariff Regulations 2015, the deemed repayment has been considered equivalent of the net depreciation cost for the financial year.
- 4.7.5 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 200 basis points as on April 1st, 2018 i.e. 10.70%. The normative interest comes to Rs. 9.20 Crs as against Rs. 10.93 Crs approved by Hon'ble Commission in MYT order. The table below provides calculation of Interest on Normative Loan for FY 2018-19.

Particulars	Estimates Approved in ARR dt. 28.02.17 (Rs.Crs)	Rev.Est / 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	15.11	1.49
Less: Deemed Repayments	32.08	28.30
Closing Balance of Normative Loans	88.22	72.78
Average Balance of Normative Loans	96.71	86.19
Interest Rate (SBI base Rate+200 bp)	11.30%	10.70%
Normative Interest Amount	10.93	9.22

- https://www.sbi.co.in/portal/web/interest-rates/base-rate-historical-data
- 4.7.6 The Hon'ble Commission is requested to kindly approve the Interest on normative loan balance of Rs. **9.22** Crs as given in table above for APR purpose subject to trueup.



- 4.7.7 *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.
- 4.7.8 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%**.
- 4.7.9 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

4.7.10

4.7.11

4.7.12 Table 4-2318 which is used for computation of below interest on working capital. The computation of interest on working capital is given below:

Particulars	Estimates Approved in ARR dt. 28.02.17 (Rs.Crs)	Wheeling Normative Claim (Rs.Crs)	Retail Normative Claim (Rs.Crs)	Total Normative Claim (Rs.Crs)
O&M Expenses @ 1 Month for Wheeling / Retail business		4.35	2.20	
Maintainence Spares @1% of Opening GFA for Wheeling / Retail business in ratio of 90:10		4.89	0.54	
Receivables for 2 months' Revenue @ existing Tariff from Wheeling / Retail business		22.20	283.91	
Sub-Total	-	31.44	286.65	318.09
Less: Security Deposit		-	23.41	
Less: Power Purchase cost for 1 month			124.16	
Total Working Capital	-	31.44	139.07	170.52
SBI base rate plus 350 bp as on 1st April	12.80%	12.20%	12.20%	
Total Interest on Working Capital *	17.34	3.84	16.97	20.80

Table 4-18: Computation of Interest on Working Capital for FY 2018-19

* Figures as approved under Review Order dated 11.9.2018

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



- 4.7.13 The Hon'ble Commission is requested to kindly approve the Interest on working capital of Rs. **20.80** Crs for FY 2018-19 for APR purpose subject to trueup.
- 4.7.14 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 2018-19. The Petitioner submits that it has estimated around Rs. 2.00 Crs for FY 2018-19. The table below provides the details of interest on security deposit computed based on SBI Base rate on 01st April 2018.

Interest on Security Deposit						
Particulars	Estimates Approved in ARR dt. 28.02.17 (Rs.Crs)	Rev.Est / Normative Claim (Rs.Crs)				
	FY 2018-19	FY 2018-19				
Opening Security Deposit	17.81	22.41				
Security Deposit received	1.23	2.00				
Closing Security Deposit	19.04	24.41				
Average Security Deposit	18.43	23.41				
Rate of Interest : SBI Base Rate	9.30%	8.70%				
Interest on Secuity Deposit	1.71	2.04				
https://www.sbi.co.in/portal/web/interest-rates/base-rate-historical-data						

4.7.15 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.."*

- 4.7.16 The value of the energy security deposit in the form of Bank Guarantee is not included in the computation of working capital as it does not provide any cash.
- 4.7.17 Accordingly, the total Interest and Finance Charges for FY 2018-19 are summarized in the table below:

Interest and Finance Charges						
Particulars	Estimates	Rev.Est /				
	Approved	Normative				
	in ARR dt.	Claim				
	28.02.17	(Rs.Crs)				
	(Rs.Crs)					
	FY 2018-19	FY 2018-19				
Interest on Normative Loan	10.93	9.22				
Interest on Working Capital	17.34	20.80				
Interest on Security Deposit	1.71	2.04				
Total Interest & Finance Charge	29.98	32.06				

Table 4-20: Total Interest and Finance Charges for FY 2018-19

4.7.18 The Petitioner therefore request the Hon'ble Commission to kindly approve the total interest and finance charge amounting to **Rs.32.06 Crs** for FY 2018-19 for APR purpose subject to true up.

4.8 Return on Equity

- 4.8.1 The Petitioner has considered the same methodology as approved by Hon'ble Commission in earlier MYT orders. The deemed additions to the equity has been considered @30% of total fixed asset addition after reducing assets additions from consumer contribution amount received during the year. {(Total Additions to GFA during the year Assets Addition from Consumer Contribution during the year) x 30%}. Please refer Table 4-16 provided in preceeding paragraphs. The normative return on equity is claimed @ 15.5% which is the return prescribed under the Distribution Tariff Regulation 2015.
- 4.8.2 **Income Tax:** It is submitted that Petitioner has considered income tax at prevailing rates for grossing up ROE for FY 2018-19.
- 4.8.3 The computation of ROE based on normative approach is as under:



Return on Equity							
Particulars	Estimates	Rev.Est /					
	Approved	Normative					
	in ARR dt.	Claim					
	28.02.17	(Rs.Crs)					
	(Rs.Crs)						
	FY 2018-19	FY 2018-19					
Opening Balance of Normative Equity	144.78	144.89					
Add: Deemed Additions during the FY 2018-19	6.48	0.64					
Closing Balance of Normative Equity	151.26	145.53					
Average Balance of Normative Equity	148.02	145.21					
Rate of Return on Equity	15.50%	15.50%					
Normative ROE Amount -(A)	22.94	22.51					
Income Tax Rate - (B)		34.608%					
Normative ROE Amount with Income tax C=A/(1-E	22.94	34.42					

Table 4-21: Return on Equity for FY 2018-19

4.8.4 The Petitioner therefore requests the Hon'ble Commission to kindly approve the Return on Equity of Rs. **34.42** Crs for FY 2018-19 as per above claim.

4.9 Non-Tariff Income

4.9.1 The Petitioner estimates that Non-tariff income for FY 2018-19 is estimated to be around Rs. Rs. **5.0** Crs which is in line with MYT approved figure. The Hon'ble Commission is requested to kindly approve the same for APR Purpose subject to trueup.

4.10 Revenue from Sale of power

- 4.10.1 It is submitted that revenue from sales of power for FY 2018-19 is based on provisional performance (latest available unaudited information).
- 4.10.2 The revenue from sale of power for FY 2018-19 is provided in the table below:



Statement of Sales, nos. of consumer, Load & Revenue for FY'2018-19									
Consumer Category	No. of Consumers	Connected Load	Sales	Fixed/Energy ChargesDemand& FPPPAVChargesCharges		PF / LF / Voltage inc/Sur & others	Total Revenue		
	Nos.	kVA/kW	MUs	Rs. Crs	Rs. Crs	Rs. Crs	Rs. Crs		
Domestic	37,406	2,08,638	197.38	1.07	81.13	-3.15	79.05		
Domestic - DSHT	132	47,729	85.50	2.37	36.34	0.77	39.48		
Commercial	9,490	56,021	71.24	1.05	44.87	-2.15	43.77		
Total HT IS	126	4,33,071	2,081	152.82	1,376.49	(82.49)	1446.82		
Utilities/Street Light	393	18,215	89.11	0.00	43.68	0.00	43.68		
Temporary Supply	77	129	2.44	0.01	1.99	0.00	2.00		
Sale to JUSCO	1	70,000	408.39	0.00	181.87	0.00	181.87		
Total	47625	833802	2935.16	157.32	1766.35	-87.02	1836.65		
				Total Tariff	Income_Rs.		18366548697		
				Fixed charge	es & Meter charge	s_Rs.	2,00,00,000		
				Service char	Service charges_Rs.				
				Other charges_Rs.			50,00,000		
				Total Non ta	6,50,00,000				
				Total Tariff	Total Tariff & Non Tariff Income				

Table 4-22: Revenue from Sale of Power for FY 2018-19

4.10.3 The Petitioner requests Hon'ble Commission to kindly approve the revenue of Rs. Crs **1,836.65** from sale of power as per above table.

4.11 Aggregate Revenue Requirement and Revenue Gap for FY 2018-19

4.11.1 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:

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%
б	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%

4.11.2 The APR and Revenue gap/ (surplus) for FY 2018-19 along with figures of MYT order are presented in the table below.



	Summary of ARR (Rs.Crs)								
Sr No	Particulars	Wheeling and Retail ARR for FY 2018-19							
		Estimates	Wheeling	Retail %	Wheeling	Retail ARR	Revised		
		Approved in	%		ARR	(Rs.Crs)	Estimates		
		MYT Order dt			(Rs.Crs)		(Rs.Crs)		
		28.2.2017							
1	Power Purchase Cost	1,408.81	0%	100%	-	1,489.98	1,489.98		
2	Employee Expenses	25.88	60%	40%	14.84	9.89	24.73		
3	A&G Expenses	23.18	50%	50%	13.87	13.87	27.74		
4	R&M Expenses	22.74	90%	10%	23.47	2.61	26.08		
5	Additional payments due to Statutory	-	50%	50%	-	-	-		
	/ Change in Law								
6	Interest on Loan	10.93	90%	10%	8.30	0.92	9.22		
7	Interest on Working Capital	17.34	10%	90%	3.84	16.97	20.80		
8	Interest on Security Deposit	1.71	0%	100%	-	2.04	2.04		
9	Depreciation	32.08	90%	10%	25.47	2.83	28.30		
10	Return on Equity	22.94	90%	10%	30.98	3.44	34.42		
11	Gross Aggregate Revenue	1,565.61			120.76	1,542.55	1,663.31		
	Requirement (1 to 10)								
12	Less: Non Tariff Income	5.86	10%	90%	0.50	4.50	5.0		
13	Aggregate Revenue Requirement	1,559.75			120.26	1,538.05	1,658.31		
	(11-12)								
14	Less: Revenue from Sale of Power @	-	Wheeling	Retail ARR	133.20	1,703.46	1,836.65		
	Existing Tariff		ARR Ratio	Ratio					
15	Revenue Gap/ (Surplus) (13- 14)	-					(178.34)		

Table 4-23: ARR for FY 2018-19

4.11.3 The Hon'ble Commission is requested to kindly approve the APR of Rs. **1,658.31** Crs and the resultant revenue gap/ (surplus) of Rs. **(178.34)** Crs for FY 2018-19 based on provisional unaudited performance.



Chapter 5. Revised Annual Revenue Requirement for FY 2019-20

5.1 Revised ARR for FY 2019-20

- 5.1.1 The Petitioner submits that ARR figures for FY 2018-19 as discussed in previous chapter are almost in line with MYT approved figures with ARR increasing by approximately only 2% than approved levels.
- 5.1.2 The Petitioner submits that in the projections for FY2019-20 ARR, Petitioner has revised the Unit Sales forecast based on FY2018-19 actual sales and expected additions during FY2019-20. Due to this revised sales estimates, Revenue and Power Purchase costs had also undergone change and the same is revised in the ARR for FY2019-20, whereas all other parameters have been retained at the same level as has been approved in the MYT order dated 28th Feb'2017. The petitioner had revised the power purchase costs as it constitutes approximately 80% of the ARR and has significant impact on ARR values. The Petitioner requests Hon'ble Commission to kindly consider the revised projections of sales and power purchase cost is explained in subsequent section.

Particulars	Approved in MYT Order and proposed for FY	Estimated Now for ARR FY2019-20
	2019-20 (Rs.Crs)	
Power Purchase Cost	1,464.11	1,536.66
Employee Expenses	24.03	24.03
A&G Expenses	24.19	24.19
R&M Expenses	27.01	27.01
Interest on Normative loan	9.08	9.08
Interest on Security Deposit	1.83	1.83
Interest on Working capital	17.95	17.95
Depreciation	33.62	33.62
Total Expenditure	1,601.82	1,674.37
Add: Return on Equity	24.04	24.04
Less: Non Tariff Income	5.86	5.86
Aggregate Revenue Requirement	1,620.01	1,692.56

Table 5-1: ARR for FY 2019-20

5.2 Revenue from Sale of Power at Existing Tariff for FY 2019-20 Estimated Sales in Million Units (MUs) FY2019-20

5.2.1 Sales has been re-estimated based on Sales of FY2018-19 and expected additions during the year FY19-20.



5.2.2 Hon'ble Commission had amended the Electricity Supply Code , wherein provisional power connections were allowed upt 2kW for based on ID and address proof. This has enabled petitioner to provide provisional power supply to the weaker section of society . More consumer additions are expected under provisional connection category in both domestic and commercial area.

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. Sales to JUSCO for FY19-20 has been considered as 413.15 MU based on input received from them.

	No. of Consumers, Load and Sales for FY 2018-19		Expected additions FY2019-20		Expected No. of Consumers , Load and Sales for FY2019-20				
Consumer Category	No of Consumer s	Connected Load (kW/KVA)	Sales (Mus)	No of Consumer s	Connecte d Load (kW/KVA)	(Mus)	No. of Consumers	Connected Load (kW/KVA)	Sales (Mus)
Domestic Rural & Urban	37,406	2,08,638	197.38	2000	5789	5.48	39,406	2,14,427	203
Domestic Service - DSHT	132	47,729	85.50	8	2893	5.18	140	50,621	91
Commercial Services	9,490	56,021	71.23	400	1190	1.51	9,890	57,211	73
Temporary Connections	77	129	2.44	0		0.00	77	129	2
HT Industrial Services (HTIS)	125	4,33,071	2,081.10	4	1200	5.77	129	4,34,271	2,087
Institutional Services -	393	18,215	89.11	0	0	0	393	18,215	89
Sale to Other Licensee	1	70,000	408.39	0	0	4.76	1	70,000	413
Total	47,624	8,33,802	2,935	2,412	11,072	23	50,036	8,44,874	2,958

5.3 Energy Balance for FY 2019-20

- 5.3.1 The above sales is planned to be met from power procured from Tata Power Jojobera, DVC 132kV Source, DVC 400kV Source, Power taken from exchange during outage of units either at DVC or at Jojobera and some power from TSL Captive Source.
- 5.3.2 Petitioner tries to optimise its Power Purchase Costs based on incremental cost analysis on realtime basis. At the same time reliability and availability of power needs to be ensured. Therefore during outage of machines with whom Petitioner has PPA, additional power need to be procured from power exchange.
- 5.3.3 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 FY2019-20.
- 5.3.4 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 round of persuation and followup with ERLDC and DVC, finally

petitioner could manage to start the same of its daily surplus power. The impact of this initiative is included in Table 5-5: Power purchase for FY 2019-20.

	Energy Balance for FY 2019	-20 (MUs)	
Sr No	Particulars	Estimates	Estimated now
		Approved in MYT Order dt 28.2.2017	for revised ARR of
		01001 01 20.2.2017	FY2019-20
		FY2019-20	FY2019-20
Α	ENERGY REQUIREMENT		
1	Sales to Other Licensees	337.95	413.15
2	Distribution Losses on Sales to Other Licensees (%)	0.00%	0.00%
3	Unit Lost on Sales to Other Licensees		-
4	Energy Requirement for Sales to Other Licensees	337.95	413.15
5	Sales to Steel Work HT - IV Category	100.00	171.51
6	Distribution Losses to HT - IV (%)	0.00%	0.00%
7	Unit lost on Sales to HT - IV	0.00%	0.00%
8	Energy Requirement for HT - IV	100.00	171.51
	Category		
9	Sales to LT Consumers (Dom + Comm	434.44	367.15
	+ Street light + Temp)		
10	Sales to HT Consumers (DSHT + HTIS)	2,410.45	2,177.55
11	Total Sales to Consumers other than HT-IV & JUSCO	2,844.90	2,373.19
12	Distribution Losses on Sales to	4.00%	3.75%
13	Consumers other than JUSCO (%) Unit Lost on Sales to Consumers	118.54	88.99
10	other than JUSCO	110.54	88.55
14	Energy Requirement for Sales to	2,963.43	2,462.19
	Consumers other than JUSCO		
15	Overall Sales (4 + 8 +11)	3,282.85	2,957.85
16	Overall Distribution Losses (%)	3.48%	2.92%
17	Overall Distribution Losses	118.54	88.99
18	Total Energy Requirement	3,401.39	3,046.85
В	EXPECTED ENERGY SOURCES		
1	Tata Power Company Limited	1,608.34	1,416.48
а	Unit - II	804.17	705.92
b	Unit - III	804.17	710.56
2	Damodar Valley Corporation	1,773.05	1,482.67
а	132 kV	373.20	397.43
b	400 kV	1,399.85	1,085.24
3	TSW Captive	20.00	19.35
4	RPO	-	-
5	Open access / Other Sources	-	128.38
19	Total Pooled Energy Availability	3,401.39	3,046.88

Table 5-3 : Projected Energy Balance for FY 2019-20



5.4 Power Purchase costs for FY 2019-20

Power Purchase cost for FY2019-20 has been worked out based on latest available information on approved tariff for DVC and Tata Power.

- 5.4.1 **Tata Power Jojobera:** Fixed charges and Energy Charge has been considered based on Tata Power Tariff order dated 19th Feb'2018. Over the years, due to increase in fuel prices Tata Power has been charging the FPPPA charges to TSL, which has also been considered while projecting the Power Purchase costs from Tata Power. It is expected that Tata Power Jojobera plant shall procure cheaper coal which was recently auctioned under SHAKTI (Scheme for Harnessing and Allocating Koyala in India) scheme from Q4 of FY 2019-20 and there shall be reduction of ~10% of power purchase cost from Q4 of FY 2019-20. This, when distributed across the year shall give an overall reduction of ~2.5% in energy charges. The petitioner expects that this reduction shall take care of inflationary adjustments for the year FY 2019-20. Hence, no escalation in variable cost of power from this source.
- 5.4.2 **DVC 132kV:** Power Purchase costs of DVC 132kV has been considered based on latest tariff order of DVC dated 18th May'2018 for the projected purchase.
- 5.4.3 **DVC 400KV Source:** TSL has 200 MW allocation from DVC 400kV source. Fixed Charges for DVC 400KV source is taken from the Respective following orders of CERC.
 - CERC orders for DSTPS Unit-1 and Unit-2 dated 17.03.2017
 - CERC order for MTPS Unit-7 and Unit-8 dated 03.10.2016

Energy Charges from DVC 400kV source is considered based on Energy charges billed by DVC in Quarter-4 of FY 2018-19, with escalation of 5.5% (based on last 3 years CAGR of Energy charges) to accommodate the coal price increase during FY 2019-20.

- 5.4.4 **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 Tata Power, Jojobera .
- 5.4.5 **RPO / REC :** RPO Obligation is calculated as below and cost of REC has been considered @ Rs. 2/Unit for Solar REC and @Rs. 1.5/Unit for Non Solar REC in line with the traded prices during March'2019 purchase of the Petitioner.

Calculation of obligation for FY2019-20 -	Solar	Non Solar	Total	Obligated units
Cumulative balance obligation from previous year till March 2019 (MUs)	9.62	0.95	10.57	
Total obligation in % as per RPO Regulations for FY2019-20	6.55%	5.00%		
Total RPO Requirement of TSL Licensee for FY'2019-20 (MUs)	173.54	132.47	306.01	2649.45
Total Obligation required to be fulfilled during FY 2019-20 (MUs)	183.16	133.42	316.58	
Expected average price_Rs./unit	2.00	1.50		
Total Cost of RECs for RPOs (Rs. Crs)	36.63	20.01	56.64	

Table 5-4: Cost of RECs for the Obligated units (2649.45 MUs)



Sale of Surplus power:

- 5.4.6 The petitioner would like to submit to the Hon'ble commission that they are taking all efforts to generate additional incremental revenue by offering the daily power balance surplus (if any) expected to be available on any day for opportunity-based sale in power exchange. Due to various constraints in getting open access permission from DVC and standing clearance from DVC, SLDC, it took time and the same had just started from the month of May 2019.
- 5.4.7 Petitioner would like to submit that such surplus power balance is available only when all generating units/sources (7 no.s as shown below) are available without any generation constraint, loading in the distribution system is also relatively lower and there are no constraints in the 132 kV/400 kV system. Also, to sell this surplus balance in exchange there should be enough demand from buyer and the price offered by the buyer is more than cost of generation plus wheeling, transmission and scheduling charges in addition to effective charges for loss in the system.

Power Sources availability									
Tata P	ower	DVC 132 kV		DVC 400 kV					
Unit 2	Unit 3	Full allocation	MTPS 7	MTPS 8	DSTPS 1	DSTPS 2			
A	А	А	А	А	А	A	Yes		

A - Available

- 5.4.8 During the deficit period, surplus power shall be available in case all the sources are available. If any of the above units are shut down due to maintenance issues or grid unavailability to evacuate surplus power, such sale may not happen.
- 5.4.9 In the view of the above, it is estimated that approximately 100 MUs sale may be possible in exchange at a price of Rs.3.50/unit in FY 2019-20. Margins received from such sale will lower the effective power purchase cost to the petitioner.



Table 5-5: Power purchase cost for FY 2019-20

		Approved by th	o Commission	-	
Particulars		Approved by th As in MYT order dt. 28th	As expected now for FY	Remarks	
Faiticulais		Feb'17 FY 2019-20	2019-20 ARR		
A. TPCL		1001711201320	LOID LO ANN		
Units Purchased (MU's)	Unit II	804.17	705.92		
	Unit III	804.17	710.56		
	Total	1608.34	1416.48		
				As per TPCL Tariff Order dt. 19th Feb'18 (Table 182,	
Per Unit Energy Charge (Rs. / kWh)	Unit II	2.63			
	Unit III	2.64	2 59	As per TPCL Tariff Order dt. 19th Feb'18 (Table 182,	
		2.04		Page 100)	
Per Unit FPPPA Charge (Rs. / kWh)	Unit II			As per actuals for FY'19 (Rs 0.585 per unit)	
	Unit III			As per actuals for FY'19 (Rs 0.614 per unit)	
Total Fixed Charges (Rs Cr.)	Unit II	112.76		As per TPCL Tariff Order dt. 19th Feb'18	
	Unit III	103.26		As per TPCL Tariff Order dt. 19th Feb'18	
	Total	216.02	224.44		
Power Purchase Cost (Rs Cr.)	Unit II	324.12	340.18		
	Unit III	315.25	334.99		
	Total	639.37	675.17		
B. DVC at 132 kV		373.20	397.43		
Units Purchased (MU's)					
Per Unit Energy Charge (Rs. / kWh)		3.51	3.40	As per DVC Tariff Order dt. 18th May'18	
Total Fixed Charges (Rs Cr.)		51.99	51.98	FY 18-19 Rs 51.98 crores As per actual bills of FY'18-19 crores as contract demand remains same in FY'20 also	
Power Purchase Cost (Rs. Cr)		183.08	187.11		
C. DVC at 400 kV					
Units Purchased (MU's)		1399.85	1085.24		
Per Unit Energy Charge (Rs. / kWh)		2.18	2.81	Based on energy rate charged by DVC for MTPS unit 7&8 and DSTP unit 1&2 in last Qtr of FY'19 with inflationary adjustment @ 5.5% (Qtr 4 average unit rate Rs 2.77 for MSTPS & Rs 2.55 for DSTPS)	
Total Fixed Charges (Rs Cr.)		236.34	212.34		
Power Purchase Cost (Rs. Cr)		541.78	516.89		
D. TSW - Captive					
Units Purchased (MU's)		20.00	19.35		
Per Unit Price (Rs. / kWh)		3.87	4.92		
Power Purchase Cost (Rs. Cr)		7.74	9.52		
E. RPO / RECs					
Units Purchased (MU's)					
Power Purchase Cost		92.13	56.64		
(Rs. Cr)		92.15	50.04		
F. Others/ Open access					
Units Purchased (MU's)			128.38		
Per Unit Price (Rs. / kWh)			4.96		
Power Purchase Cost (Rs. Cr)			63.65		
G. Total Power Purchased					
Units Purchased (MU's)		3,401.38	3,046.88		
Per Unit Price (Rs. / kWh)		4.30	4.95		
Total Power Purchase Cost (Rs. Cr)		1464.11	1508.99		
Expected Margin from sale of daily					
balance surplus power (Rs. Cr)			5.14		
Effective power purcahse cost (Rs. Cr)			1503.85		



5.5 Aggregate Revenue Requirement for FY 2019-20

Particulars	Approved in MYT Order and proposed for FY 2019-20 (Rs.Crs)	Estimated Now for ARR FY2019-20
Power Purchase Cost	1,464.11	1,503.85
Employee Expenses	24.03	24.03
A&G Expenses	24.19	24.19
R&M Expenses	27.01	27.01
Interest on Normative loan	9.08	9.08
Interest on Security Deposit	1.83	1.83
Interest on Working capital	17.95	17.95
Depreciation	33.62	33.62
Total Expenditure	1,601.82	1,641.56
Add: Return on Equity	24.04	24.04
Less: Non Tariff Income	5.86	5.86
Aggregate Revenue Requirement	1,620.01	1,659.75

Table 5-6: ARR for FY 2019-20 (Rs Crs)

The petitioner requests the Hon'ble Commission to approve the Annual Revenue Requirement of **Rs. 1,659.75 Crs** for FY 2019-20.



5.6 Revenue from existing tariff

S.No.	Consumer Category	No. of	Contract	Sales	Fixed/	Energy	Revenue	Revenue	Rebates and	Total	Revenue
		Consumers	Demand		Demand	Charge	from Fixed	from	Surcharges	Revenue	per unit
					Charge		Charge	Energy			
								Charge			
					(Rs/Conn/m						
					onth or						
		Nos	kW/BHP/ kVA	MUs	Rs/kW/	Rs/kWh	Rs. Crores	Rs. Crores	Rs. Crores	Rs. Crores	Rs./ unit
		1105		mos	month or	1.5/1001	1.5. 610165		113. 610163		no., unic
					Rs/kVA/						
					month)						
1	2	3	4	5	6	7	8	9	10	11	12
1	DOMESTIC SERVICE	39,546	2,65,048	294			3.69	122.48	(2.52)	123.64	4.21
	DS LT	39,406	2,14,427	203			1.26	84.39	(1.71)	83.94	4.14
	0-100 units	7,881	42,885	40.57	13	2.60	0.12	10.55		10.67	2.63
	Above 100 units	31,525	1,71,541	162.29	30	4.55	1.13	73.84		74.98	4.62
	DS HT	140	50,621	91	40	4.20	2.43	38.09	(0.81)	39.71	4.38
	IRRIGATION & AGRICULTURE SERVICE (IAS				20	4.50					
Ш	COMMERCIAL SERVICES (CS)	9,890	57,211	73			1.19	45.46	(0.71)	45.94	6.32
	All Units	9,890	57,211	73	100	6.25	1.19	45.46	(0.71)	45.94	6.32
IV	INDUSTRIAL SERVICES	129	4,34,271	2,087			153	1,315	(83)	1,385	6.64
	Low Tension Industrial Service				100	5.00				-	-
	High Tension Industrial Service	129	4,34,271	2,087	320	6.30	153.24	1,315	(82.72)	1,385	6.64
v	INSTITUTIONAL SERVICES	394.00	88,215	502			0.17	248.28	(2.49)	245.95	4.90
	Utilities/ Street Light	393.00	18,215	89	350	4.90	0.17	43.66	(0.45)	43.38	4.87
VI	Sale to JUSCO	1.00	70,000	413	350	4.95		204.62	(2.05)	202.57	4.90
VII	TEMPORARY CONNECTIONS	77.00	129.00	2.44			0.00	2.00	(0.02)	1.98	8.10
VIII	Total	50,036	8,44,874	2,958			158	1,733	(88)	1,803	6.09
IX	Expected recovery from FPPPA (5%)							86.65		86.65	
Х	Total including FPPPA	50,036	8,44,874	2,958			158	1,820	(88)	1,889	6.39

 Table 5-7: Revenue from Sale of Power at Existing Tariff for FY 2019-20

The revenue at existing tariff is calculated based on revised sales, no. of consumers and connected load forecasted for FY 19-20. Rebate and Surcharges are calculated based on

- 1% rebate on prompt payment before deadline and 1% rebate for each consumer for using online mode of payment subject to a maximum of Rs.250/consumer for commercial and domestic categories.
- For HT category, rebate is considered in line with the rebate availed by HT category in FY 2018-19 as it also has component of load factor, power factor and voltage rebate which is dependent upon their consumption pattern.

5.7 Wheeling and Supply ARR and Revenue gap/ (surplus) for FY 2019-20

5.7.1 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 5-8: 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%
б	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%

5.7.2 The ARR and Revenue gap/ (surplus) for FY 2019-20 based on existing tariff is presented in the tables below.

Particulars	Wheeling %	Retail %	Wheeling ARR (Rs.Crs)	Retail ARR (Rs.Crs)	Total ARR (Rs.Crs)
Power Purchase Cost	0%	100%	-	1,503.85	1,503.85
Employee Expenses	60%	40%	14.42	9.61	24.03
A&G Expenses	50%	50%	12.10	12.10	24.19
R&M Expenses	90%	10%	24.31	2.70	27.01
Interest on Normative loan	90%	10%	8.17	0.91	9.08
Interest on Security Deposit	0%	100%	-	1.83	1.83
Interest on Working capital	As per M	YT Order	3.62	14.33	17.95
Depreciation	90%	10%	30.26	3.36	33.62
Total Expenditure			92.87	1,548.69	1,641.56
Add: Return on Equity	90%	10%	21.64	2.40	24.04
Less: Non Tariff Income	10%	90%	0.59	5.27	5.86
Aggregate Revenue Requirement			113.93	1,545.82	1,659.75

Table 5-9: Wheeling & Retail ARR and Revenue Gap/ (Surplus) for FY 2019-20

Table 5-10: Revenue Gap/(Surplus) at existing tariffs for FY 2019-20

Particulars	Revised Estimates for FY 19-20
Net Revenue requirement	1,659.75
Less: Revenue from Sale of Power at Existing Tariff	1,889.40
Revenue Gap / (Surplus) at Existing Tariff	(229.65)



- 5.7.3 The resultant revenue gap/(surplus) for FY 2019-20 is (**229.65**) Crores. The petitioner requests the Hon'ble Commission to approve the same.
- 5.7.4 The details of cumulative revenue gap/ (surplus) and the tariff philosphy is provided in subsequent chapters.



Chapter 6. Cumulative Gap/ (Surplus)

6.1 Cumulative Gap / (Surplus) till FY 2019-20

6.1.1 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 6-1: Cumulative Revenue gap/ (surplus) as per T.O. dated 18.05.2018

Particulars	FY	FY	FY	FY	FY	FY	FY
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	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

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

6.1.2 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 6-2: 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
С	Interest on Working Capital	18.62	18.65
5	Sub Total (1 to 4)	1365.28	1367.39
б	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 6-3: 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
С	Interest on Working Capital	14.80	14.86
5	Sub Total (1 to 4)	1394.30	1396.52
б	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)

6.1.3 Based on the submissions for FY 2016-17, FY 2017-18, FY 2018-19 & FY 2019-20, the cumulative revenue gap/ (surplus) till FY 2019-20 is presented in the table below.



		FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Opening Revenue Gap/ (Surplus) as on 1st April of FY	A	1,108.84	1,269.38	1,323.59	1,157.77	1,109.80
Revenue Gap/ (Surplus) created during the year	В	(2.81)	(101.76)	(312.88)	(178.34)	(229.65)
Add/ Less: Sharing of Gains/ (Loss) on account of O&M expenses	С	-	-	-	-	-
Total additions during the year	D=B+C	(2.81)	(101.76)	(312.88)	(178.34)	(229.65)
Rate of Interest (as per prevailing SBI PLR)	E	14.75%	12.80%	12.60%	12.20%	12.20%
Carrying Cost on Opening Balance	F=A*E	163.55	162.48	166.77	141.25	135.40
Carrying Cost on Additional Gap/ (Surplus)	G=E*D	(0.21)	(6.51)	(19.71)	(10.88)	(14.01)
Total Carrying Cost	H=E+G	163.35	155.97	147.06	130.37	121.39
Total Gap incl. Carrying Cost	I=A+D+H	1,269.38	1,323.59	1,157.77	1,109.80	1,001.53

Table 6-4: Cumulative Revenue gap/ (surplus) at existing tariff till FY 2019-20

The Petitioner requests the Hon'ble Commission to approve a cumulative revenue gap of **Rs.1,001.53 Crs** till FY 2019-20.

In order to liquidate this revenue gap, petitioner has proposed tariff increase. The increase in tariff is proposed in the fixed charge as well as the energy charge which will enable liquidation of revenue gap in next 3 to 4 years.



Chapter 7. Tariff Philosophy

7.1 Tariff Philosophy

7.1.1 The Petitioner submits that its tariff is not aligned to the cost structure. The recovery of tariff from fixed/ demand charges are very minimal and need to be aligned to its costs with respect to fixed and variable charges.

7.2 Analysis of fixed and variable costs of Licensee & Tariff Rationalisation

- 7.2.1 The Petitioner has been requesting Hon'ble Commission for Rationalisation of Tariff with respect to Fixed / Demand Charges linked to Fixed charges expenses and Energy Charges linked to variable components since last 2-3 years and request the Hon'ble Commission to kindly consider the same in this tariff order.
- 7.2.2 The Hon'ble Commission in Tariff order dated 18.05.2018, para 10.6 has stated as under:

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

7.2.3 The Petitioner submits that from its entire ARR, all costs except variable power purchase cost are fixed in nature i.e O&M and Financial Costs will be incurred / claimed in ARR irrespective of sale of energy. Hence Petitioner has deducted power purchase variable charges from the total ARR to arrive at fixed cost obligation. The proportion of fixed and variable cost and revenue for the Petitioner is calculated for FY 2019-20, and has been presented in table given below.



Particulars	Unit	Amount (Rs.Crs)
Total Annual Revenue Requirement	Rs. Crs	1,659.75
Less: Variable cost component of Power purchase cost	Rs. Crs	1,020.23
Net Fixed Charges componenet in ARR	Rs. Crs	639.52
Proportion of Fixed cost in ARR	%	39%
Proportion of Variable cost in ARR	%	61%
Total Revenue from Sale of Power	Rs. Crs	1,889.40
Fixed/ Demand Charges	Rs. Crs	158.29
Energy/ Variable Charges	Rs. Crs	1,731.11
Proportion of Fixed/ Demand charges	%	8%
Proportion of Energy/ Variable charges	%	92%

Table 7-1: Calculation of Fixed & Variable component of ARR & Revenue for FY 2019-20

- 7.2.4 In current tariff structure, the recovery from fixed charges is only **8%** of the total revenue, whereas the total fixed costs of the Petitioner is **39%** of total ARR.
- 7.2.5 In view of the same, Fixed charges and Energy charges should be adjusted gradually, say over a period of three to four years, so as to make the retail tariff cost structure reflective of the actual Fixed Cost.

7.3 Proposed changes in Tariff Schedule

7.3.1 Currently the petitioner is charging FPPPA (~5% of energy charges) to recover the additional cost increase in fuel price of generating station, which is being charged to the petitioner by its power suppliers. It is proposed to merge the FPPPA charges with energy charges. Further, to ensure that liquidation of regulatory assets continues in the coming years also, it is proposed to increase energy charges by 2% effectively across all catergories of consumers. This will also ensure relatively faster recovery of regulatory assets. If such increase is not allowed, the carrying cost on regulatory assets keep increasing and the distribution business may become unviable in long run. The petitioner has knowingly considered only marginal increase in energy charges as at current tariff itself, few industrial customers are approaching the petitioner to avail open access so that they can buy power from alternate sources. Though the liquidation of regulatory asset is a concern to the petitioner, the petitioner plans to do this in such a way that tariff remains competitive and also tariff shock is not felt by the consumers. The current proposed tariff will also assist the petitioner in liquidation of regulatory assets in addition to current costs.



- 7.3.2 Thus, the Petitioner requests the Hon'ble Commission to kindly consider such increase in the greater interest of the consumers.
- 7.3.3 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). Also there are no unmetered connections in TSL network including rural consumers. In view of the same no tariff is proposed under the unmetered category.
- 7.3.4 The petitioner would like to state that the impact analysis of kVA biling is yet to be dine and therefore the petitioner has not considered kVAh billed tariff in this petition. However, in the subsequent petition which is to be filed in Nov 2019, the petitioner will approach the Commission with kVAh based billing for HT consumers.

7.4 Revenue from Sale of Power at Proposed Tariff

7.4.1 Based on above philosophy and proposal, the Petitioner hereby submits the revenue from sale of power at proposed tariff for FY 2019-20 as under:Table 7-2: Revenue from Sale of Power at Proposed Tariff for FY 2019-20

S.N o.	Consumer Category	No. of Consumer s	Contract Demand	Sales	Fixed/ Demand Charge	Energy Charge	Revenue from Fixed Charge	Revenue from Energy Charge	Rebates and Surcharg es	Total Revenue
		Nos	kW/BHP/ kVA	MUs	(Rs/Con n/month or Rs/kW/ month or Rs/kVA/ month)		Rs. Crores	Rs. Crores		
1	2	3	4	5	6	7	8	9	10	11
Т	DOMESTIC SERVICE	39,546	2,65,048	294			4	131	(3)	132
	DS LT	39,406	2,14,427	203			1.47	90.07	(1.83)	89.71
	0-100 units	7,881	42,885	41	15	2.80	0.14	11.36		11.50
	Above 100 units	31,525	1,71,541	162	35	4.85	1.32	78.71		80.03
	DS HT	140	50,621	91	45	4.50	2.73	40.81	(0.87)	42.67
П	IRRIGATION & AGRICULTURE SERVICI	E (IAS)			25	4.80				
III	COMMERCIAL SERVICES (CS)	9,890	57,211	73			1.25	48.74	(0.75)	49.24
	All Units	9,890	57,211	73	105	6.70	1.25	48.74	(0.75)	49.24
IV	INDUSTRIAL SERVICES	129	4,34,271	2,087			163	1,409	(83)	1,489
	Low Tension Industrial Service				110	5.35				-
	High Tension Industrial Service	129	4,34,271	2,087	340	6.75	162.82	1,409	(82.72)	1,489
v	INSTITUTIONAL SERVICES	394.00	88,215	502.26			0.18	251.40	(2.53)	249.06
	Street Light/utilities	393.00	18,215	89.11	390	5.25	0.18	46.78	(0.48)	46.49
VI	Sale to JUSCO	1.00	70,000.00	413.15		4.95		204.62	(2.05)	202.57
VII	TEMPORARY CONNECTIONS	77	129	2			0.00	2.00	-	2.00
	Total	50,036	8,44,874	2,957.85			168.45	1,841.64	(89)	1,921



7.4.2 As can be seen with the proposed tariff, the revenue is expected to be increased from **Rs.1,889 Crs** to **Rs.1,921 Crs**.

7.5 Revenue Gap at Proposed Tariff

Table 7-3: Cumulative Revenue Gap at prposed tariff till FY 20)19 - 20
--	----------

Cumulative Re	Cumulative Revenue Gap / (Surplus) till FY 2019-20 (Rs.Crores)									
Particulars		FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20				
Opening Revenue Gap/ (Surplus) as on 1st April of FY	A	1,108.84	1,269.38	1,323.49	1,157.85	1,109.88				
Revenue Gap/ (Surplus) created during the year	В	(2.81)	(101.76)	(312.88)	(178.34)	(261.65)				
Add/ Less: Sharing of Gains/ (Loss) on account of O&M expenses	С	-	(0.09)	0.17	-	-				
Total additions during the year	D=B+C	(2.81)	(101.85)	(312.71)	(178.34)	(261.65)				
Rate of Interest (as per prevailing SBI PLR)	E	14.75%	12.80%	12.60%	12.20%	12.20%				
Carrying Cost on Opening Balance	F=A*E	163.55	162.48	166.76	141.26	135.41				
Carrying Cost on Additional Gap/ (Surplus)	G=E*D	(0.21)	(6.52)	(19.70)	(10.88)	(15.96)				
Total Carrying Cost	H=E+G	163.35	155.96	147.06	130.38	119.44				
Total Gap incl. Carrying Cost	I=A+D+H	1,269.38	1,323.49	1,157.85	1,109.88	967.67				

Based on Proposed tariff, the Cumulative Gap at the end of FY 2019-20 is **Rs.967.67 Crs** as against the Cumulative Gap of **Rs.1,001.53 Crs** at existing tariff.



Chapter 8. Tariff Proposal

8.1 Tariff Philosophy and Proposed tariff Schedule

8.1.1 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

8.2 Domestic Service

- 8.2.1 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 recognised 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.
- 8.2.2 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.

- 8.2.3 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



8.2.4 Proposed Tariff:

Consumer	Ex	isting tariff	Proposed tariff		
Category	Fixed Charges		Energy Charges	Fixed Charges	Energy Charges
Domestic	Unit	Rate	Rate(₹/kWh)	Rate	Rate(₹/kWh)
0-100 units	₹/Conn/ Month	13	2.60	15	2.80
Above 100 units	₹/Conn/ Month	30	4.55	35	4.85
HT	₹/kVA/ Month	40	4.20	45	4.50

- 8.2.5 **Delayed Payment Surcharge:** In accordance with Clause IV of Terms & Conditions of Supply as provided in Paragraph 8.8 of the Present Tariff Petition.
- 8.2.6 **Prompt Payment Rebate/ Rebate for online payment:** In accordance with Clause VII and Clause VIII of Terms & Conditions of Supply as provided in Paragraph 8.8 of the Present Tariff Petition.

8.3 Irrigation & Agriculture Service (IAS)

- 8.3.1 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.

8.3.2 Service Character:

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

8.3.3 Proposed Tariff:

		Existing tar	Proposed tariff		
Consumer Category	Fixed Ch	arges	Energy Charges	Fixed Charges	Energy Charges
	Unit	Rate	Rate(₹/kWh)	Rate	Rate(₹/kWh)
All units	Rs./HP/Month	20	4.50	25	4.80

8.4 Commercial Services (CS)

- 8.4.1 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.
- 8.4.2 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.
- 8.4.3 Service Character:
 - AC 50 Cycles, Single phase at 230 Volts or Three Phase at 400 Volts.

	Existin	Proposed tariff			
Consumer Category	Fixed Charges		Energy Charges	Fixed Charges	Energy Charges
	Unit	Rate	Rate(₹/kWh)	Rate	Rate(₹/kWh)
All units	Rs./Connection/Month	100	6.25	105	6.70

8.4.4 Proposed Tariff:

- 8.4.5 **Delayed Payment Surcharge:** In accordance with Clause IV of Terms & Conditions of Supply as provided in Paragraph 8.8 of the Present Tariff Petition.
- 8.4.6 **Installation of Shunt Capacitors:** In accordance with Clause II of Terms & Conditions of Supply as provided in Paragraph 8.8 of the Present Tariff Petition.



8.4.7 **Prompt Payment Rebate/ Rebate for online payment:** In accordance with Clause VII and Clause VIII of Terms & Conditions of Supply as provided in Paragraph 8.8 of the Present Tariff Petition.

8.5 Industrial Services

- 8.5.1 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.

8.5.2 Service Character:

Low Tension Industrial Service (LTIS): 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

	E	xisting tariff	Proposed tariff		
Consumer Category	Fixed Charges		Energy Charges	Fixed Charges	Energy Charges
	Unit	Rate	Rate(₹/kWh)	Rate	Rate(₹/kWh)
LTIS	Rs./kVA/Month	100	5.00	110	5.35
HTIS	Rs./kVA/Month	320	6.30	340	6.75

8.5.3 Proposed Tariff:

8.5.4 **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.



- 8.5.5 **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 8.8 of the Present Tariff Petition.
- 8.5.6 **Load Factor Rebate for HTIS:** In accordance with Clause IX of Terms & Conditions of Supply as provided in Paragraph 8.8 of the Present Tariff Petition.
- 8.5.7 **Voltage Rebate for HTIS:** In accordance with Clause VI of Terms & Conditions of Supply as provided in Paragraph 8.8 of the Present Tariff Petition.
- 8.5.8 **Delayed Payment Surcharge:** In accordance with Clause IV of Terms & Conditions of Supply as provided in Paragraph 8.8 of the Present Tariff Petition.
- 8.5.9 **Power Factor Penalty/Rebate for LTIS:** In accordance with Clause II of Terms & Conditions of Supply as provided in Paragraph 8.8 of the Present Tariff Petition.
- 8.5.10 Installation of Shunt Capacitors for LTIS: In accordance with Clause II of Terms & Conditions of Supply as provided in Paragraph 8.8 of the Present Tariff Petition. Load factor rebate and power factor rebate shall not be allowed to consumers with outstanding arrears.
- 8.5.11 **Prompt Payment Rebate/ Rebate for online payment:** In accordance with Clause VII and Clause VIII of Terms & Conditions of Supply as provided in Paragraph 8.8 of the Present Tariff Petition.

8.6 Institutional Services

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

- 8.6.1 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 at cost as decided by Hon'ble Commission)
- 8.6.2 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

		Existing ta	Proposed tariff		
Consumer Category	Fixed Charges		Energy Charges	Fixed Charges	Energy Charges
	Unit	Rate	Rate(₹/kWh)	Rate	Rate(₹/kWh)
Street Light	Rs./Conn ection/M onth	35	4.90	40	5.25
Railway Traction Services, Military Engineering Services and Other Distribution Licensees*	Rs/KVA/ Month	350	6.00	375	6.40

8.6.3 Proposed Tariff:

*Note: 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 8.8 of the Present Tariff Petition.

8.6.4 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.

8.6.5 **Delayed Payment Surcharge:** In accordance with Clause IV of Terms & Conditions of Supply as provided in Paragraph 8.8 of the Present Tariff Petition. Load factor rebate shall not be allowed to consumers with outstanding arrears.



8.7 Temporary Connections

- 8.7.1 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.

8.7.2 Proposed Tariff:

	Exis	ting tariff	Proposed tariff		
Consumer Category	Fixed Charges	Energy Charges	Fixed Charge		Energy Charges
		Rate(₹/kWh)			Rate(₹/kWh)
All units	1.5 times of the applicable fixed charges	1.5 times of the applicable energy charges	the	times of applicable d charges	1.5 times of the applicable energy charges

8.8 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.

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

Once the actual demand is recorded to be higher than contract demand for two continuous months, the licensee would serve notice to the consumer after the end of



the second month for enhancement of the contract demand. The consumer would be liable to respond within 15 days of receipt of such notice and submit application for enhancement of contract demand to the licensee. The licensee would, within 15 days of receipt of response from the consumer, finalise the new agreement after making necessary changes at consumer's installations.

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

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

Clause II: Power factor Penalty/Rebate

Power Factor Penalty:

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

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

Further, all consumers having aggregate inductive load greater than 3 HP (2.2 kW) and above (except domestic and street lights) on advice of Licensee, 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



Rating of individual Inductive Load in HP	kVAR rating of LT capacitors
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 even after the advice by the Licensee, the consumers does not get the capacitor installed/replaced within the notice period, the consumer shall be levied a surcharge at 5% on the total billed amount charge (metered or flat), till they have installed the required capacitors.

If required by Licensee, connection shall not be released for any consumer having aggregate inductive load greater than 3 HP (2.2 kW), unless the capacitors of suitable rating are installed.

Power Factor Rebate:

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

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

Clause III: Jharkhand Electricity Duty

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

Clause IV: Interest on Delayed payment

The Delayed Payment Surcharge will be levied for all consumers at the rate of 1.5% per month and part thereof for all consumer categories. The due date for making payment of energy bills or other charges shall be as stipulated in the JSERC (Supply Code) Regulations, 2015 and its amendments which is presently minimum 15 days after issue date of bill for LT Domestic, Commercial and Agriculture category and minimum 21 days



after issue date of bill for other categories. The bill should be generated and delivered on monthly basis. For consumers having Email and Whatsup number, Bills sent on Email/ Whats up or vide any other electronic media shall be considered to be delivered. In case, the licensee defaults in generating and delivering bills on monthly basis, DPS will not be charged for the period of default by licensee.

Clause V: Electricity Supply Code

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

Clause VI: Voltage Rebate

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

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

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

Clause VII: Rebate for prompt payment

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

Clause VIII: Rebate for online payment

"To motivate the consumers to make online payment of the bills through online web portal or digital methods, a rebate of 1% of the billed amount (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.

Dishonoured Cheques

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

Stopped/ defective meters

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

In case of meter being out of order from the period before which no pattern of consumption is available, the provisional average bill shall be issued on the basis of



sanctioned/ contract load on following load factor applicable to respective categories, as shown below:

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

Sale of energy

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

Release of new connections

No new connections shall be provided without appropriate meter.

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 Regulaion 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

8.9 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	Payable with energy bill
	Street light	20	No change	



		Scale of	Proposed	Manner in which payment will		
No.	Purpose	Charges	Charges	be realized		
	Domestic	15 (Kutir Jyoti)				
		20 (Others)	No change			
	Commercial	20	No change			
	Other LT categories	50	No change			
	HTS	100	No change			
	HTSS, EHTS, RTS	100	No change			
2	Revision of estimate when a c	onsumer intimate	es changes in his	s requirement subsequent to the		
	preparation of service connection	on estimate base	d on his original a	application		
	Agriculture	10	No change			
	Domestic	30	No change			
	Commercial	30	No change	Payable with energy bill		
	Other LT categories	50	No change			
	HT Supply	150	No change			
3	Testing of consumers Installation	n				
	First test and inspection free of					
	charge but should any further		No change			
	test and inspection be					
	necessitated by faults in the	100		Payable with energy bi		
	installation or by not	100		i dyddie with chefgy bin		
	compliance with the					
	conditions of supply for each					
	extra test or inspection					
4	Meter test when accuracy disputed by consumer					
	Single phase	40	No change	If the meter is found defective within the meaning of the Indian		
	Three phase	100	No change	Electricity Rules 1956, no charge		
	Trivector of special type meter			shall be levied. If it is proved to be correct within the permissible		
		650	No change	limits laid down in the Rules, the amount will be charged in the		
	next energy bill.					
5	Removing/ Refixing of meter		1			
	Single phase	50	No change			
	Three phase	100	No change	Payable with energy bill		
	Trivector of special type meter	300	No change			



No	Durness	Scale of	Proposed	Manner in which payment will				
No.	Purpose	Charges	Charges	be realized				
6	Changing of meter /meter equipment/fixing of sub meter on the request of the consumer/fixing							
	of sub meter							
	Single phase	50	No change					
	Three phase	100	No change	Payable with energy bill				
	Trivector of special type meter	300	No change					
7	Resealing of meter when seals a	Resealing of meter when seals are found broken						
	Single phase	25	No change					
	Three phase	50	No change	Payable with energy bill				
	Trivector of special type meter	100	No change					
8	Replacement of meter card, if	10	No change	Davable with energy bill				
	lost or damaged by consumer	10	No change	Payable with energy bill				
9	Fuse call – Replacement							
	Board fuse due to fault of	15	No change					
	consumer		No change	Payable with energy bill				
	Consumer fuse	15	No change					
10	Disconnection/ Reconnection							
	Single phase	10	200	Payable in cash in advance along				
		40	200	with the request by the				
	Three phase	100	350	consumer. If the same consumer				
	LT Industrial Supply	400	700	is reconnected/ disconnected				
	HT Supply			within 12 months of the last				
		700	1000	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	Rs. 20/50	No change					
	phase	113. 20/50	No change					
	Domestic- HT	Rs 50	No change					
	Commercial Single Phase/	Rs 20/105	No change	Payable with energy bill				
	Three phase	1.5 20/ 103						
	LT meter with CT	Rs. 250	No change					
	НТ	Rs 700	No change					



*Applicable for a 6 month duration from the date of taking the transformer on rent, thereafter monthly escalation of 10% would be applicable



Chapter 9. Proposal for Open Access Charges

9.1 Proposal for Open Access Charges

- 9.1.1 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.
- 9.1.2 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.
- 9.1.3 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.
- 9.1.4 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:

9.1.5 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;"

- 9.1.6 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;"

- 9.1.7 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 voltage wise at HT/ EHT and LT levels.
- 9.1.8 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 2019-20.

9.2 Wheeling charges

9.2.1 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 2019-20 and the wheeling charges is given below:



Wheeling and Retail ARR for FY 2019-20						
Particulars	Wheeling %	Retail %	Wheeling ARR (Rs.Crs)	Retail ARR (Rs.Crs)	Total ARR (Rs.Crs)	
Power Purchase Cost	0%	100%	-	1,503.85	1,503.85	
Employee Expenses	60%	40%	14.42	9.61	24.03	
A&G Expenses	50%	50%	12.10	12.10	24.19	
R&M Expenses	90%	10%	24.31	2.70	27.01	
Interest on Normative loan	90%	10%	8.17	0.91	9.08	
Interest on Security Deposit	0%	100%	-	1.83	1.83	
Interest on Working capital	As per M	YT Order	3.62	14.33	17.95	
Depreciation	90%	10%	30.26	3.36	33.62	
Total Expenditure			92.87	1,548.69	1,641.56	
Add: Return on Equity	90%	10%	21.64	2.40	24.04	
Less: Non Tariff Income	10%	90%	0.59	5.27	5.86	
Aggregate Revenue Requirement			113.93	1,545.82	1,659.75	
Projected Sales (MUs)			3,167			
Average Cost of Supply (Rs/kWh)			5.24			
Wheeling Tariff (Rs/kWh)				0.36		

9.3 Cross Subsidy Surcharge

9.3.1 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.

9.3.2 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 applicabl e voltage	D- Wheeling Charge	Cross Subsidy Surcharge (Rs/kWh)
Domestic	LT	4.51	4.95	9.05%	0.36	-
Commercial	LT	6.77	4.95	9.05%	0.36	1.45
Industrial- LTIS	LT		4.95	9.05%	0.36	-
Industrial- HTIS	HT	7.13	4.95	3.00%	0.36	1.82
Institutional	HT	4.96	4.95	3.00%	0.36	-

Table 9-2: Cross Subsidy Surcharge calculation for FY 2019-20

9.4 Additional Surcharge:

- 9.4.1 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."*
- 9.4.2 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.



9.5 Regulatory Surcharge for Open Access Consumers

- 9.5.1 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.
- 9.5.2 The Petitioner has proposed liquidation of meagre amount of regulatory assets. Therefore, Petitoiner has not calculated the category wise regulatory asset surcharge. However, the Petitioner requests the Hon'ble Commision 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.



Chapter 10. Compliance to Directives

10.1 Compliance to Directives

The compliance to the new directives given in the Tariff order dated 18th May 2018 are as under:

Directive Ref	Directive
Ref. 13.2	Optimisation of Power Purchase Cost
Main Directive	The Commission directs the Petitioner to undertake a detailed demand forecasting exercise for short term, medium term as well as long term based on which it should devise a power procurement strategy with higher focus on managing short term procurement of power through various avenues and optimising costs for procurement other than long term sources.
Compliance by Petitioner	The petitioner would like to state that the demand forecasting for the current control period i.e. FY 2017-2021 was done by the petitioner in 2016. The demand in the petitioner's license area is primarily governed by explansion plans of the industrial units as almost 80% of the sales is driven by industrial consumption. The existing license area has very little land left for new industrial units and therefore, whatever demand variation is expected, it is primarily due to vertical expansion of residential units and shops/commercial complexes. The petitioner's current methodology of forecasting demands based on past consumption and information available from various industrial units and other sources seems to be appropriate, which is also corroborated from the demand forecast done by the petioner and actual demand witnessed during the the current control period.
	For the next control period is being worked out by the petitioner and will be submitted to the Commission in subsequent filings.
	As far as power procurement strategy is concerned, the petitioner has already created a Power Management Group who are working on optimizing the power purchase costs from all long term tied up sources by scheduling energies based on merit order subject to technical and load flow constraints in the system. The petitioner would like to communicate that reliability of power supply is of atmost importace for industrial and urban consumers and therefore, reliance on opportunity based short-term power may hamper the availability and reliability of power supply to consumers. However, the Power Management Group of the petitioner of the petitioner had worked throughout the year and



came up with a solution where the daily surplus balance of long term tied up sources of the licensee after ensuring reliable power supply to licensee's consumers is being offered in exchange whenever available.

The petitioner submits that it had taken up with DVC for scheduling and sale of power from daily balance surplus through DVC 400kV system. After several followups, meetings and engagement sale of daily balance surplus power of TSL Licensee has just started in May'2019. The petitioner's Power Management Group is taking all necessary steps to ensure that daily surplus (if any) is sold in the exchange , which will reduce the power purchase cost.

On purchase of power from short term market, the petitioner would like to communicate that the average prices in the exchange during FY 2018-19 varied as per the table below:

	Area E1	Price (Rs/unit)
Summary of FY 2018-19	Average (RTC)	3.815
	Peak	4.636
	Non Peak	3.542
	Day	3.682
	Night	3.268
	Morning	3.777

*Source: IEX

Over and above this, there will be T&D loss charges, scheduling charges which will vary in the range of 20-30 ps/unit depending upon the source. The petitioner's Power Management Group is consistently looking for the opportunities and working to enable the permissions and approvals from appropriate agencies so that, in case of commercially favourable opportunities, power is also taken from short term market.

Directive Ref	Directive
Ref. 13.3	RPO Obligation
Main Directive	The Commission directs the Petitioner to comply with the RPO norms set by the Commission in future, failing which the penal action may be taken by the Commission against the licensee.
Compliance by Petitioner	The Petitioner is taking all efforts to comply with the provisions of RPO Regulations and in the past also met the targets through



purchase of RECs. The Petitioner has been regularly updating Hon'ble Commission about its action plan on RPO. Petitioner would like to communicate that it is not considering the power purchased from DVC 132kV source for RPO compliance as the same is purchased at distribution tariff and therefore the RPO compliance on that units need to be done by DVC. We request the Hon'ble Commission that DVC may be advised accordingly.

Directive Ref	Directive
Ref. 13.4	Quality of power/ Reliability Indices and Standard of Performance (SOP)
Main Directive	The Commission directs the Petitioner to continue submitting monthly report on Reliability Indices in MS-Excel format along with compliance to SOPs in true spirit, in course of achieving 24x7 quality & reliable power.
Compliance by Petitioner	The Petitioner is complying this directive and submitting the monthly reports to Hon'ble Commission on timely basis.

Directive Ref	Directive
Ref. 13.5	Impact assessment study for switching from kWh billing to kVAh billing
Main Directive	The Commission directs the Petitioners to carry out impact assessment study on transition from kWh billing to kVAh billing, for a sample set of consumers in the HTIS category, and submit a report within six months of issuance of this Order.
Compliance by Petitioner	The impact assessment study is underway and the Petitioner shall report the findings as soon as the same is completed.

Directive Ref	Directive
Ref. 13.6	Approval of PPAs
Main Directive	The Commission directs TSL to submit, for approval, all the PPAs which have not yet been approved by the Commission within three months of the date of issuance of this Tariff Order.
Compliance by Petitioner	The Petitioner submits that it has submitted the PPAs with DVC for 120 MVA at 132 kV and 200 MW at 400 kVA to the Hon'ble Commission vide its Letter No. PBD/957/59-T/2018 dated 22 nd October 2018

Directive Ref

Directive



Ref. 13.7	Wheeling Tariff
Main Directive	The Commission directs the Petitioner to propose capacity based Wheeling tariff and specify the voltage-wise distribution losses as per clause 7.9 of the JSERC MYT Regulations, 2015.
Compliance by	Voltage wise losses may be taken as follows-
Petitioner	• 132kV ~ 0.3- 1%
	• 33kV ~ 1- 2%
	• 6.6kV ~ 1- 2 %
	• LT~ 7 -to 8 %
	In absence of the methodology and clear understanding of the
	capacity based wheeling charges, we are not in a position to
	propose the same. We would request the Hon'ble Commission to kindly issue the methodology for such computation.

Directive Ref	Directive
Ref. 13.8	Consolidated tariff petition for FY 2018-19 and FY 2019-20
Main Directive	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.
Compliance by Petitioner	 The Petitioner submits that filing has been delayed due to unavailability of Signed Audited Accounts for FY 2017-18 and also more time took to prepare the 4 year data on this petition. Petitioner submits that new statutory auditors took relatively more time to ensure the regulatory compliance. Our efforts to submit the petition with audited account, and also to compile 4 year data took more time than expected which led to this delay. We request the Hon'ble Commission to kindly condone this delay in filing as the same has happened in our efforts to comply to the requirement. On the subject, TSL has also requested the Hon'ble Commission vide letter No. PBD / 1019 / 59-T / 2018 dated 30.11.2018.

Directive Ref	Directive
Ref. 13.9	Strengthening/ Increasing effectiveness of consumer grievance redressal mechanism
Main Directive	The Commission directs the Petitioner to strengthen and increase effectiveness of its consumer grievance handling mechanism and submit a report to the Commission along with the next Tariff Petition indicating- total number of complaints received, nature of



	complaint, complaints resolved, average resolution time, complaints pending etc.
Compliance by Petitioner	The Petitioner submits that it takes utmost care to ensure that all needs of the customer are taken care of and that none of the needs and complaints converts into a Grievance.
	The Petitioner submits that as a compliance to the above directive, it has submitted the summary of required report for FY 2016-17, FY2017-18 and H1 of FY 2018-19 (up to Sep-18) vide its Letter No.PBD/976/59-T/2018 dated 31 st October 2018. Also it is submitting the quarterly reports on the same from time to time.

Directive Ref	Directive
Ref. 13.10	Bank Guarantee for security deposit above Rs 10 Lakhs
Main Directive	The Commission directs the Petitioner to strictly comply with Clause 8.2.20 of the JSERC (Supply Code) Regulations, 2015 as per which: <i>"The Consumer whose total amount of Security Deposit exceeds Rs.</i> 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"
	The above mentioned clause shall be applicable for all existing as well as new consumers.
Compliance by Petitioner	The Petitioner submits that it has allowed the eligible consumers to submit Security Deposit in the form of BG. 3 consumers have submitted the BG in FY2018-19.

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



Compliance by Investment in Cybersecurity measures:			
Petitioner	Approach document on the same is enclosed. As most of the		
	Operational and Billling system IT is maintained by JUSCO for TSL		
	also, Vulnerability and Protection Testing (VPT) for cybersecurity		
	systems has been conducted by JUSCO. Based on outcome of VPT		
	tests of IT and SCADA	systems, TSL/JUSCO i	s working on the actions
	and necessary expend	iture required includ	ing capital expenditures.
	As a preliminary estimate, following expenditures is expected.		
	SAP HANA/ ISU	Current version of	~ Rs. 1200 Lakhs
	upgrade	SAP is old and runs	
		with several	
		surround system	
		which poses	
		security risk	
	Upgradation of old	Existing	~ Rs. 40 Lakhs for
	Computers/Laptops	workstations/	approx 60
	with Windows XP-	computers with	Computers/Laptops.
	not supported now.	Windows XP	
		whose support is not available need	
		to be replaced	
		with new	
		workstations with	
		Windows10	
	L However detailed esti	mation SAP Hana and	ISU upgrade is required
However detailed estimation SAP Hana and ISU upgrade is require			

However detailed estimation SAP Hana and ISU upgrade is required to be done based on input on costs to be given by suppliers. Upgradation of Computers/ Laptops (more than 8 years old with Windows XP) software- not supported now) has started in phases. The costs of SAP HANA/ISU upgrade shall be shared between JUSCO and TSL Licensed area as this will service both the area.



List of Annexure (Book 2 – Book 6)

Annexure 1: Annual Audited Accounts for FY 2016-17 Page N0 1 to 11
Annexure 2: Power regulatory accounts manual and Annual Audited Accounts for FY 2017-18 Page No 12
to 38
Annexure 3: Tata Power Monthly Purchase Bills for FY 2016-17 Page No 39 to 222
Annexure 4: DVC-132 kV source Monthly Power Purchase Bills for FY 2016-17 Page NoPage No 223 to 260
Annexure 5: DVC-400 kV source Monthly Power Purchase Bills for FY 2016-17 Page NoPage No 261 to 409
Annexure 6: TSL-Captive works source Monthly Power Purchase Bills for FY 2016-17 Page No 410 to 412
Annexure 7: REC Certificates for FY 2016-17 Page No 413 to 418
Annexure 8: Open Access source Monthly Power Purchase Bills for FY 2016-17 Page No 419 to 458
Annexure 9: Certificate from JUSCO for payment of Outsourcing Cost for FY 2016-17 Page No 459 to 460
Annexure 10: Inspection report and its Compliance letter of CGRF TSL Page No 461 to 465
Annexure 11: Scheme wise Capital Expenditure & Capitalization from FY 2016-17 to FY 2019-20
Page No 466 to 467
Annexure 12: Income Tax paid challans for FY 2016-17 Page No 468 to 469
Annexure 13: Tata Power Monthly Purchase Bills for FY 2017-18 Page No 470 to 662
Annexure 14: DVC-132 kV source Monthly Power Purchase Bills for FY 2017-18 Page No 623 to 711
Annexure 15: DVC-400 kV source Monthly Power Purchase Bills for FY 2017-18 Page No 712 to 914
Annexure 16: TSL-Captive works source Monthly Power Purchase Bills for FY 2017-18
Page No 915 to 916
Annexure 17: REC Certificates for FY 2017-18 Page No 917 to 930
Annexure 18: Open Access source Monthly Power Purchase Bills for FY 2017-18 Page No 931 to 1788
Annexure 19: Certificate from JUSCO for payment of Outsourcing Cost for FY 2017-18 Page No 1789 to1790
Annexure 20: Income Tax paid challans for FY 2017-18Page No1791 to 1792
Annexure 21: Monthly Power Purchase Expenses for FY 18-19 Page No1793 to 1804
Annexure 22: correspondence with DVC to get NOC for 400KV power sale through
ExchangePage No 1805 to 1822