

BEFORE
THE BIHAR ELECTRICITY REGULATORY COMMISSION
VIDYUT BHAWAN - II, PATNA

Petition for
True-Up for FY 2018-19,
Annual Performance Review (APR) for FY 2019-20
And
Determination of ARR and Tariff for FY 2020-21
For
Bihar State Power Transmission Company Limited
(BSPTCL)
Patna



Chief Engineer (P&E and Commercial & Regulatory Affair Cell),
1st Floor, Vidyut Bhawan - I,
Jawaharlal Nehru Marg,
Patna - 800 021

15th November 2019

**Before the Bihar Electricity Regulatory Commission,
Patna**

Filing No.:

Case No.:

IN THE MATTER OF **Filing of the Petition for True-up of FY 2018-19, Annual Performance Review (APR) for FY 2019-20, and Aggregate Revenue Requirement (ARR) and Tariff for FY 2020-21 under BERC (Terms and Conditions for Determination of Tariff) Regulations, 2007 & BERC (Multi-Year Transmission Tariff and SLDC Charges) Regulations, 2018 along with the other guidelines and directions issued by the BERC from time to time and under Section 45, 46, 47, 61, 62, 64 and 86 of The Electricity Act, 2003 read with the relevant guidelines.**

AND

IN THE MATTER OF **Bihar State Power Transmission Company Limited**
THE APPLICANT **(herein after referred to as 'BSPTCL' or 'Petitioner', which shall mean for the purpose of this Petition the Licensee, having its registered office at Vidyut Bhawan -I, Jawaharlal Nehru Marg, Patna - 800 021**

The Petitioner respectfully submits as under:

1. Pursuant to the enactment of Electricity Act, 2003, Bihar State Power Transmission Company Limited (herein after referred to as 'BSPTCL' or 'Petitioner') is filing this petition, under Sections 61, 62 and 64 of the Electricity Act, 2003 and the governing Regulations thereof, for approval of Truing-up of FY 2018-19, Annual Performance Review (APR) for FY 2019-20 and Aggregate Revenue Requirement (ARR) for FY 2020-21.
2. The Multi-year Tariff (MYT) Petition for the Control Period from FY 2013-14 to FY 2015-16 was filed by BSPHCL on behalf of all successor Companies on 14th November 2012 and accordingly, the Hon'ble Commission had issued common

Order for all entities (Tariff Order dated 15th March 2013).

3. The Petitioner had then filed separate Petition for APR for FY 2013-14 and Revised ARR for FY 2014-15 on 14th November 2013 and accordingly, the Hon'ble Commission had issued Tariff Order on 28th February 2014.
4. The Petitioner had then filed Petition for True-up for FY 2013-14, APR for FY 2014-15, Revised ARR for FY 2015-16 and accordingly, the Hon'ble Commission had issued Tariff Order on 12th March 2015.
5. The Petitioner had then filed Petition for True-up for FY 2014-15, APR for FY 2015-16 and approval of ARR for the period FY 2016-17 and Determination of Multi-Year Transmission Tariff for FY 2016-17, 2017-18 and 2018-19 on 28th December 2015 and the Hon'ble Commission issued the Order on the Petition on 21st March 2016.
6. The Petitioner filed Review Petition before Hon'ble Commission against Tariff Order dated 21st March 2016 and the Hon'ble Commission issued the Order on Review Petition on 12th July 2016.
7. The Petitioner had then filed the Petition for True-up for FY 2015-16, APR for FY 2016-17 and Determination of ARR and Tariff for FY 2017-18 and accordingly, the Hon'ble Commission had issued the Order on 9th March 2017.
8. The Petitioner had then filed the Petition for True-up for FY 2016-17, APR for FY 2017-18 and Determination of ARR and Tariff for FY 2018-19 and accordingly, the Hon'ble Commission had issued the Tariff Order on 7th March 2018 against which BSPTCL had filed the Review Petition before Hon'ble Commission on 24th April 2018.
9. The Petitioner had then filed Petition for True-up for FY 2017-18, APR for FY 2018-19 and approval of ARR for the Multi-Year Tariff period from FY 2019-20 to FY 2021-22 and Determination of Transmission Tariff for FY 2019-20, on 30th November 2018 and the Hon'ble Commission issued the Order on the Petition on 15th February 2019.

-
10. The Petitioner had filed a Review Petition on the Tariff Order dated 15th February 2019. The Hon'ble Commission issued Order on Review Petition on 25th July 2019.
 11. The present Petition is being filed before the Hon'ble Commission for Truing-up of FY 2018-19, APR of FY 2019-20 and Determination of ARR and Tariff for FY 2020-21, considering the approved values in Tariff Order dated 7th March 2018 for Truing-up of FY 2018-19 and approved values in Tariff Order dated 15th February 2019 for APR and ARR of FY 2019-20 and FY 2020-21, respectively.
 12. The present Petition is filed on independent basis by BSPTCL.
 13. This Petition has been prepared in accordance with the provisions of Sections 61, 62, and 64 of the Electricity Act, 2003 and relevant provisions of BERC (Terms and Conditions for Determination of Tariff) Regulations, 2007 as amended from time to time, and BERC (Multi-Year Transmission Tariff and SLDC Charges) Regulations, 2018 notified by the Hon'ble Commission.
 14. The Petitioner along with this Petition is submitting the regulatory formats with data and information to the extent applicable and would make available any further information/additional data required by the Hon'ble Commission during the course of proceedings.

Prayers to the Hon'ble Commission:

15. The Petitioner respectfully requests the Hon'ble Commission to:
 - a. Admit this Petition;
 - b. Examine the proposal submitted by the Petitioner in the enclosed Petition for a favourable dispensation;
 - c. Pass suitable Orders with respect to the Trued-up ARR for FY 2018-19, APR for FY 2019-20 and ARR for FY 2020-21 as submitted in this Petition;
 - d. Approve the transmission charges as per the proposal and allow relaxation in tariff norms wherever sought for;
 - e. Pass separate Order for the Petitioner against the present Petition;

-
- f. Permit to propose suitable changes to the respective True-up/APR/ARRs, prior to the final approval by the Hon'ble Commission;
 - g. Permit to revise any inadvertent omissions/errors/shortcomings, etc., and accordingly add/change/modify/alter this filing and make further submissions as may be required at a future date;
 - h. Approve open access charges in Tariff Order of BSPTCL which is to be recovered from open access consumers;
 - i. Pass such Order as the Hon'ble Commission may deem fit and appropriate keeping in view the facts and circumstances of the case.

Dated: _____November 2019

Dileep Kumar
Chief Engineer (P&E and
Commercial & Regulatory Affair
Cell)

Table of Contents

1	Introduction	14
1.1	Background	14
1.2	Profile of BSPTCL	14
1.3	Filing of Present Petition	15
1.4	Contents of the Petition	16
1.5	Approach to the Present Filing.....	16
2	Truing up for FY 2018-19	19
2.1	Introduction	19
2.2	Transmission Losses	19
2.3	Capitalization.....	20
2.4	Reconciliation of Capitalization in Accounts	21
2.5	Change in Accounting Standards	22
2.6	Gross Fixed Asset	22
2.7	Depreciation.....	23
2.8	Interest and Finance Charges	25
2.9	Operation and Maintenance Expenses.....	26
2.10	Return on Equity	30
2.11	Income Tax	31
2.12	Interest on Working Capital	31
2.13	Incentive for Transmission Availability.....	32
2.14	Non-Tariff Income.....	34
2.15	Revenue from Transmission Charges	35
2.16	Revenue Gap/(Surplus) for FY 2018-19.....	37
3	Annual Performance Review (APR) for FY 2019-20	39
3.1	Background	39
3.2	Transmission Losses	39
3.3	Capital Expenditure and Capitalization	40

3.4	Gross Fixed Asset	42
3.5	Depreciation.....	42
3.6	Interest and Finance Charges	44
3.7	Operation and Maintenance Expenses.....	46
3.8	Return on Equity	53
3.9	Interest on Working Capital	55
3.10	Non-Tariff Income.....	56
3.11	Aggregate Revenue Requirement for FY 2019-20.....	57
3.12	Revenue from Transmission Charges	58
3.13	Revenue Gap/(Surplus) for FY 2019-20.....	58
4	Aggregate Revenue Requirement and Tariff for FY 2020-21.....	60
4.1	Background	60
4.2	Transmission Losses	61
4.3	Projects to be implemented in 13 th Plan.....	61
4.4	Capital Expenditure and Capitalization	63
4.5	Gross Fixed Asset	64
4.6	Depreciation.....	65
4.7	Interest and Finance Charges	67
4.8	Operation and Maintenance Expenses.....	69
4.9	Return on Equity	76
4.10	Interest on Working Capital	78
4.11	Non-Tariff Income.....	79
4.12	Aggregate Revenue Requirement for FY 2020-21.....	80
4.13	Trued-up Revenue Gap/(Surplus) of FY 2018-19	81
4.14	APR Revenue Gap/(Surplus) of FY 2019-20	81
4.15	Annual Transmission Charges for FY 2020-21.....	82
4.16	Methodology of Recovery of ARR.....	82
4.17	Transmission Charges for Short Term Open Access Consumers	85

5	Compliance to Directives	87
5.1	Directive 1: Energy Auditing and Transmission Loss	87
5.2	Directive 2: Maintenance of Asset /Property Register	88
5.3	Directive 3: Details of programmed Capital Works	90
5.4	Directive 4: Synchronising the Planned Transmission Work with BGCL	91
5.5	Directive 5: Meters at interface points of BSPTCL & BGCL.....	92
5.6	Directive 6: Colony Consumption and Electricity Charges	93
5.7	Directive 7: Adherence to BERC (Procedure for filing Capital investment and Capitalisation plan) Regulations, 2018	94
5.8	Directive 8: Timely Completion of Projects/Schemes	95
5.9	Directive 9: Utilisation / Loading Levels of Transmission Assets.....	96
5.10	Directive 10: Utilisation / Loading Levels of Transmission Assets.....	96
5.11	Directive 11: Disclosure with respect to quantitative details no. of employees, total transmission lines in Ckt KM, no. of Substations and no. of bays	97

List of Tables

Table 1-1: GSS and Power Transformer Capacity in MVA.....	14
Table 1-2: Transmission Line Length in Ckt Km.....	15
Table 2-1: Actual Transmission Loss of BSPTCL for FY 2018-19	20
Table 2-2: Capital Expenditure and Capitalization for FY 2018-19 (Rs. Crore)	21
Table 2-3: Reconciliation of Capitalization (Asset Addition) (Rs. Crore)	21
Table 2-4: Reconciliation of Gross Fixed Assets (Rs. Crore)	22
Table 2-5: Gross Fixed Asset claimed in True-up of FY 2018-19 (Rs. Crore).....	23
Table 2-6: Depreciation considered in Truing-up of FY 2018-19 (Rs. Crore)	24
Table 2-7: Loan and Equity additions during FY 2018-19 (Rs. Crore).....	25
Table 2-8: Interest on Loan computed for FY 2018-19 (Rs. Crore)	26
Table 2-9: Employee expenses for FY 2018-19 (Rs. Crore)	27
Table 2-10: R&M expenses for FY 2018-19 (Rs. Crore)	28
Table 2-11: A&G Expenses for FY 2018-19 (Rs. Crore)	29
Table 2-12: Operation and Maintenance Expenses for FY 2018-19 (Rs. Crore).....	29
Table 2-13: Return on Equity for FY 2018-19 (Rs. Crore)	30
Table 2-14: Interest on Working Capital for FY 2018-19 (Rs. Crore)	32
Table 2-15: Month-wise Transmission Availability	32
Table 2-16: Incentive Computation on Transmission Availability (Rs. Crore)	34
Table 2-17: Non-Tariff Income for FY 2018-19 (Rs. Crore).....	35
Table 2-18: Revenue from Transmission Charges for FY 2018-19 (Rs. Crore).....	35
Table 2-19: Transmission Charges approved in APR of FY 2018-19 (Rs. Crore)	36
Table 2-20: Revenue Gap/(Surplus) for FY 2018-19 (Rs. Crore)	37
Table 3-1: Actual Transmission Loss for FY 2019-20.....	40
Table 3-2: Capital Expenditure and Capitalization for FY 2019-20 (Rs. Crore)	41
Table 3-3: Gross Fixed Asset claimed in APR of FY 2019-20 (Rs. Crore)	42
Table 3-4: Depreciation considered in APR of FY 2019-20 (Rs. Crore).....	44
Table 3-5: Loan and Equity additions during FY 2019-20 (Rs. Crore).....	45
Table 3-6: Interest on Loan computed for FY 2019-20 (Rs. Crore)	46
Table 3-7: Base value norms for Employee Expenses	47
Table 3-8: Transmission Line, No. of sub-stations and No. of employees for FY 2019-20.....	47
Table 3-9: CPI Inflation considered for FY 2019-20	48
Table 3-10: Employee Expenses for FY 2019-20.....	48
Table 3-11: R&M expenses for FY 2019-20 (Rs. Crore)	49

Table 3-12: Base value norms for A&G Expenses	50
Table 3-13: CPI:WPI Inflation considered for FY 2019-20	51
Table 3-14: A&G Expenses for FY 2019-20	51
Table 3-15: Holding Company Expenses for FY 2019-20 (Rs Crore)	52
Table 3-16: Operation and Maintenance Expenses for FY 2019-20 (Rs. Crore)	53
Table 3-17: Return on Equity for FY 2019-20 (Rs. Crore)	54
Table 3-18: Interest on Working Capital for FY 2019-20 (Rs. Crore)	56
Table 3-19: Non-Tariff Income for FY 2019-20 (Rs. Crore)	57
Table 3-20: Annual Transmission Charges/ ARR of Transmission Business for FY 2019-20 (Rs. Crore)	57
Table 3-21: Revenue Gap/(Surplus) for FY 2019-20 (Rs. Crore)	58
Table 4-1: Capital Expenditure and Capitalization for FY 2020-21 (Rs. Crore)	64
Table 4-2: Gross Fixed Asset projected for FY 2020-21 (Rs. Crore)	65
Table 4-3: Depreciation considered in ARR of FY 2020-21 (Rs. Crore)	66
Table 4-4: Loan and Equity additions during FY 2020-21 (Rs. Crore)	68
Table 4-5: Interest on Loan computed for FY 2020-21 (Rs. Crore)	69
Table 4-6: Base value norms for Employee Expenses	70
Table 4-7: Transmission Line, No. of sub-stations and No. of employees for FY 2020-21	70
Table 4-8: CPI Inflation considered for FY 2020-21	71
Table 4-9: Employee Expenses for FY 2020-21	72
Table 4-10: R&M Expenses for FY 2020-21 (Rs. Crore)	73
Table 4-11: Base value norms for A&G Expenses	73
Table 4-12: CPI: WPI Inflation considered for FY 2020-21	74
Table 4-13: A&G Expenses for FY 2020-21	74
Table 4-14: Holding Company Expenses for FY 2020-21 (Rs. Crore)	75
Table 4-15: Operation and Maintenance Expenses for FY 2020-21 (Rs. Crore)	76
Table 4-16: Return on Equity for FY 2020-21 (Rs. Crore)	77
Table 4-17: Interest on Working Capital for FY 2020-21 (Rs. Crore)	79
Table 4-18: Non-Tariff Income for FY 2020-21 (Rs. Crore)	80
Table 4-19: Annual Transmission Charges/ ARR of Transmission Business for FY 2020-21 (Rs. Crore)	80
Table 4-20: Revenue Gap of FY 2018-19 along with Holding Cost	81
Table 4-21: Revenue Gap/(Surplus) for FY 2020-21 (Rs. Crore)	82
Table 4-22: Transmission Charges for NBPDCCL and SBPDCL (Rs. Crore)	84

Table 4-23: Transmission Charges for Railways (Rs. Crore).....85

LIST OF ABBREVIATIONS

A&G	Administrative & General
BSEB	Bihar State Electricity Board
ARR	Aggregate Revenue Requirement
BERC	Bihar Electricity Regulatory Commission
BERC Tariff Regulations, 2007	BERC (Terms and Conditions for Determination of Tariff) Regulations, 2007
BERC MYT Regulations, 2018	BERC (Multi Year Transmission Tariff and SLDC Charges) Regulations, 2018
CEA	Central Electricity Authority
CPI	Consumer Price Index
CWIP	Capital Work in Progress
DPR	Detailed Project Report
EA	Electricity Act
GFA	Gross Fixed Asset
IDC	Interest During Construction
IoWC	Interest on Working Capital
IT	Income Tax
kV	kilo Volt
MAT	Minimum Alternate Tax
MU	Million Units
MW	Mega Watt
MVA	Mega Volt Ampere
MYT	Multi Year Tariff
O&M	Operation & Maintenance
PBT	Profit Before Tax
R&M	Repair & Maintenance
RTC	Round the Clock
SCADA	Supervisory Control and Data Acquisition
STOA	Short Term Open Access
STU	State Transmission Utility
ToD	Time of Day
TSA	Transmission Service Agreement

TSU	Transmission System User
TTSC	Total Transmission System Cost
WPI	Wholesale Price Index

1 Introduction

1.1 Background

The erstwhile Bihar State Electricity Board (hereinafter referred to as 'Board' or 'BSEB') was originally constituted on 1st April 1958 under Section 5 of the Electricity (Supply) Act, 1948 and was engaged in the management of electricity generation, transmission, distribution and related activities in the State of Bihar.

Under the 'Bihar State Electricity Reforms Transfer Scheme 2012', the BSEB has been unbundled into five companies, viz., Bihar State Power (Holding) Company Limited (BSPHCL), Bihar State Power Transmission Company Limited (BSPTCL), Bihar State Power Generation Company Limited (BSPGCL), South Bihar Power Distribution Company Limited (SBPDCL), and North Bihar Power Distribution Company Limited (NBPDC), with effect from 1st November 2012 vide Notification No. 17 dated 30th October 2012.

'Bihar State Power Transmission Company Limited' or 'BSPTCL' means the Transmission Company to which the Transmission Undertakings of the Board are to be transferred in accordance with this Scheme.

1.2 Profile of BSPTCL

Primarily, the transmission of power takes place at 400 kV, 220 kV and 132 kV voltage levels. The capacity additions by BSPTCL in terms of MVA capacity of Grid Sub-stations (GSS) and transmission line length (up to September 2019) are provided in the table below:

Table 1-1: GSS and Power Transformer Capacity in MVA

Sub-stations	No. of GSS	FY 2019-20 (Up to Sep 2019)
220/132kV	18	7,140
132/33kV	124	13,310
TOTAL	142	20,450

Table 1-2: Transmission Line Length in Ckt Km

Transmission Line	FY 2019-20 (Up to Sep 19)
220 kV	4,469
132 kV Double Circuit	11,113

The power supply position in the State of Bihar is improving and BSPTCL is taking all the required steps to strengthen and develop the electricity infrastructure for end-to-end transmission of power within the State. BSPTCL is on the verge of completion of projects undertaken in 12th Plan. Further, all the requisite approvals of projects under 13th Plan have already been accorded by the Hon'ble Commission in the previous Tariff Order dated 15th February 2019. The schemes under 13th Plan are proposed to be funded through 80% loan and 20% equity.

1.3 Filing of Present Petition

The present Petition considers the proposal of BSPTCL for True-up of FY 2018-19, APR for FY 2019-20 and revised ARR for FY 2020-21 and thereby determination of tariff for FY 2020-21.

Section 62 of the Electricity Act, 2003 requires the Licensee to furnish details as may be specified by the Hon'ble Commission for determination of tariff. In addition, as per the Regulations issued by the Hon'ble Commission, BSEB or its unbundled Companies are required to file Petition for all reasonable expenses, which they believe that they would incur over the next financial year and seek the approval of the Hon'ble Commission for the same. The filing is to be done based on the projections of the expected revenue and costs.

The present Petition is prepared in accordance with the provisions of the following Acts/Regulations namely:

- Electricity Act, 2003;
- BERC (Terms and Conditions for Determination of Tariff) Regulations, 2007, as amended time to time
- BERC (Terms and Conditions for Open Access) Regulations, 2018, as amended time to time
- BERC Multi-Year Transmission Tariff and SLDC Charges) Regulations, 2018

BSPTCL has made genuine efforts for compiling all relevant information relating to the True-up/ APR/ ARR Petition as required by the Regulations issued by the Hon'ble Commission and has also made every effort to ensure that information provided to the Hon'ble Commission are accurate and free from material errors.

However, there may be certain deficiencies / infirmities in the Petitions owing to the different aspects related with the operations of Transmission Company on independent basis. Hence, BSPTCL prays to the Hon'ble Commission that the information provided be accepted for the current filing and deficiencies, if any, may please be condoned. BSPTCL assures the Hon'ble Commission that appropriate measures have been taken to improve the management information system for improved data collection.

1.4 Contents of the Petition

The present Petition consist of the following main sections namely:

- Truing-up of FY 2018-19
- Annual Performance Review of FY 2019-20
- Aggregate Revenue Requirement and Tariff for FY 2020-21
- Compliance to Directives

1.5 Approach to the Present Filing

Regulations 4.1 and 4.2 of BEREC (Multi Year Transmission Tariff and SLDC Charges) Regulations, 2018 specify the basis on which the Hon'ble Commission shall determine tariff for transmission and SLDC business for each year of the Control Period. The relevant extract is as follows:

“4.1 The Commission shall determine the tariff for Transmission business or charges of SLDC operations under a Multi-Year Tariff framework with effect from April 1st of each financial year subject to provisions under these Regulations.

4.2 The Multi Year Tariff frameworks shall be based on the following elements, for calculation of Aggregate Revenue Requirement and expected revenue from tariff and charges for Transmission Business and Fees and Charges of SLDC:

i. Control Period, before commencement of which a forecast of the Aggregate Revenue Requirement and expected revenue from existing tariff in case of transmission licensee

or Fees and Charges in case of SLDC, as the case may be, shall be submitted by the applicant and approved by the Commission;

Provided that the performance parameters whose trajectories have been specified in these Regulations shall form the basis of projection for the Aggregate Revenue Requirement for the entire Control Period

ii A detailed Business Plan based on the Operational Norms and trajectories of performance parameters specified in the MYT Regulations, for each year of the Control Period, shall be submitted by the applicant for the Commission's approval subject to provisions under these Regulations;

iii. Based on the Business Plan, the applicant shall submit a petition with the forecast of Aggregate Revenue Requirement and expected revenue from existing tariff and charges for each year of the Control Period, and the Commission shall approve the transmission tariff and Fees and Charges in case of SLDC for each year of the Control Period;

iv. The mechanism for pass-through of approved gains or losses on account of uncontrollable factors as specified under Regulation 9 of these Regulations;

v. The mechanism for sharing of approved gains or losses arising out of controllable factors as specified under Regulation 10 of these Regulations....”

The Licensee is required to file an application before the Hon’ble Commission for determination of tariff as per Regulation 11.3 of BERC (Multi Year Transmission Tariff and SLDC Charges) Regulations, 2018. The relevant extract is as follows:

“11.3 An application (along with soft copy) for determination of tariff and charges shall be made by 15th November every year, for Truing up of expenses of previous years, for Annual Performance Review (APR) of the Aggregate Revenue Requirement (ARR) for the current year and determination of ARR and transmission tariff or SLDC charges for the ensuing years of the control period. The application should contain the data relating to each item of the ARR supported with the information/data in the formats Form no- SI to Form no-P12 appended to these Regulations and accompanied by such fees as may be specified under the BERC (Fees, Fines and Charges) Regulations, 2005 as amended from time to time. All the information as required in the formats appended to these Regulations along with justification shall be provided in the main petition....”

The Hon'ble Commission vide Tariff Order dated 15th February 2019 approved Truing-up of FY 2017-18, APR of FY 2018-19 and ARR for the Multi-Year Tariff period from FY 2019-20 to FY 201-22 and determined the Transmission Tariff for FY 2019-20.

In accordance with the above provisions of BERC (Multi Year Transmission Tariff and SLDC Charges) Regulations, 2018, BSPTCL is filing the present Petition for Truing-up of FY 2018-19 based on audited accounts of FY 2018-19, APR of FY 2019-20 based on half year actuals and half year estimates, and determination of revised ARR and tariff for FY 2020-21 based on projections.

2 Truing up for FY 2018-19

2.1 Introduction

BSPTCL has filed Truing-up Petition for FY 2018-19 based on the audited accounts for FY 2018-19. BSPTCL has considered the values approved in ARR of FY 2018-19 vide Tariff Order dated 7th March 2018 vis-à-vis values as per audited accounts of FY 2018-19. The Truing-up of FY 2018-19 is carried out in accordance with relevant provisions of BERC Tariff Regulations, 2007.

Regulation 22 (1) & (2) of the BERC (Terms and Conditions for Determination of Tariff) Regulations, 2007 specify:

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

“After audited accounts of the year are made available, the Commission shall undertake a similar exercise as in sub-clause (1) above based on the final actual figures as per the audited accounts. This exercise based on the audited accounts shall be called ‘Truing-up’. The Truing-up exercise for any year shall not ordinarily be considered after more than one-year gap after “Review”.

Accordingly, BSPTCL has undertaken Truing-up for FY 2018-19 based on the audited annual accounts for FY 2018-19. A copy of audited accounts of FY 2018-19 is attached as **Annexure I**.

2.2 Transmission Losses

BSPTCL submits that the actual transmission loss in BSPTCL system for FY 2018-19 is 3.99%. The following table shows the comparison of approved and actual transmission loss for FY 2018-19:

Table 2-1: Actual Transmission Loss of BSPTCL for FY 2018-19

Particulars	FY 2018-19 (Approved)	FY 2018-19 (Actual)
Energy Input (in MU)		29,709.18
Energy Output (in MU)		28,524.90
Transmission Loss (in MU)		1,184.27
Transmission Loss (%)	3.92%	3.99%

The month-wise Transmission Loss for FY 2018-19, i.e., from April 2018 to March 2019 with full details of energy input and energy output is attached as **Annexure II**.

BSPTCL submits that it has been able to install energy meters at almost all the interface points for computing the correct level of transmission loss. In view of the above, the transmission loss computed from April 2019 onwards is much lower than the transmission loss approved by the Hon'ble Commission, and is ranging between 2.35% to 2.6%. The details of Transmission Loss from April 2019 onwards is discussed in detail in the APR of FY 2019-20. The details of metering and energy accounting is elaborated under the Section on Compliance to Directives, submitted along with this Petition.

It can be deduced that the actual loss in BSPTCL system in FY 2018-19 would have also been lower than the approved value of 3.92%.

2.3 Capitalization

BSPTCL submits that the capitalization as per audited accounts for FY 2018-19 is Rs. 1,207.28 Crore. The following table shows the approved and actual capital expenditure and capitalization for truing-up of FY 2018-19 as shown in the table below.

Table 2-2: Capital Expenditure and Capitalization for FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	FY 2018-19	
		Approved in Tariff Order dated 07.03.2018	Claimed in Truing-up of FY 2018-19
1	Opening CWIP (A)	2,109.18	2,973.16
2	Capital Investment during the Year (B)	700.75	716.08
3	Less: Capitalization (C)	2,706.96	1,207.28
4	Closing CWIP (A+B-C)	102.97	2,481.96

BSPTCL has considered opening CWIP of Rs. 2,973.16 Crore in line with the closing balance of CWIP approved by the Hon'ble Commission for FY 2017-18 in Tariff Order dated 15th February 2019. The capital expenditure and capitalization incurred during the year is as per audited accounts of FY 2018-19 and accordingly, the closing CWIP for FY 2018-19 works out to Rs. 2,481.96 Crore.

BSPTCL has provided scheme-wise break-up of capitalization of Rs. 1207.28 Crore for FY 2018-19 as **Annexure III**.

2.4 Reconciliation of Capitalization in Accounts

BSPTCL submits the following table for reconciliation of asset capitalization claimed in the True-up and asset capitalization reflecting in audited annual accounts of FY 2018-19:

Table 2-3: Reconciliation of Capitalization (Asset Addition) (Rs. Crore)

Sl. No.	Particulars	FY 2018-19
1	Capitalization of Asset (Transfer from CWIP)	1,207.28
2	Add: Value of Land	11.99
3	Add: Direct Addition to GFA	4.45
4	Less: Disposal/Sale/Transfer of Assets	19.56
5	Less: Adjustment entry for land	2.28
6	Net GFA addition as per Audited Accounts	1,201.88

2.5 Change in Accounting Standards

During the processing of last Tariff Order, the Hon'ble Commission observed that there is a difference in the opening GFA submitted by BSPTCL and as per audited accounts. BSPTCL replied to the query stating that the Company has adopted cost model for valuation of Property, Plant and Equipment (PPE) as per Ind AS 16. Consequently, all items of PPE are carried at cost less accumulated depreciation and accumulated impairment of losses.

In the audited accounts, BSPTCL has netted off gross block of assets with accumulated depreciation as on April 1, 2016 and carried over the balance accordingly. The difference in Gross Block submitted and that reflecting in audited accounts is on account of accumulated depreciation adjusted and will continue to remain the same way in future years. The following Table shows the reconciliation of Gross Fixed Asset from 1st April 2016 to 31st March 2018:

Table 2-4: Reconciliation of Gross Fixed Assets (Rs. Crore)

Sl. No.	Particulars	Amount
1	Gross Fixed Asset as on 31 st March 2016 as per audited accounts	4001.23
2	Accumulated Depreciation adjusted as on 31 st March 2016	973.47
3	Gross Fixed Asset as on 1 st April 2016 as per IND AS Requirement (1-2)	3,027.76
4	Asset addition in FY 2016-17	993.08
5	Gross Fixed Asset as on 31 st March 2017 as per AS (1+4)	4,994.31
6	Gross Fixed Asset as on 31 st March 2017 as per IND AS (3+4)	4,020.84
7	Asset addition in FY 2017-18	1,391.30
8	Gross Fixed Asset as on 31st March 2018 as per AS (5+7)	6,385.61
9	Gross Fixed Asset as on 31st March 2018 as per IND AS (6+7)	5,412.14

However, for the purpose of this Petition, BSPTCL has considered the opening GFA of **Rs. 6418.00 Crore** for FY 2018-19, equal to the closing GFA of FY 2017-18 approved by Hon'ble Commission in last Tariff Order dated 15th February 2019.

2.6 Gross Fixed Asset

As stated above, BSPTCL has considered the opening GFA for FY 2018-19 equal to the closing GFA approved by the Hon'ble Commission in True-up of FY 2017-18 in Tariff Order.

The addition to GFA and Interest During Construction (IDC) is considered based on the audited accounts for FY 2018-19. The total capitalization is Rs. 1,207.28 Crore, which includes IDC of Rs. 13.18 Crore. Accordingly, BSPTCL has arrived at closing GFA of FY 2018-19. The following table shows the schedule of Gross Fixed Asset claimed in Truing-up of FY 2018-19:

Table 2-5: Gross Fixed Asset claimed in True-up of FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	FY 2018-19	
		Approved in Tariff Order dated 07.03.2018	Claimed in Truing-up of FY 2018-19
1	Opening GFA (A)	8,103.94	6,418.00*
2	Add: Additions to GFA (excluding IDC) (B)	2,706.96	1,194.10
3	Add: Direct Additions to GFA (C)		4.45
4	Add: Net Value of Land (D)		9.71
4	Less: Disposal/Sale/ Transfer of Asset (E)		19.56
5	Add: Interest During Construction (F)	18.15	13.18
6	Closing GFA (A+B+C+D-E+F)	10,829.05	7,619.88

*Closing balance of FY 2017-18 as approved in True-up

BSPTCL has considered the closing GFA of **Rs. 7,619.88 Crore** for FY 2018-19, as computed in the table above. The Hon'ble Commission is requested to approve asset addition, IDC during the year, and closing GFA as claimed in the table above.

The scheme-wise break-up of IDC during the year is attached as **Annexure III**.

2.7 Depreciation

Regulation 73 (2) (a) of BERC (Terms and Conditions for Determination of Tariff) Regulations 2007, specifies as under regarding Depreciation:

*“For the purpose of tariff, depreciation shall be computed in the following manner;
 (i) the value base for the purpose of depreciation shall be the historical cost of the asset
 (ii) depreciation shall be calculated annually, based on straight-line method over the useful life of the assets and at rates prescribed by the Central Electricity Regulatory Commission, from time to time*

The residual value of the asset shall be considered as 10% and the depreciation shall be allowed up to a maximum of 90% of the historical capital cost of the asset. Land is not a depreciable asset and its cost shall be excluded from the capital cost while computing 90% of the historical cost of the asset. The historical capital cost of the asset shall include additional capitalisation on account of foreign exchange rate variation as allowed by the Central Government/Central Electricity Regulatory Commission.

(iii) On repayment of entire loan, the remaining depreciable value shall be spread over the balance useful life of the asset.

(iv) Depreciation shall be chargeable from the first year of operation of the asset. For part of the year, depreciation shall be charged on pro rata basis.

BSPTCL has computed the depreciation to be considered in ARR of FY 2018-19 based on weighted average depreciation rate on average depreciable GFA. BSPTCL has considered weighted average rate of 5.11% as approved by the Commission in Tariff Order for FY 2018-19. BSPTCL has separately computed depreciation on asset created out of grants and adjusted the same in the gross computed depreciation, to arrive at net depreciation to be charged in ARR of FY 2018-19. The following Table shows the net depreciation considered by BSPTCL for FY 2018-19:

Table 2-6: Depreciation considered in Truing-up of FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	FY 2018-19 (Approved)	FY 2018-19 (True-up)
1	Opening GFA	8,103.94	6418.00*
2	Less: Value of Land	1,392.16	1,405.30
3	Value of GFA net of Land (1-2)	6,711.78	5,012.70
4	Addition during the year (excluding land and IDC)	2,706.96	1,178.99
5	Add: IDC	18.15	13.18
6	Closing GFA (3+4+5)	9,436.89	6,204.87
7	Average GFA	8,074.33	5,608.79
8	Weighted average rate of depreciation	5.11%	5.11%
9	Depreciation (7*8)	412.60	286.61
10	Opening Grants	1,653.20	1,856.40*
11	Grants during the year	158.39	-
12	Total Grants	1,811.59	1,856.40
13	Average Grants	1,732.40	1,856.40
14	Weighted average rate of depreciation	5.11%	5.11%
15	Depreciation on Asset created out of Grants (13*15)	88.53	94.86
16	Net Depreciation considered in ARR (9-15)	324.07	191.75

*Closing balance of FY 2017-18 as approved in True-up

It is to be noted that net addition of grant of Rs. 48.06 Crore reflecting in audited accounts is not considered in the above Table, since the grant funds were not utilized for asset creation during FY 2018-19.

The Hon'ble Commission is requested to approve Depreciation of Rs. 191.75 Crore in Truing-up of FY 2018-19.

2.8 Interest and Finance Charges

BSPTCL has considered normative opening balance of loan for FY 2018-19 at Rs. 1,746.07, equal to the closing balance of normative loan approved by the Hon'ble Commission in Truing-up of FY 2017-18. Net Asset capitalized during FY 2018-19 is Rs. 1,201.88 Crore as per audited annual accounts for FY 2018-19.

BSPTCL has considered loan addition in accordance with Regulation 71 read with Regulation 73 of the BERC Tariff Regulations, 2007. The additional loans are considered at 70% of the capitalisation during FY 2018-19. The following table shows the equity and loan additions considered for FY 2018-19:

Table 2-7: Loan and Equity additions during FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	FY 2018-19
1	Capitalization during FY 2017-18	1,201.88
2	Less: Grant	-
3	Net Capitalization (A)	1,201.88
4	Equity Considered (30% of A)	360.56
5	Debt Considered (70% of A)	841.31

BSPTCL has considered repayment of loans equivalent to Depreciation considered in truing up for FY 2018-19 as per Regulation 73 (1) (f) of BERC Tariff Regulations, 2007.

As clarified in previous Tariff Order, the outstanding loan of BSPTCL is only against Asian Development Bank (ADB). During FY 2018-19, BSPTCL did not avail of additional loan from other sources. Hence, the weighted average interest rate considered for computation of interest is equal to the rate of interest on ADB loan.

It is further submitted that as per audited accounts, the interest rate of ADB loan is 13.00%. BSPTCL has considered the same interest rate on loan for computation of Interest and Finance Charges.

The following Table shows the computation of Interest on Loan for FY 2018-19 in accordance with Regulation 73 of the BERC Tariff Regulations, 2007. BSPTCL has claimed other finance charges in line with the amounts reflecting in audited accounts of FY 2018-19.

Table 2-8: Interest on Loan computed for FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	FY 2018-19	
		Approved in Tariff Order dated 07.03.2018	Claimed in Truing-up of FY 2018-19
1	Opening Loan	3,034.32	1,746.07
2	Addition during the year	1,796.70	841.31
3	Normative Repayment (Equal to Depreciation)	324.07	191.75
4	Closing Loan (1+2-3)	4,506.95	2,395.64
5	Average Loan	3,770.63	2,070.85
6	Interest Rate (%)	8.68%	13.00%
7	Interest on Loan	327.29	269.21
8	Other Finance Charges	-	0.01
9	Interest and Finance Charges (7+8)	327.29	269.22

The Hon'ble Commission is requested to approve Interest on Loan and Finance Charges of Rs. 269.22 Crore in Truing-up of FY 2018-19.

2.9 Operation and Maintenance Expenses

Employee Expenses

It is submitted that that employee expenses primarily include costs towards salaries, dearness allowances, bonus, staff welfare and medical benefits, leave travel and earned leave encashment, and the terminal benefits in the form of pension, gratuity, etc.

As per Regulation 22 (2) of BERC Tariff Regulations, 2007, BSPTCL has claimed the expenses as reflecting in audited accounts of FY 2018-19. As per audited accounts of

FY 2018-19, BSPTCL has incurred Employee cost of Rs.162.84 Crore. The audited accounts of BSPTCL includes SLDC employee cost of Rs. 4.06 Crore, which is considered separately in the Petition filed by SLDC for truing up of FY 2018-19. BSPTCL has accordingly deducted Rs. 4.06 Crore towards employee cost relating to SLDC business from the total employee cost of BSPTCL in truing up for FY 2018-19. The following table shows the employee expenses considered in Truing-up of FY 2018-19 after deducting SLDC expenses:

Table 2-9: Employee expenses for FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	FY 2018-19	
		Approved in Tariff Order dated 07.03.2018	Claimed in Truing-up of FY 2018-19
1	Employee cost as per audited accounts	105.95	162.84
2	Less: Employee Cost relating to SLDC	-	4.06
3	Net Employee Cost to be claimed	105.95	158.78

The Hon'ble Commission is requested to approve Employee Cost of Rs. 158.78 Crore in Truing-up of FY 2018-19.

Repairs and Maintenance Expenses (R&M)

BSPTCL has initiated major drive for maintenance and up-keep of its existing transmission assets and also incurred substantial capital expenditure in improvement of existing intra-State transmission infrastructure to improve transmission system reliability matching with short/long-term demand of the State.

As per Regulation 22 (2) of BERC Tariff Regulations, 2007, BSPTCL has claimed the expenses as reflecting in audited accounts of FY 2018-19. As per audited accounts of FY 2018-19, BSPTCL has incurred R&M expenses of Rs. 36.43 Crore in FY 2018-19. The audited accounts of BSPTCL includes SLDC R&M expenses of Rs. 0.08 Crore, which is considered separately in the Petition filed by SLDC for truing up of FY 2018-19. BSPTCL has accordingly deducted Rs. 0.08 Crore towards R&M expenses relating to SLDC business from the total R&M expenses of BSPTCL in truing up for FY 2018-19.

The following table shows the R&M expenses considered in Truing-up of FY 2018-19 after deducting SLDC expenses:

Table 2-10: R&M expenses for FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	FY 2018-19	
		Approved in Tariff Order dated 07.03.2018	Claimed in Truing-up of FY 2018-19
1	R&M expenses as per audited accounts	50.16	36.43
2	Less: R&M Expenses relating to SLDC	-	0.08
3	Net R&M Expenses to be claimed	50.16	36.34

The Hon'ble Commission is requested to approve R&M Expenses of Rs. 36.34 Crore in Truing-up of FY 2018-19.

Administration and General Expenses (A&G)

A&G Expenses mainly comprise rent charges, telephone and other communication expenses, professional charges, conveyance and travelling allowances and Holding Company expenses and other debits.

As per Regulation 22 (2) of BERC Tariff Regulations, 2007, BSPTCL has claimed the expenses as reflecting in audited accounts of FY 2018-19. As per audited accounts of FY 2018-19, BSPTCL has incurred A&G Expenses of Rs. 50.82 Crore in FY 2018-19. The audited accounts of BSPTCL includes SLDC A&G Expenses of Rs. 0.58 Crore, which is considered separately in the Petition filed by SLDC for truing up of FY 2018-19. BSPTCL has accordingly deducted Rs. 0.58 Crore towards A&G Expenses relating to SLDC business from the total A&G Expenses of BSPTCL in truing up for FY 2018-19.

The following table shows the A&G Expenses considered in Truing-up of FY 2018-19 after deducting SLDC expenses:

Table 2-11: A&G Expenses for FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	FY 2018-19	
		Approved in Tariff Order dated 07.03.2018	Claimed in Truing-up of FY 2018-19
1	A&G Expenses as per audited accounts	19.10	37.63
2	Less: A&G Expenses relating to SLDC	-	0.58
3	Net A&G Expenses of BSPTCL	19.10	37.05
4	Holding Company Expenses	5.35	13.18
5	Net A&G Expenses including Holding Expenses	24.45	50.24

BSPTCL submits that expenses of BSP(H)CL, which is the holding Company of all the State Utilities and Generating Company, recovers its expenses from its subsidiary Companies. The cost sharing between the subsidiary Companies including BSPTCL is as per the amount of equity shares issued by the Holding Company to the Subsidiary Company. In light of the above, all the Utilities have to bear the cost of the Holding Company. The cost is hence included in A&G Expenses for FY 2018-19.

The Hon'ble Commission is requested to approve A&G Expenses of Rs. 50.24 Crore, which is inclusive of Holding Company expenses of Rs. 13.18 Crore as reflecting in the audited accounts of FY 2018-19.

The following table shows the total O&M expenses claimed by BSPTCL based on audited Accounts of FY 2018-19 as per Regulation 22 (2) of BERC Tariff Regulations, 2007:

Table 2-12: Operation and Maintenance Expenses for FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	FY 2018-19	
		Approved in Tariff Order dated 07.03.2018	Claimed in Truing-up of FY 2018-19
1	Employee expenses	105.95	158.78
2	R&M Expenses	50.16	36.34
3	A&G Expenses	19.10	37.05
4	Holding Company Expenses	5.35	13.18
5	Total Operation and Maintenance Expenses	180.56	245.36

The Hon'ble Commission is requested to approve Operation and Maintenance Expenses of Rs. 245.36 Crore in Truing-up of FY 2018-19.

2.10 Return on Equity

BSPTCL has considered closing equity of Rs. 375.41 Crore as on 31st March 2015 (approved in the True up for FY 2014-15) as opening equity for FY 2015-16 in respect of assets capitalised before 31st March 2015.

Further, in respect of projects commissioned with effect from 1st April 2015, the opening equity is considered at Rs. 672.50 Crore based on the closing equity approved in true up for FY 2017-18 in Tariff Order dated 15th February 2019. The addition to equity during FY 2018-19 is considered at Rs. 360.56 Crore as considered in Table 2-7 of this Petition.

BSPTCL, in accordance with Regulations 73 and 71 of the BERC Tariff Regulations, 2007, for the purpose of computation of Return on Equity, has considered the rate of Return on Equity @14% on the assets capitalised before 31st March 2015 and @15.50% on the assets capitalised w.e.f. 1st April 2015 as per the BERC Tariff Regulations read with 2nd amendment notified on 27th March 2014.

The following table shows the Return of Equity computed by BSPTCL for FY 2018-19:

Table 2-13: Return on Equity for FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	FY 2018-19	
		Approved in Tariff Order dated 07.03.2018	Claimed in Truing-up of FY 2018-19
1	Opening Equity as on 1.4.2015	375.41	375.41
2	Rate of Return on Equity	14.00%	14.00%
3	Return on Equity (1*2)	52.56	52.56
	Equity on projects commissioned w.e.f.1.4.2015		
4	Opening Equity	1,239.24	672.50
5	Addition during the year	770.02	360.56
6	Closing Equity (4+5)	2,009.26	1,033.06
7	Average Equity	1,624.25	852.78
8	Rate of Return on Equity	15.50%	15.50%

9	Return on Equity (7*8)	251.76	132.18
10	Total Return on Equity (3+9)	304.32	184.74

The Hon'ble Commission is requested to approve Return on Equity of Rs. 184.74 Crore in Truing-up of FY 2018-19.

2.11 Income Tax

BSPTCL has paid Income Tax of Rs.119.44 Crore for FY 2018-19 (Assessment Year 2019-20).

Regulation 16 of BERC Tariff Regulations 2007 considers Income Tax/MAT in true up subject to adjustment based on final assessment orders. BSPTCL hence, requests the Hon'ble Commission to allow Income Tax as actually paid to authorities as reflecting in audited accounts of FY 2018-19.

The Hon'ble Commission is requested to approve Income Tax of Rs. 119.44 Crore in Truing-up of FY 2018-19.

2.12 Interest on Working Capital

As per the amended Regulation 73(4)(ii) (amendment notified in the Bihar Gazette dated 27th March 2014), the rate of interest on working capital will be computed at 350 basis points over and above the Base Rate. The SBI Base Rate as on 1st April 2018 was 8.70% and therefore the rate of interest considered for computing Interest on Working Capital is 12.20% (i.e., 8.70% + 3.50%) for Truing-up of FY 2018-19.

Further Regulation 73(4)(i)(b) of the BERC Tariff Regulations, 2007 specifies "maintenance spares @ 1% of the historical cost escalated at 6% per annum". BSPTCL has considered opening GFA at Rs. 6418.00 Crore in line with closing GFA approved in the True-up of FY 2017-18.

The Hon'ble Commission in previous Tariff Order has reduced the amount of revaluation of asset included in the Opening GFA for computation of maintenance spares. In line with the above methodology, BSPTCL has also excluded amounts of asset revaluation from opening GFA for computation of maintenance spares. BSPTCL has therefore considered Opening GFA of Rs. 5,162.94 crore (Rs. 6418.00 Crore -Rs.

1255.06 Crore). BSPTCL has accordingly considered maintenance spares at 1% of the Historical value (Rs. 5,162.94 Crore) with escalation at 6%.

BSPTCL has computed the working capital requirement as per norms and interest on working capital based on the considered expenses at an interest rate of 12.20% as on 1st April 2018 as given in the table below:

Table 2-14: Interest on Working Capital for FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	FY 2018-19	
		Approved in Tariff Order dated 07.03.2018	Claimed in Truing-up of FY 2018-19
1	Receivables equivalent to two (2) month of Transmission Charges	184.88	155.69
2	O&M Expenses of one month	15.05	20.45
3	Maintenance spares@ 1% of Opening GFA with 6% Escalation	72.60	54.73
	Total Working Capital	272.53	230.87
4	Rate of Interest on working Capital (%)	12.60%	12.20%
5	Interest on Working Capital to be claimed	34.34	28.17

The Hon'ble Commission is requested to approve Interest on Working Capital of Rs. 28.17 Crore in Truing-up of FY 2018-19.

2.13 Incentive for Transmission Availability

BSPTCL has claimed incentive for Transmission Availability Factor (TAF) for FY 2018-19 as per Regulations 68, 74 and 76 of the BERC Tariff Regulations, 2007.

The incentive computation is as per the Formula prescribed in Regulation 76 of BERC Tariff Regulations, 2007 for FY 2018-19. The following table shows the month-wise Transmission availability achieved by BSPTCL during FY 2018-19:

Table 2-15: Month-wise Transmission Availability

April-18	May-18	June-18	July-18	Aug-18	Sep-18
99.09%	99.39%	99.46%	99.20%	98.74%	98.49%
Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19
99.20%	99.36%	99.54%	98.95%	99.57%	99.80%

Thus, the actual TAF achieved by BSPTCL in FY 2018-19 works out to 99.23%. The SLDC Certificate for actual TAF achieved by BSPTCL in FY 2018-19 is annexed as **Annexure IV**.

BSPTCL is well aware of the fact that the Hon'ble Commission has rejected BSPTCL's prayer for consideration of Target Availability at 98% for incentive calculation in previous Tariff Orders and as well as review Orders issued by Hon'ble Commission. BSPTCL has since filed an Appeal before the Hon'ble Appellate Tribunal for Electricity (APTEL) for computation of incentive w.r.t. target availability of 98% for FY 2016-17 and FY 2017-18 as specified in Regulation 68 of BERC Tariff Regulations, 2007, and the Judgment of Hon'ble APTEL is awaited.

However, for computation of Incentive on account of achieving higher than target TAF in FY 2018-19, BSPTCL has considered target availability of 98% as specified in Regulation 68 of BERC Tariff Regulations, 2007. The Hon'ble Commission has considered the target availability as 98.5% for the purpose of incentive computation, in accordance with the norms specified by CERC, under the premise that Regulation 4 of BERC Tariff Regulations, 2007, specifies that the Hon'ble Commission shall be guided by CERC Tariff Regulations. BSPTCL respectfully submits that Regulation 4 of BERC Tariff Regulations, 2007 also specifies that the Hon'ble Commission shall be guided by the Electricity Act, 2003. BSPTCL is of the view that Regulation 4 specifies only a general guiding principle regarding following of Acts and Regulations at the central level.

BSPTCL respectfully submits that the Hon'ble Commission can take shelter of the guiding provision specified in Regulation 4 of BERC Tariff Regulations, 2007, only if there is a vacuum present in the existing Regulations specified by the Hon'ble Commission, for any aspect. However, such general guiding principle cannot override a specific provision in the same Tariff Regulations.

In this case, the Hon'ble Commission is considering target availability of 98.5% even though its own Regulations specifies target availability at 98%. The Hon'ble Commission cannot pick and choose particular clauses from CERC Regulations to be made applicable to BSPTCL especially when similar clause is already present in its

own Regulations. By this rationale, the O&M norms specified by CERC for PGCIL and other Transmission Licensees regulated by CERC, which are much higher than that allowed by the Hon'ble Commission for BSPTCL, can and should also be made applicable to BSPTCL. Further if such methodology to be adopted, there is no point in specifying performance parameters in BERC Tariff Regulations, as all performance parameters can be considered from CERC Regulations. BSPTCL respectfully submits that the Hon'ble Commission could have amended the Regulations by setting Target availability at 98.5%, for the purpose of computing Incentive, but no such action has been taken by the Hon'ble Commission.

In view of the facts and above submission, BSPTCL is of the view that incentive on TAF has to be computed in accordance with the norms specified in the BERC Tariff Regulations, 2007 and has hence, computed the incentive considering target availability of 98%, as shown in the Table below:

Table 2-16: Incentive Computation on Transmission Availability (Rs. Crore)

Sl. No.	Particulars	FY 2018-19
		To be claimed in True-up
1	Transmission Availability for FY 2018-19	99.23%
2	Target Availability	98.00%
3	Additional Achievement	1.23%
4	Average Equity (852.78+375.41)	1,228.19
5	Incentive for Target Availability	15.13

The Hon'ble Commission is requested to approve Incentive on Target availability of Rs. 15.13 Crore in Truing-up of FY 2018-19.

2.14 Non-Tariff Income

BSPTCL has considered the Non-Tariff Income of Rs. 121.28 Crore, reflecting in audited accounts of FY 2018-19. The following Table shows the break-up of Non-Tariff Income for FY 2018-19. BSPTCL submits that the Other Transmission/Open Access Charges coming under Non-Tariff Income includes Open Access Charges from Railways.

Table 2-17: Non-Tariff Income for FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	FY 2018-19	
		Approved in Tariff Order dated 07.03.2018	Claimed in Truing-up of FY 2018-19
1	Income from sale of Scrap		2.65
2	Lease Rental Income		0.24
3	Interest Income		87.73
4	Other Transmission/Open Access Charges		13.07
5	Income from Tax Refund		1.87
6	Supervision Charges		14.03
7	Interest on Loan and Advances to Staff		0.00
8	Miscellaneous Receipts		1.64
9	Application fee Received		0.04
10	Total Non-Tariff Income	43.14	121.28

The Hon'ble Commission is requested to approve Non-Tariff Income of Rs. 121.28 Crore in Truing-up of FY 2018-19.

2.15 Revenue from Transmission Charges

The following table shows the revenue earned by BSPTCL from Transmission Charges during FY 2018-19:

Table 2-18: Revenue from Transmission Charges for FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	FY 2018-19	
		Approved in Tariff Order dated 07.03.2018	Claimed in Truing-up of FY 2018-19
1	Revenue from NBPDCCL		429.71
2	Revenue from SBPDCL		504.45
3	Total Revenue from Transmission Charges	1,194.38	934.16

As seen from the table above, BSPTCL has collected and booked revenue of Rs. 934.16 Crore as compared to the revenue of Rs. 1,194.38 Crore approved by the Hon'ble Commission in Tariff Order dated 7th March 2018.

It is submitted that BSPTCL has adjusted the revenue to be recovered in FY 2018-19 in line with the Annual Transmission Charges approved by Hon'ble Commission in APR of FY 2018-19 vide Tariff Order dated 15th February 2019. The following Table shows the Annual Transmission Charges as approved by the Hon'ble Commission in Tariff Order dated 15th February 2019 for FY 2018-19:

Table 2-19: Transmission Charges approved in APR of FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	Approved for FY 2018-19 (RE)
1	Aggregate Revenue Requirement for FY 2018-19	849.07
2	Add: Revenue Gap of FY 2016-17 with carrying cost	85.09
3	Annual Transmission Charges	934.16

Though the Hon'ble Commission has not passed on the surplus of APR of FY 2018-19 approved in previous Tariff Order, the Hon'ble Commission re-determined the Annual Transmission Charges to Rs. 934.16 Crore. BSPTCL has considered and booked revenue of Rs. 934.16 Crore as approved in APR of FY 2018-19 in Tariff Order dated 15th February 2019, by giving credit notes to NBPDC and SBPDC in March 2019, due to the following reasons:

- There is no timely payment made by NBPDC and SBPDC to BSPTCL for Transmission Charges.
- If BSPTCL continued to recover higher Transmission Charges from NBPDC and SBPDC in FY 2018-19, at the time of True-up, BSPTCL would be liable to give a refund to NBPDC and SBPDC along with holding cost, for the amounts, which have not even been received from the Distribution Companies.
- For the overall benefit of the consumer, it was necessary that in case there is a benefit in tariff which can be passed on to the consumers, the same shall be taken up immediately, rather than wait for the true-up to be completed
- BSPTCL has been paying significant amount of Advance Tax due to higher profit booking. The Tax payment during FY 2018-19 is Rs. 119.44 Crore.

Hence, for overall benefit of the consumers of the State of Bihar and for the benefit of BSPTCL to avoid unnecessary refunds with carrying cost at the time of True-up, BSPTCL adjusted the revenue to be recovered for FY 2018-19 in line with the

Transmission Charges approved by the Hon'ble Commission in APR of FY 2018-19 in Tariff Order dated 15th February 2019.

The Hon'ble Commission is requested to approve Revenue from Transmission charges of Rs. 934.16 Crore for Truing-up of FY 2018-19.

2.16 Revenue Gap/(Surplus) for FY 2018-19

BSPTCL has considered the components of ARR as discussed in this Chapter and has adjusted the revenue as reflecting in audited accounts of FY 2018-19 to arrive at Revenue Gap/(Surplus) for FY 2018-19. The following Table shows the Revenue Gap/(Surplus) for FY 2018-19:

Table 2-20: Revenue Gap/(Surplus) for FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	FY 2018-19	
		Approved in Tariff Order dated 07.03.2018	Claimed in Truing-up of FY 2018-19
1	Employee Expenses	105.95	158.78
2	R&M Expenses	50.16	36.34
3	A&G Expenses	19.10	37.05
4	Share of Holding Company Expenses	3.35	13.18
5	Total O&M Expenses	180.56	245.36
6	Return on Equity	304.32	184.74
7	Depreciation	324.07	191.75
8	Interest on Loan Capital and Finance Charges	327.29	269.22
9	Less: IDC	18.15	-
10	Interest on Working Capital	34.34	28.17
11	Income Tax/MAT	-	119.44
12	Incentive for Transmission Availability	-	15.13
13	Total Expenditure	1,152.43	1,053.79
14	Less: Non-Tariff Income	43.14	121.28
15	Net ARR for Transmission	1,109.29	932.52
16	Add: Revenue Gap/(Surplus) of Previous year	85.09	85.09
16	Revenue earned from Transmission Charges	1,194.38	934.16
17	Revenue Gap/(Surplus)		83.45

The Hon'ble Commission is requested to approve Revenue Gap of Rs. 83.45 Crore in Truing-up of FY 2018-19. The Revenue Gap is to be passed on in the ARR of FY 2020-21 along with carrying cost.

3 Annual Performance Review (APR) for FY 2019-20

3.1 Background

BSPTCL has filed Annual Performance Review for FY 2019-20 as compared to the ARR approved for FY 2019-20 in Tariff Order dated 15th February 2019.

Regulation 7 and Regulation 13 of BERC MYT Regulations, 2018 provides for APR of current year. The relevant extracts are as follows:

“7 Annual Review of Performance and True-up

7.1 Where the Aggregate Revenue Requirement and expected revenue from tariff and charges of a Transmission Licensee or SLDC, as the case may be, are covered under a Multi-Year Tariff framework, such Transmission Licensee or SLDC shall be subject to an annual review of performance and True-up during the Control Period in accordance with these Regulations....

13 True-Up and Annual Performance Review

..... (d) The Commission shall undertake review of estimates of expenses for the current year as a part of the tariff order on the basis of the actual expenses incurred during the period April – September of the current year and corresponding figures in the order for Annual Revenue Requirement (ARR) of the current year approved by the Commission.

(e) Estimates of expenses for the ensuing year shall be on the basis of corresponding figures in the order for True-up of expenses of the previous year and Annual Performance Review or Tariff Order of the current year, as the Commission may consider reasonable and deem fit.....”

Accordingly, BSPTCL has proposed APR for FY 2019-20 based on actual expenses for first half of FY 2019-20 and estimated expenses for second half of FY 2019-20 and in line with relevant provisions of BERC MYT Regulations, 2018. A copy of trial balance for first half of FY 2019-20 is attached as **Annexure V**.

3.2 Transmission Losses

BSPTCL submits that it has considered the transmission loss for FY 2019-20 at 3.92% in line with the transmission loss approved by the Commission in Tariff Order dated

15th February 2019. The following table shows the month-wise computation of Transmission Loss for first half of FY 2019-20:

Table 3-1: Actual Transmission Loss for FY 2019-20

Transmission Line	FY 2019-20 (Actual)
April 2019	2.35%
May 2019	2.47%
June 2019	2.43%
July 2019	2.52%
Aug 2019	2.58%
Sep 2019	2.53%

BSPTCL submits that with meters being installed at all the interface points; the Transmission Loss has been correctly measured from April 2019 at all interface points. The Transmission loss is in the range of 2.35% to 2.58%. However, the transmission losses would vary from month to month. BSPTCL therefore requests the Hon'ble Commission to kindly approve losses of 3.92% in line with Transmission Loss allowed for Control Period. BSPTCL shall claim the actual Transmission Losses for FY 2019-20 at the time of Truing-up.

The month-wise Transmission Loss from April 2019 to September 2019 with full details of energy input and energy output is attached as **Annexure VI**.

BSPTCL has made all efforts for installation of energy meters at all the interface points for computing appropriate transmission loss. The details of metering and energy accounting is elaborated under the Section on Compliance to Directives, submitted along with this Petition.

3.3 Capital Expenditure and Capitalization

BSPTCL has projected capital expenditure and capitalization based on actuals for first half of FY 2019-20 and estimates for second half of FY 2019-20.

BSPTCL submits that most of the projects that are falling under 12th Plan are expected to be completed and capitalized in FY 2019-20. Some projects falling under 12th Plan

may spill over to FY 2020-21 based on the status of the project. Accordingly, capitalization of such projects is considered in FY 2020-21.

The detailed list of projects, which are actually completed and capitalized and those which are expected to get capitalized by March 2020 is attached as **Annexure VII**.

BSPTCL has estimated capital expenditure of Rs. 945.18 Crore and capitalization of Rs. 1,387.08 Crore for FY 2019-20. The estimated capitalization amount of Rs. 1,387.08 Crore includes IDC of Rs. 53.25 Crore based on the assets that are expected to get capitalized in FY 2019-20, which are funded through ADB loan. The following Table shows the approved and estimated capital expenditure and capitalization for APR of FY 2019-20:

Table 3-2: Capital Expenditure and Capitalization for FY 2019-20 (Rs. Crore)

Sl. No.	Particulars	FY 2019-20	
		Approved in MYT Order	Claimed in APR
1	Opening CWIP (A)	1,543.64	2,481.96
2	Investment during the Year (B)	2,893.55	945.18
3	Less: Capitalization (C)	1,310.43	1,387.08
4	Closing CWIP (A+B-C)	3,126.76	2,040.07

BSPTCL has considered opening CWIP of Rs. 2,481.96 Crore in line with the closing CWIP of FY 2018-19 considered in True-up of FY 2018-19.

BSPTCL has considered capital expenditure based on the expenditure incurred against each scheme till September 2019 and expected expenditure in second half of FY 2019-20.

Capitalization for entire year is considered at Rs. 1,387.08 Crore, which includes asset capitalized cost of Rs. 1,333.83 Crore and IDC of Rs. 53.25 Crore based on assets capitalized up to September 2019 and assets expected to get capitalized till March 2020. BSPTCL has considered conservative estimates of project completion, depending on present status of projects and likelihood of projects getting completed and put to use before March 31, 2020. Accordingly, the closing balance of CWIP is Rs. 2,040.07 Crore. It is to be noted that the cost of land is not included in the above capitalization and has been separately claimed in next Section of this Chapter.

The Hon'ble Commission is requested to approve Capitalization of Rs. 1,387.08 Crore for FY 2019-20.

3.4 Gross Fixed Asset

BSPTCL has considered the opening GFA of Rs. 7,619.88 Crore for FY 2019-20 equal to the closing GFA considered in True-up of FY 2018-19 in previous Chapter.

The addition to GFA is considered based on the estimates for FY 2019-20 as discussed in the previous section. The total capitalization is Rs. 1,387.08 Crore, which also includes expected IDC. BSPTCL has considered cost of land addition in proportion with the land capitalized in FY 2018-19. Accordingly, BSPTCL has arrived at closing GFA of FY 2019-20. The following Table shows the schedule of Gross Fixed Asset claimed in APR of FY 2019-20.

Table 3-3: Gross Fixed Asset claimed in APR of FY 2019-20 (Rs. Crore)

Sl. No.	Particulars	FY 2019-20	
		Approved in MYT Order	Claimed in APR
1	Opening GFA	8518.00	7,619.88
2	Add: Additions to GFA from CWIP (excluding IDC)	1,310.43	1,333.83
3	Add: IDC	-	53.25
4	Add: Land Cost		11.29
5	Closing GFA	9,828.43	9,018.25

BSPTCL has thus, considered closing GFA of **Rs. 9,018.25 Crore** with total capitalization of **Rs. 1,398.37 Crore** in the APR of FY 2019-20, including land cost as computed in the table above. The Hon'ble Commission is requested to approve asset addition, Interest during Construction during the year and closing GFA as claimed in the Table above.

3.5 Depreciation

BSPTCL has computed depreciation for FY 2019-20 in accordance with Regulation 23 of the BERG MYT Regulations, 2018. The relevant provisions are as follows:

"23 Depreciation

(i) Depreciation shall be calculated for each year of the control period on the original cost of the fixed assets of the corresponding year. No advance shall be granted against depreciation.

(ii) Depreciation shall not be allowed on assets funded by capital subsidies, beneficiary contributions or grants.

(iii) Depreciation shall be calculated annually on the basis of assets capitalised and put to use based on the straight-line method over the useful life of the asset and at the rate not exceeding the rate specified by the Central Electricity Regulatory Commission from time to time as provided in Appendix-III of these Regulations.

The residual value of assets shall be considered as 10% and depreciation shall be allowed to a maximum of 90% of the original cost of the asset. The Transmission Licensee or SLDC, as the case may be, shall submit separate detail of fully depreciated asset along with year of commissioning and year of attaining ninety percent depreciation with the tariff petition.

Provided that freehold land shall not be treated as a depreciable asset and its cost shall be excluded while computing 90% of the original cost of the asset.

Provided further that the cost of lease hold land shall be amortised evenly within the leased period.

(iv) The original capital cost of the asset shall include Additional Capitalisation on account of Foreign Exchange Rate Variation as allowed by the Government / Bihar Electricity Regulatory Commission.

(v) Depreciation shall be chargeable from the first year of operation of the asset. For part of the year, depreciation shall be charged on pro rata basis"

BSPTCL has considered opening depreciable GFA of Rs. 6,204.87 Crore in line with the closing depreciable GFA considered in True-up of FY 2018-19. BSPTCL has considered additions to GFA net of land cost.

BSPTCL has considered the weighted average rate of depreciation of 5.11% as considered in Truing-up of FY 2018-19 for computation of depreciation of FY 2019-20.

The opening value of Grants is considered same as the closing value of grants considered in Truing-up of FY 2018-19. None of the assets considered for capitalization are funded by grants and therefore, no addition in grants is considered while computing depreciation of FY 2019-20. BSPTCL has excluded the cost of land

while computing depreciation for FY 2019-20. The following Table shows the computation of depreciation:

Table 3-4: Depreciation considered in APR of FY 2019-20 (Rs. Crore)

Sl. No.	Particulars	FY 2019-20 (Approved)	FY 2019-20 (APR)
1	Opening GFA		7,619.88
2	Less: Value of Land		1,415.01
3	Value of GFA net of Land (1-2)	7,112.70	6,204.87
4	Addition during the year (excluding land and IDC)	1,280.43	1,333.83
5	Add: IDC		53.25
6	Closing GFA	8,393.13	7,591.95
7	Average GFA	-	6,898.41
8	Weighted average rate of depreciation on opening depreciable GFA	5.13%	5.11%
9	Weighted average rate of depreciation on addition to depreciable GFA	3.77%	
10	Depreciation	413.15	352.51
11	Opening Grants	1,919.09	1,856.40
12	Grants during the year	19.02	-
13	Total Grants	1,938.11	1856.40
14	Weighted average rate of depreciation on opening Grants	5.13%	5.11%
15	Weighted average rate of depreciation on additional Grants	3.77%	
16	Depreciation on Asset created out of Grants	99.17	94.86
17	Net Depreciation considered in ARR (9-15)	313.99	257.65

The Hon'ble Commission is requested to approve Depreciation of Rs. 257.65 Crore in APR of FY 2019-20.

3.6 Interest and Finance Charges

BSPTCL has considered normative opening balance of loan for FY 2019-20 at Rs. 2,395.64 Crore, equal to the closing balance of normative loan considered in Truing-up of FY 2018-19. Net Asset capitalized during FY 2019-20 is Rs. 1,398.37 Crore, which includes IDC and cost of land estimated for FY 2019-20.

Regulation 24 (j) specifies that *“addition to loan during the year for interest purpose will be restricted to the quantum of assets capitalised and put to use”*.

BSPTCL has therefore, considered loan addition at 70% of the expected capitalisation during FY 2019-20, as shown in the Table below:

Table 3-5: Loan and Equity additions during FY 2019-20 (Rs. Crore)

Sl. No.	Particulars	FY 2019-20
1	Capitalization during FY 2019-20	1,398.37
2	Less: Grant	-
3	Net Capitalization (A)	1,398.37
4	Equity Considered (30% of A)	419.51
5	Debt Considered (70% of A)	978.86

BSPTCL has considered repayment of loans equivalent to Depreciation considered in APR for FY 2019-20 in accordance with Regulation 24 (e) of BERC MYT Regulations, 2018.

BSPTCL would like to submit that the capitalization considered in FY 2019-20 is only against the 12th Plan and hence the debt: equity ratio of 70:30 is considered for computation of loan and equity for FY 2019-20. None of the projects of the 13th Plan is considered to be capitalized in FY 2019-20. All the schemes of 13th Plan are considered to be capitalized in FY 2020-21 and onwards and therefore, the debt: equity ratio of 80:20 is considered for these schemes in the ARR of FY 2020-21.

The outstanding loan of 12th Plan of BSPTCL is only against ADB. Hence, the weighted average interest rate considered for computation of interest is equal to the rate of interest of ADB loan. BSPTCL has considered weighted average interest rate of 13.00% as considered in Truing-up of FY 2018-19.

Other Finance Charges are kept same as that claimed in the Truing-up of FY 2018-19.

BSPTCL has computed Interest and finance Charges in line with the methodology detailed in Regulation 24 of BERC MYT Regulations, 2018, as shown in the following Table:

Table 3-6: Interest on Loan computed for FY 2019-20 (Rs. Crore)

Sl. No.	Particulars	FY 2019-20	
		Approved in MYT Order	Claimed in APR
1	Opening Loan	2,933.46	2,395.64
2	Addition during the year	983.59	978.86
3	Normative Repayment (Equal to Depreciation)	313.99	257.65
4	Closing Loan (1+2-3)	3,603.07	3,116.85
5	Average Loan	3,268.26	2,756.25
6	Interest Rate (%)	10.50%	13.00%
7	Interest on Loan	343.17	358.31
8	Other Finance Charges	-	0.01
9	Interest and Finance Charges (7+8)	343.17	358.32

The Hon'ble Commission is requested to approve Interest on Loan and Finance Charges of Rs. 358.32 Crore in APR of FY 2019-20.

3.7 Operation and Maintenance Expenses

Employee Expenses

It is submitted that that employee expenses primarily include costs towards salaries, dearness allowances, bonus, staff welfare and medical benefits, leave travel and earned leave encashment, and the terminal benefits in the form of pension, gratuity, etc.

Regulation 21 of BERC MYT Regulations, 2018, specifies that the Hon'ble Commission shall stipulate a separate trajectory of norms for each of the components, viz., Employee expenses, R&M expenses and A&G expenses, which shall be defined in terms of number of personnel per Ckt. km, number of personnel per bay along with annual expenses per personnel, combination of A&G expenses per personnel, and A&G expenses per substation, and R&M expenses as percentage of Gross Fixed Assets.

The Hon'ble Commission in previous Tariff Order stipulated a separate trajectory of norms for Employee Expenses namely: Norms for No. of personnel per ckt/km, no. of personnel per substation and annual expenses per personnel. The Hon'ble

Commission adopted 45% of the total no. of the employees as a part of substation and 55% personnel as a part of ckt. km for the purpose of calculation of norms.

The Hon'ble Commission has also proportionately adjusted the SLDC cost from the total cost of BSPTCL from previous year and accordingly arrived at the norms for employee expenses.

The following Table shows the base value of norms computed by the Hon'ble Commission in previous Tariff Order:

Table 3-7: Base value norms for Employee Expenses

Sl. No.	Particulars	FY 2019-20
1	Number of personnel per ckt/km (55%)	0.0822
2	Number of personnel per substation (45%)	6.6427
3	Annual expenses per personnel (Rs. Lakh)	7.461

BSPTCL has considered the above norms for computation of employee expenses for FY 2019-20. BSPTCL has projected Transmission Line in ckt. km, number of sub-stations and number of employees for FY 2019-20 based on the half year actuals of FY 2019-20 and estimates for second half of FY 2019-20. The following Table shows the number of employees and number of sub-stations estimated for FY 2019-20:

Table 3-8: Transmission Line, No. of sub-stations and No. of employees for FY 2019-20

Sl. No.	Particulars	As on Mar-19 (Actual)	As on Sep-19 (Actual)	As on Mar-20 (Est.)
1	Transmission Line in Ckt. km	15,070	15,583	15,772
2	No. of sub-stations	142	142	146
3	No. of employees	2,060	2,156	2,156

Based on the above parameters and the base values stipulated by the Hon'ble Commission in the Tariff Order dated 15th February 2019, BSPTCL has estimated employee expenses for FY 2019-20.

Regulation 21.1 of BERC MYT Regulations, 2018 provides for escalation of base value norms for consideration of employee expenses. The relevant extracts are as follows:

“21.1 Employee Cost

Employee cost shall be computed as per the approved norm escalated by consumer price index (CPI), adjusted by provisions for expenses beyond the control of the Transmission Licensee and one-time expected expenses, such as recovery/adjustment of terminal benefits, implications of pay commission, arrears and Interim Relief, governed by the following formula:

$$EMP_n = (EMP_b * CPI \text{ inflation}) + Provision$$

Where:

EMP_n : Employee expense for the year n

EMP_b : Employee expense as per the norm

CPI inflation: is the average increase in the Consumer Price Index (CPI)

for immediately preceding three years.....”

In accordance with the above Regulation, BSPTCL has considered the CPI up to March 2019 and taken average of preceding three years of escalation in CPI for consideration of escalation of base norm for employee expenses. The following Table shows the escalation considered on base norms for computation of employee expenses:

Table 3-9: CPI Inflation considered for FY 2019-20

Particulars	Actual				Estimate
	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Annual Average CPI Index	265	276	284	300	
CPI Inflation		4.12%	3.08%	5.45%	4.22%

BSPTCL has hence, considered inflation rate of 4.22% on base norms for computation of employee expenses for FY 2019-20. The following Table shows the computation of employee expenses in accordance with Regulation 21.1 of BERC MYT Regulations, 2018:

Table 3-10: Employee Expenses for FY 2019-20

Sl. No.	Particulars	Base Norms	FY 2018-19	
			Approved in MYT Order	Claimed in APR
1	CPI Inflation		4.28%	4.22%
2	Norms-Number of personnel per ckt. km	0.0822	0.086	0.085
3	Norms-Number of personnel per substation	6.6427	6.927	6.923

Sl. No.	Particulars	Base Norms	FY 2018-19	
			Approved in MYT Order	Claimed in APR
4	Transmission line length in ckt. km		15,500	15,772
5	No. of Sub-stations		146	146
6	Norms-Annual expenses per personnel (Rs. lakh)	7.461	7.7802	7.776
7	Employee cost (Number of personnel per ckt. km) (2*4*6)/100 (Rs. Crore)		103.37	104.80
8	Employee cost (Number of personnel per substation) (3*5*6)/100 (Rs. Crore)		78.68	78.59
9	Total Employee cost for the year (7+8) (Rs. Crore)		182.06	183.39

The Hon'ble Commission is requested to approve Employee Cost of Rs. 183.39 Crore in APR of FY 2019-20.

Repairs and Maintenance Expenses (R&M)

Regulation 21.2 of the BERC MYT Regulations, 2018 specifies R&M expenses as percentage of opening gross fixed assets (excluding land cost) for estimation of R&M expenses. Regulation 21 (i) specifies that the norms shall be determined based on audited accounts of last three years. The Hon'ble Commission in Tariff Order dated 15th February 2019 computed the 'K' factor (i.e., R&M norm) based on available three (3) years audited accounts from FY 2015-16 to FY 2017-18. The Hon'ble Commission computed 'K factor' at 1.36% for the Control Period from FY 2019-20 to FY 2021-22.

BSPTCL has considered 'K factor' of 1.36% as approved in previous Tariff Order and applied the same on the Opening GFA (net of Land) for computation of R&M expenses for FY 2019-20, as shown in the following Table:

Table 3-11: R&M expenses for FY 2019-20 (Rs. Crore)

Sl. No.	Particulars	FY 2019-20 (Approved)	FY 2019-20 (Claimed in APR)
1	Opening GFA (net of Land)	7,112.70	6,204.87
2	% on GFA	1.36%	1.36%
3	R&M Expenses on Opening GFA (1*2)	96.73	84.39

The Hon'ble Commission is requested to approve R&M Expenses of Rs. 84.39 Crore in APR of FY 2019-20.

Administration and General Expenses (A&G)

A&G Expenses mainly comprise rent charges, telephone and other communication expenses, professional charges, conveyance and travelling allowances and other debits.

As discussed in the previous Section, the Hon'ble Commission in previous Tariff Order has computed norms for A&G expenses in terms of A&G expense per personnel and A&G expense per substation. The following Table shows the norms stipulated by the Hon'ble Commission in the previous Tariff Order:

Table 3-12: Base value norms for A&G Expenses

Sl. No.	Particulars	FY 2019-20
1	A&G Expenses per personnel	0.9996
2	A&G Expenses per sub-station (Rs. Lakh)	12.026

BSPTCL has considered the above norms for computation of A&G expenses for FY 2019-20. BSPTCL has estimated number of sub-stations and number of employees for FY 2019-20 as discussed in Table 3-8.

Regulation 21.3 of BERC MYT Regulations, 2018 provides for escalation of base value norms for consideration of employee expenses. The relevant extracts are as follows:

"21.3 Administrative and General (A&G) Expense

A&G expense shall be computed as per the norm escalated by wholesale price index (WPI) and Consumer Price Index (CPI) in the ratio 60:40 and adjusted by provisions for confirmed initiatives (IT etc. initiatives as proposed by the Transmission Licensee and validated by the Commission) or other expected one-time expenses, and shall be governed by following formula:

$$A\&G_n = (A\&G_b * WPI \text{ inflation}) + Provision$$

Where:

A&G_n: A&G expense for the year n

A&G_b: A&G expense as per the norm

WPI inflation: is the average increase in the Wholesale Price Index (WPI) for immediately preceding three years....."

BSPTCL has considered average of preceding three years of escalation in CPI and WPI indices for consideration of escalation of base norm for A&G expenses. The following Table shows the escalation considered on base norms for computation of A&G expenses:

Table 3-13: CPI:WPI Inflation considered for FY 2019-20

Particulars	Actual				Estimate
	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Annual Average CPI Index	265	276	284	300	
CPI Inflation		4.12%	3.08%	5.45%	4.22%
Annual Average WPI Index	110	112	115	120	
WPI Inflation		1.73%	2.92%	4.32%	2.99%
WPI: CPI (60:40)					3.48%

BSPTCL has hence, considered inflation rate of 3.48% on base norms for computation of A&G expenses for FY 2019-20.

The following Table shows the computation of A&G expenses in accordance with Regulation 21.3 of BEREC MYT Tariff Regulations, 2018:

Table 3-14: A&G Expenses for FY 2019-20

Sl. No.	Particulars	Base Value	FY 2019-20	
			Approved in Tariff Order	Claimed in APR
1	Average annual WPI & CPI Index		2.70%	3.48%
2	Norms-A&G Expenses per personnel	0.9996	1.0266	1.0344
3	Norms-A&G Expenses per substation (Rs. Lakh)	12.0266	12.3513	12.4452
4	No. of Employees		2,589	2,156
5	No. of Sub-stations		146	146
6	A&G Expenses (No. of employees) (2*4) (Rs. Crore)		26.58	22.30
7	A&G Expenses (No of substations) (3*5) (Rs. Crore)		18.03	18.17
8	Total A&G Expenses for the year (Rs. Crore) (6+7)		44.61	40.47

The Hon'ble Commission is requested to approve A&G Expenses of Rs. 40.47 Crore in APR of FY 2019-20.

Holding Company Expenses

BSPTCL submits that expenses of BSP(H)CL, which is the holding Company of all the State Utilities and Generating Company, is recovered from its subsidiary Companies. The cost sharing between the subsidiary Companies including BSPTCL is as per the amount of equity shares issued by the Holding Company to the Subsidiary Company. In light of the above, all the Utilities have to bear the cost of the Holding Company. BSPTCL is claiming holding expenses separately in line with the methodology adopted in previous Tariff Order.

BSPTCL has claimed Holding Company expenses for FY 2019-20 on the basis of actual expenses for FY 2018-19. BSPTCL has not considered any increase in Holding Expenses for FY 2019-20. Any variation with respect to the submitted expenses shall be claimed in True-up of FY 2019-20.

Table 3-15: Holding Company Expenses for FY 2019-20 (Rs Crore)

Sl. No.	Particulars	FY 2019-20 (Approved)	FY 2019-20 (Claimed in APR)
1	Holding Company Expenses for FY 2018-19	10.60	13.18
2	Inflationary Increase	0.03	-
3	Holding Company Expenses	10.63	13.18

The Hon'ble Commission is requested to approve Holding Company Expenses of Rs. 13.18 Crore in APR of FY 2019-20.

The following Table shows the total O&M expenses claimed by BSPTCL based on estimated expenses of FY 2019-20 as per Regulation 21.1, 21.2 and 21.3 of BERC MYT Tariff Regulations, 2018:

Table 3-16: Operation and Maintenance Expenses for FY 2019-20 (Rs. Crore)

Sl. No.	Particulars	FY 2019-20	
		Approved in MYT Order	Claimed in APR
1	Employee expenses	182.04	183.39
2	Repairs and Maintenance Expenses	96.73	84.39
3	Administration and General Expenses	44.61	40.47
4	Holding Company Expenses	10.63	13.18
5	Total Operation and Maintenance Expenses	334.03	321.43

The Hon'ble Commission is requested to approve Operation and Maintenance Expenses of Rs. 321.43 Crore in APR of FY 2019-20.

3.8 Return on Equity

BSPTCL has considered closing equity of Rs. 375.41 Crore as on 31st March 2015 (approved in the True up for FY 2014-15) as opening equity for FY 2015-16 in respect of assets capitalised before 31st March 2015.

Further, in respect of projects commissioned with effect from 1st April 2015, the opening equity is considered at Rs. 1,033.06 Crore based on the closing equity considered in true up for FY 2018-19. The addition to equity during FY 2019-20 is considered at Rs. 419.51 Crore as considered in Table 3-5 of this Petition.

Regulation 22 read with Regulation 27 has considered rate of return on equity on pre-tax basis. The relevant extracts are as follows:

"22 (b) The return on the equity invested shall be allowed from the date of start of commercial operation and after put to use:

(c) Return on equity shall be computed at the rate of 15.5% for the project which is commissioned w.e.f. 01.04.2015 and further incentive equivalent to 0.5% will be allowed in the form of RoE, if the project is completed within schedule as per the Annexure A or original schedule period as the case may be. However, Return on Equity for the project commissioned prior to 01.04.2015 shall be allowed at the rate of 14%....

....27 (2) Rate of return on equity shall be rounded off to two decimal places and shall be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

Where "t" is the effective tax rate in accordance with Clause

(1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of licensee/SLDC paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess..."

BSPTCL has considered the MAT rate of 18.50%, which was revised for FY 2019-20.

BSPTCL has computed pre-tax RoE of **19.02%** (15.5% / (1-18.50%)) for assets capitalized after 31st March 2015 and pre-tax RoE of **17.18%** (14.00% / (1-18.50%)) for the assets capitalised before 31st March 2015.

The following table shows the Return of Equity computed by BSPTCL for FY 2019-20:

Table 3-17: Return on Equity for FY 2019-20 (Rs. Crore)

Sl. No.	Particulars	FY 2019-20	
		Approved in MYT Order	Claimed in APR
1	Opening Equity as on 1.4.2015	375.41	375.41
2	Rate of Return on Equity	14.00%	14.00%
3	Tax/MAT rate %	21.55%	18.50%
4	Rate of Return on Equity (Pre-tax)	17.85%	17.18%
5	Return on Equity (1*4)	67.01	64.51
	Equity on projects commissioned w.e.f. 1.4.2015		
6	Opening Equity	1,283.69	1,033.06
7	Addition during the year	307.82	419.51
8	Closing Equity (6+7)	1,591.51	1,452.58
9	Average Equity	1,437.60	1,242.82
10	Rate of Return on Equity	15.50%	15.50%
11	Tax/MAT rate %	21.55%	18.50%
12	Rate of Return on Equity (Pre-tax)	19.76%	19.02%
13	Return on Equity (9*12)	284.07	236.36
14	Total Return on Equity (5+13)	351.08	300.87

The Hon'ble Commission is requested to approve pre-tax Return on Equity of Rs. 300.87 Crore in APR of FY 2019-20.

3.9 Interest on Working Capital

Regulation 26 of the BERC MYT Regulations, 2018 provides for computation of Interest on Working Capital for the Control Period. The relevant extracts are as follows:

"26 Interest on working Capital

The Transmission Licensee shall be allowed interest on the estimated level of working capital for the financial year, computed as follows:

(i) Receivables equivalent to two (2) month of transmission charges calculated on target availability level.

(ii) O&M Expenses of one (01) month.

(iii) Maintenance spares @ 15% of O&M expenses for one month.

Less:

(iv) Depreciation return on equity and contribution to contingency reserves equivalent to two months.

(v) Amount of security deposits from Transmission System users, if any, held during the year except the security deposits held in the form of Bank Guarantee from Transmission System Users.

b) Interest on working capital shall be on normative basis and rate of interest shall be equal to the State Bank one-year Marginal Cost of Funds-based Lending Rate ('MCLR') as of the date on which petition for determination of tariff is filed plus 150 basis points. The rate of interest for the purpose of Truing-up shall be the weighted average MCLR of the concern Financial Year plus 150 basis points.

(c) Interest shall be allowed on the amount held as security deposit from Transmission System Users at the Bank Rate as at the date on which the application for determination of tariff is filed. The interest allowed shall be subject to true up at weighted average Bank Rate of the concern Financial Year.

(d) If the State Government is providing resource gap grant and/or subsidy, the working capital shall be reduced by two months equivalent of that amount."

In accordance with the above provisions, BSPTCL has computed the interest on working capital for FY 2019-20. Regulation 26 (b) specifies that the rate of interest shall

be equal to State Bank of India (SBI) one-year MCLR as of the date on which Tariff Petition is filed, plus 150 basis points.

BSPTCL has considered SBI MCLR rate of 8.00% for one-year tenure revised with effect from 10th November 2019, as available on SBI website (<https://www.sbi.co.in/portal/web/interest-rates/mclr>), and accordingly added 150 basis points as provided in the Regulation. BSPTCL has therefore considered interest rate of 9.50% (8.00%+1.50%) for computation of interest on working capital for FY 2019-20. The maintenance spares are considered at 15% of 1-month O&M expenses, in accordance with the Regulations.

BSPTCL has computed the working capital and interest on working capital considering the expenses estimated in the APR of FY 2019-20 at an interest rate of 9.50% for FY 2019-20 as given in the Table below:

Table 3-18: Interest on Working Capital for FY 2019-20 (Rs. Crore)

Sl. No.	Particulars	FY 2019-20	
		Approved in MYT Order	Claimed in APR
1	Receivables equivalent to two (2) months of Transmission Charges	213.20	188.16
2	O&M Expenses of one month	27.84	26.79
3	Maintenance spares @15% of 1-month O&M expenses	4.18	4.02
4	Less: Depreciation, RoE and Contribution to Contingency Reserve for 2 months	110.84	93.09
	Total Working Capital	134.37	125.88
5	Interest on Working Capital (%)	10.00%	9.50%
6	Interest on Working Capital	13.44	11.96

The Hon'ble Commission is requested to approve Interest on Working Capital of Rs. 11.96 Crore in APR of FY 2019-20.

3.10 Non-Tariff Income

BSPTCL submits that it has considered Non-Tariff Income for FY 2019-20 based on actual expenses of FY 2018-19 as per audited accounts. Any variation in the same shall be submitted at the time of true-up for FY 2019-20:

Table 3-19: Non-Tariff Income for FY 2019-20 (Rs. Crore)

Sl. No.	Particulars	FY 2019-20	
		Approved in MYT Order	Claimed in APR
1	Non-Tariff Income of FY 2018-19	72.86	121.28
2	Escalation (%)	5%	-
3	Increase	3.64	-
4	Non-Tariff Income for the Year	76.50	121.28

The Hon'ble Commission is requested to approve Non-Tariff Income of Rs. 121.28 Crore in APR of FY 2019-20.

3.11 Aggregate Revenue Requirement for FY 2019-20

Based on the discussions in previous sections of this Chapter, BSPTCL has computed the ARR for Transmission Business for FY 2019-20, as shown in the Table below:

Table 3-20: Annual Transmission Charges/ARR of Transmission Business for FY 2019-20 (Rs. Crore)

Sl. No.	Particulars	FY 2019-20	
		Approved in MYT Order	Claimed in APR
1	O&M expenses (a+ b+ c+ d)	334.03	321.43
	a. Employee cost	182.06	183.39
	b. R&M expenses	96.73	84.39
	c. A&G Expenses	44.61	40.47
	d. Holding Company expenses	10.63	13.18
2	Depreciation	313.99	257.65
3	Interest on Loan Capital	343.17	358.32
4	Interest on Working Capital	13.44	11.96
5	Return on Equity	351.08	300.87
6	Less: Non-Tariff Income	76.50	121.28
7	ARR for Transmission	1,279.20	1,128.96
8	Add: Revenue Gap/(Surplus) of Previous Year	(276.89)	(276.89)
9	Net ARR	1,002.32	852.07

The Hon'ble Commission is requested to approve Net ARR of Rs. 852.07 Crore in APR of FY 2019-20.

3.12 Revenue from Transmission Charges

The Hon'ble Commission had approved Annual Transmission Charges of Rs. 1,002.32 Crore for FY 2019-20 after adjusting the surplus of FY 2017-18 in previous Tariff Order. BSPTCL is supposed to recover the same from respective Distribution Companies. Therefore, BSPTCL has considered the same as revenue in APR of FY 2019-20.

The Hon'ble Commission is requested to approve Revenue from Transmission charges of Rs. 1,002.32 Crore for APR of FY 2019-20.

3.13 Revenue Gap/(Surplus) for FY 2019-20

BSPTCL has considered the components of ARR as discussed in this Chapter and has adjusted the Revenue approved by the Hon'ble Commission in previous Tariff Order for FY 2019-20, to arrive at the Revenue Gap/(Surplus) for FY 2019-20, as shown in the following Table:

Table 3-21: Revenue Gap/(Surplus) for FY 2019-20 (Rs. Crore)

Sl. No.	Particulars	FY 2019-20
1	Net ARR computed in APR of FY 2019-20	852.07
2	Revenue approved by Hon'ble Commission for FY 2019-20 in Tariff Order dated 15 th Feb 2019	1,002.32
3	Revenue Gap/(Surplus)	(150.25)

The Hon'ble Commission is requested to approve the Revenue Surplus of Rs. 150.25 Crore in APR of FY 2019-20.

Regulation 13 (f) stipulates that

"13. True-Up and Annual Performance Review...

.... (f) Notwithstanding anything contained in regulation 4 of these Regulations, the Revenue gap/surplus arising out of Truing up shall be considered by the Commission while determining the ARR of ensuing year(s). While approving adjustments towards revenue/expenses in future years, arising out of Truing up exercises, the Commission may allow the carrying costs as determined by the Commission of such

expenses/revenues. However the revised estimated gap/surplus as a result of APR may or may not be passed in the ARR of ensuing year..... (Emphasis Added)

The Hon'ble Commission in Tariff Order dated 15th February 2019 worked out Annual Performance Review of FY 2018-19 based on revised estimates but did not pass on the gap/(surplus) in Tariff of FY 2019-20. The Hon'ble Commission was of the view that the revised estimates were indicative and can only be considered after truing-up.

It is submitted that NBPDCCL and SBPDCL have not been able to pay Transmission Charges on timely basis. Trade receivables as per accounts have increased from Rs. 354.69 Crore at the end of FY 2017-18, to Rs. 908.29 Crore at the end of FY 2018-19. On the other hand, BSPTCL has to pay higher advance tax and at the time of True-up, refund the surplus money along with holding cost.

In view of the above BSPTCL would like to request the Hon'ble Commission to permit the refund of surplus amount of Rs. 150.25 Crore in FY 2019-20 itself. However, for the purpose of this Petition, BSPTCL has adjusted the projected Revenue Surplus of FY 2019-20 in the ARR of FY 2020-21, without holding cost.

4 Aggregate Revenue Requirement and Tariff for FY 2020-21

4.1 Background

BSPTCL has filed for Determination of ARR and Tariff for ensuing year (i.e., FY 2020-21). The Hon'ble Commission has already approved the ARR for FY 2020-21 in the Tariff Order dated 15th February 2019. However, BSPTCL has filed for approval of revised ARR and accordingly Tariff for FY 2020-21 based on actuals of FY 2018-19 and revised estimates of FY 2019-20.

Regulation 11.3 of BERC MYT Regulations, 2018 requires the Transmission Licensee to file for revised ARR for each year of the Control Period. The relevant extracts are as follows:

*"11.3 An application (along with soft copy) for determination of tariff and charges shall be made by 15th November every year, for Truing up of expenses of previous years, for Annual Performance Review (APR) of the Aggregate Revenue Requirement (ARR) for the current year **and determination of ARR and transmission tariff or SLDC charges for the ensuing years of the control period.** The application should contain the data relating to each item of the ARR supported with the information/data in the formats Form no-SI to Form no-P12 appended to these Regulations and accompanied by such fees as may be specified under the BERC (Fees, Fines and Charges) Regulations, 2005 as amended from time to time. All the information as required in the formats appended to these Regulations along with justification shall be provided in the main petition... (Emphasis Added)."*

Regulation 4 of the BERC MYT Regulations, 2018 also provides for the Hon'ble Commission to determine the Transmission Charges in each year of the Control Period. The relevant extracts are as follows:

*"4.1 The Commission **shall determine the tariff for Transmission business or charges of SLDC operations under a Multi-Year Tariff framework with effect from April 1st of each financial year** subject to provisions under these Regulations..... (Emphasis Added)."*

Accordingly, BSPTCL has proposed re-determination of ARR for FY 2020-21, as discussed in the following paragraphs.

4.2 Transmission Losses

As discussed in APR of FY 2019-20, the actual Transmission Loss is well below the approved transmission loss of 3.92%. There are meters installed at all interface points and the measurement of transmission loss is now being done correctly as per the requirement of the Hon'ble Commission.

However, since FY 2019-20 is yet to be completed to arrive at the correct picture of transmission loss of BSPTCL, it is requested to kindly approve transmission loss of 3.92% for FY 2020-21 as approved in Tariff Order dated 15th February 2019. BSPTCL would claim for the actual transmission loss at the time of Truing-up of FY 2020-21.

The Hon'ble Commission is requested to approve Transmission Loss of 3.92% for FY 2020-21.

4.3 Projects to be implemented in 13th Plan

As per the 19th Electric Power Survey (EPS), load projection as per Central Electricity Authority (CEA) for the State of Bihar is 9,308 MW up to FY 2026-27. To cater to this demand, BSPTCL has to create the infrastructure of Transformation Capacity of approx. 18,000 MVA at 132/33 kV Level up- to FY 2026-27. Similar infrastructure also has to be created at 220 kV as well as at 400 kV level in order to strengthen the transmission network, evacuating the power and ensuring n-1 criteria of network reliability.

As mentioned before, 12th Plan projects are on the verge of completion and likely to be completed in FY 2019-20. Some of the projects may spill over to FY 2020-21. To meet the load projection (FY 2026-27), BSPTCL has planned various transmission projects under 13th Plan (2017-22). BSPTCL had proposed the schemes coming under 13th Plan in the Business Plan filed last year. The Hon'ble Commission has also approved these projects provisionally and considered them in ARR projections for FY 2019-20 and onwards. The relevant extracts from the Tariff Order issued on 15th February 2019 are as follows:

“The Commission accordingly provisionally approves capital expenditure, Capitalisation and source of funding of capitalisation for FY 2018-19 and the control period of FY 2019-20 to FY 2021-22 as detailed in the Table below:

Table 6.7: Capital expenditure, Capitalisation and source of funding approved for FY 2018-19 and FY 2019-20 to FY 2021-22

(Rs. Crore)

	2018-19	2019-20	2020-21	2021-22	Total
<i>Capital Expenditure (A)</i>	670.48	2893.55	949.78	134.44	4648.24
<i>Capitalization (B)</i>					
<i>Ongoing Project</i>	2100.00	495.38	-		2595.38
<i>Upcoming Project</i>	-	815.05	1990.45	1842.74	4648.24
<i>Total Capitalization</i>	2100.00	1310.43	1990.45	1842.74	7243.62
<i>Source of funding of capitalization (C)</i>					
<i>Upcoming Project</i>					
<i>Loan</i>	-	635.14	1592.36	1474.19	3701.69
<i>Grant</i>		19.02			19.02
<i>Equity</i>		160.90	398.09	368.55	927.54
<i>Ongoing Project</i>					
<i>Loan</i>	448.04				448.04
<i>Grant</i>	62.69				62.69
<i>Equity</i>	1589.26	495.38			2084.65
<i>Total Funding</i>					

	2018-19	2019-20	2020-21	2021-22	Total
<i>Loan</i>	448.04	635.14	1592.36	1474.19	4149.73
<i>Grant</i>	62.69	19.02			81.71
<i>Equity</i>	1589.26	656.28	398.09	368.55	3012.18

In view of the above, BSPTCL proposes to capitalize all pending projects of 12th Plan and significant number of projects of 13th Plan in FY 2020-21. Remaining projects of 13th Plan are expected to spill over to FY 2021-22, and capitalization shall be accordingly proposed in the next Tariff Petition for FY 2021-22.

It is submitted that the works of transmission lines and sub-stations proposed to be taken up in 13th Plan have been discussed under various fora of Transmission Planning. The proposal of 13th Plan has been taken up in the Standing Committee of BSPTCL and the members of Standing Committee including officials of Distribution Companies have also accorded approval for implementation of such projects.

BSPTCL has been in continuous communication with Distribution Companies on construction related works and connectivity to the grid. BSPTCL has been exchanging all the information with the Distribution Companies with regards to transmission lines and GSS getting constructed.

The projects coming under 13th Plan have also been discussed and approved in 18th Eastern Region Power Committee (ERPC) meeting. It is therefore, submitted that the works carried out under 13th Plan are only after taking all requisite approvals in various fora and only after prior intimation to Distribution Companies, and are hence, necessary and the financial impact of these schemes needs to be approved in the ARR and Tariff for the respective years.

4.4 Capital Expenditure and Capitalization

BSPTCL has projected capital expenditure and capitalization for FY 2020-21, based on the status of Projects coming under 13th Plan and few pending works of 12th Plan. BSPTCL proposes to complete significant number of the projects coming under 13th Plan in FY 2020-21, with the remaining projects under 13th Plan expected to spill over to FY 2021-22.

The detailed list of projects expected to get capitalized in FY 2020-21, i.e., by March 2021, is attached as **Annexure VIII**.

BSPTCL has estimated capital expenditure of Rs. 427.05 Crore and capitalization of Rs. 1,556.79 Crore for FY 2020-21. In addition to this, BSPTCL has computed IDC of Rs. 77.25 Crore based on the assets that are expected to get capitalized in FY 2020-21. It is proposed that the projects under 13th Plan shall be funded by 80% loan and 20% equity. The following Table shows the approved and estimated capital expenditure and capitalization for FY 2020-21:

Table 4-1: Capital Expenditure and Capitalization for FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	FY 2020-21	
		Approved in MYT Order	Projected in ARR
1	Opening CWIP (A)	3,126.76	2,040.07
2	Investment during the Year (B)	949.78	427.05
3	Less: Capitalization (C)	1,990.45	1,634.04
4	Closing CWIP (A+B-C)	2,086.09	833.07

BSPTCL has considered opening CWIP of Rs. 2,040.07 Crore in line with the closing CWIP of FY 2019-20 considered in APR of FY 2019-20.

Capitalization for the entire year is considered at Rs. 1,634.04 Crore, which includes asset capitalized cost of Rs. 1,556.79 Crore and IDC of Rs. 77.25 Crore based on assets expected to get capitalized till March 2021. Accordingly, the closing balance arrived for CWIP is Rs. 833.07 Crore. It is to be noted that the cost of land is not included in the above capitalization and has been separately claimed in next section of this Chapter.

The Hon'ble Commission is requested to approve Capitalization of Rs. 1,634.04 Crore for FY 2020-21.

4.5 Gross Fixed Asset

BSPTCL has considered the opening GFA of Rs. 9,018.25 Crore for FY 2020-21 equal to the closing GFA considered in APR of FY 2019-20 in previous Chapter.

The addition to GFA is considered based on the estimates for FY 2020-21 as discussed in the previous section. The total capitalization is Rs. 1,634.04 Crore, which also includes expected IDC. BSPTCL has considered cost of addition of land in proportion with the land capitalized in FY 2018-19. The following Table shows the schedule of Gross Fixed Asset claimed for FY 2020-21:

Table 4-2: Gross Fixed Asset projected for FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	FY 2020-21	
		Approved in MYT Order	Projected in ARR
1	Opening GFA	9,828.43	9,018.25
2	Add: Additions to GFA from CWIP (excl. IDC)	1,990.45	1,556.79
3	Add: IDC	-	77.25
4	Add: Land Cost		13.30
5	Closing GFA	11,818.88	10,665.60

BSPTCL has projected closing GFA of **Rs. 10,665.60 Crore** with total capitalization of **Rs. 1,647.34 Crore** including land cost as computed in the Table above.

The Hon'ble Commission is requested to approve asset addition, Interest during Construction during the year and closing GFA as claimed in the Table above.

4.6 Depreciation

BSPTCL has computed depreciation for FY 2020-21 in accordance with Regulation 23 of the BERC MYT Regulations, 2018. The relevant provisions are as follows:

"23 Depreciation

(i) Depreciation shall be calculated for each year of the control period on the original cost of the fixed assets of the corresponding year. No advance shall be granted against depreciation.

(ii) Depreciation shall not be allowed on assets funded by capital subsidies, beneficiary contributions or grants.

(iii) Depreciation shall be calculated annually on the basis of assets capitalised and put to use based on the straight-line method over the useful life of the asset and at the rate not exceeding the rate specified by the Central Electricity Regulatory Commission from time to time as provided in Appendix-III of these Regulations.

The residual value of assets shall be considered as 10% and depreciation shall be allowed to a maximum of 90% of the original cost of the asset. The Transmission Licensee or SLDC, as the case may be, shall submit separate detail of fully depreciated asset along with year of commissioning and year of attaining ninety percent depreciation with the tariff petition.

Provided that freehold land shall not be treated as a depreciable asset and its cost shall be excluded while computing 90% of the original cost of the asset.

Provided further that the cost of lease hold land shall be amortised evenly within the leased period.

(iv) The original capital cost of the asset shall include Additional Capitalisation on account of Foreign Exchange Rate Variation as allowed by the Government / Bihar Electricity Regulatory Commission.

(v) Depreciation shall be chargeable from the first year of operation of the asset. For part of the year, depreciation shall be charged on pro rata basis”.

BSPTCL has considered opening depreciable GFA of Rs. 7,591.95 Crore, equal to the closing depreciable GFA considered in APR of FY 2019-20. BSPTCL has considered additions to GFA net of land cost.

BSPTCL has computed depreciation for FY 2020-21 based on the weighted average depreciation rate of 5.11%, considered for computation in Truing-up of FY 2018-19.

The opening value of Grants is considered same as the closing value of grants considered in APR of FY 2019-20. The addition of grants is considered by BSPTCL based on the assets funded by grants that are expected to get capitalized in FY 2020-21. BSPTCL has excluded the cost of land while computing depreciation for FY 2020-21. The following Table shows the computation of depreciation in line with the methodology adopted by the Hon’ble Commission in previous Tariff Orders:

Table 4-3: Depreciation considered in ARR of FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	FY 2020-21 (Approved)	FY 2020-21 (ARR)
1	Opening GFA		9,018.25
2	Less: Value of Land		1,426.30
3	Value of GFA net of Land (1-2)	8,393.13	7,591.95
4	Addition during the year (excluding land and IDC)		1,556.79
5	Add: IDC	1,862.45	77.25

Sl. No.	Particulars	FY 2020-21 (Approved)	FY 2020-21 (ARR)
6	Closing GFA	10,255.58	9,225.99
7	Average GFA	-	8,408.97
8	Weighted average rate of depreciation on opening depreciable GFA	5.13%	5.11%
9	Weighted average rate of depreciation on addition to depreciable GFA	3.77%	
10	Depreciation	500.78	429.70
11	Opening Grants	1,938.11	1,856.40
12	Grants during the year	-	65.67
13	Total Grants	1,938.11	1,922.07
14	Average Grants	-	1,889.24
15	Weighted average rate of depreciation on opening Grants	5.13%	5.11%
16	Weighted average rate of depreciation on additional Grants	3.77%	
17	Depreciation on Asset created out of Grants	99.43	96.54
18	Net Depreciation considered in ARR (9-15)	401.36	333.16

The Hon'ble Commission is requested to approve Depreciation of Rs. 333.16 Crore in the ARR of FY 2020-21.

4.7 Interest and Finance Charges

BSPTCL has considered normative opening balance of loan for FY 2020-21 at Rs. 3,116.85 Crore, equal to the closing balance of normative loan considered in APR of FY 2019-20. Asset capitalized during FY 2020-21 is Rs. 1,647.34 Crore, which includes IDC and cost of land estimated for FY 2020-21.

Regulation 24 (j) specifies that *"addition to loan during the year for interest purpose will be restricted to the quantum of assets capitalised and put to use"*.

Regulation 24 (b) specifies that

"(b) If the equity actually deployed is more than 30 % of the capital cost, equity in excess of 30 % shall be treated as normative loan: Provided that where equity actually deployed is less than 30% of the capital cost, the actual loan shall be considered for determination of interest on loan...."

BSPTCL would like to submit that a few of the projects of 12th Plan are expected to be commissioned in FY 2020-21. The debt equity ratio considered for such projects is 70:30.

It is submitted that the projects under the 13th Plan are proposed to be funded by 80% Debt and 20% equity. As specified in the Regulations, since equity deployed is less than 30% in such projects, actual debt equity ratio is to be considered.

Accordingly, BSPTCL has considered debt: equity ratio of 80:20 for new projects (13th Plan) and 70:30 for old projects (12th Plan), for loan and equity addition during FY 2020-21, as shown in the Table below:

Table 4-4: Loan and Equity additions during FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	FY 2020-21
1	Capitalization during FY 2020-21	1,647.34
2	Less: Grant	65.67
3	Net Capitalization (A)	1,581.67
4	12 th Plan Projects	
5	Equity Considered (30%)	223.06
6	Debt Considered (70%)	520.47
7	13 th Plan Projects	
8	Equity Considered (20%)	178.27
9	Debt Considered (80%)	659.87
10	Total Equity	401.33
11	Total Debt	1,180.34

BSPTCL has considered repayment of loans equivalent to Depreciation considered in the ARR for FY 2020-21 in accordance with Regulation 24(e) of BERC MYT Regulations, 2018.

As per Regulations, weighted average interest rate of actual loan portfolio is to be considered for computation of Interest and Finance Charges. Presently, the existing loan pertains to ADB schemes only. In view of the above, BSPTCL has considered interest rate of 13.00% as per existing loan.

BSPTCL has computed Interest and Finance Charges in accordance with Regulation 24 of BERC MYT Regulations, 2018, as shown in the following Table:

Table 4-5: Interest on Loan computed for FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	FY 2020-21	
		Approved in MYT Order	Projected in ARR
1	Opening Loan (A)	3,603.07	3,116.85
2	Addition during the year	1,592.36	1,180.34
3	Normative Repayment (Equal to Depreciation)	401.36	333.16
4	Closing Loan	4,794.07	3,964.04
5	Average Loan	4,198.57	3,540.45
6	Interest Rate (%)	10.50%	13.00%
7	Interest on Loan	440.85	460.26
8	Other Finance Charges	-	0.01
9	Interest and Finance Charges (7+8)	440.85	460.27

The Hon'ble Commission is requested to approve Interest on Loan and Finance Charges of Rs. 460.27 Crore in ARR of FY 2020-21.

4.8 Operation and Maintenance Expenses

Employee Expenses

It is submitted that employee expenses primarily include costs towards salaries, dearness allowances, bonus, staff welfare and medical benefits, leave travel and earned leave encashment and the terminal benefits in the form of pension, gratuity, etc.

The Hon'ble Commission in previous Tariff Order stipulated a separate trajectory of norms for Employee Expenses namely: Norms for No. of personnel per ckt. km, no. of personnel per substation and annual expenses per personnel. The Hon'ble Commission adopted 45% of the total no. of the employees as a part of substation and 55% personnel as a part of ckt. km for the purpose of calculation of norms.

The Hon'ble Commission has also proportionately adjusted the SLDC cost from the total cost of BSPTCL from previous year and accordingly arrived at the norms for employee expenses.

The following Table shows the base value of norms computed by the Hon'ble Commission in previous Tariff Order:

Table 4-6: Base value norms for Employee Expenses

Sl. No.	Particulars	Base Value
1	Number of personnel per ckt. km (55%)	0.0822
2	Number of personnel per substation (45%)	6.6427
3	Annual expenses per personnel (Rs. Lakh)	7.461

BSPTCL has projected Transmission Line in ckt. km, number of sub-stations and number of employees for FY 2020-21, as shown in the following Table:

Table 4-7: Transmission Line, No. of sub-stations and No. of employees for FY 2020-21

Sl. No.	Particulars	As on Mar-20 (Est.)	Escalation /Addition	As on Mar-21 (Proj.)
1	Transmission Line in ckt. km	15,772	924	16,696
2	No. of sub-stations	146	6 (nos.)	152
3	No. of employees	2,156	8.65%	2,342

BSPTCL has considered additions in number of sub-stations based on the schemes, which are expected to get capitalized in FY 2020-21. Number of employees has been derived by escalating existing employees on CAGR of past five years. Transmission Line in ckt. km is estimated based on the lines expected to get commissioned in FY 2020-21.

Regulation 21.1 of the BERG MYT Regulations, 2018 provides for escalation of base value norms for consideration of employee expenses. The relevant extracts are as follows:

“21.1 Employee Cost

Employee cost shall be computed as per the approved norm escalated by consumer price index (CPI), adjusted by provisions for expenses beyond the control of the Transmission Licensee and one-time expected expenses, such as recovery/adjustment of terminal benefits, implications of pay commission, arrears and Interim Relief, governed by the following formula:

$$EMP_n = (EMP_b * CPI \text{ inflation}) + Provision$$

Where:

EMP_n : Employee expense for the year n

EMP_b : Employee expense as per the norm

CPI inflation: is the average increase in the Consumer Price Index (CPI)

for immediately preceding three years.....”

In accordance with the above Regulation, BSPTCL has considered the CPI indices up to March 2019 and taken average of preceding three years of escalation in CPI indices for escalation of norms of FY 2019-20 to arrive at norms of FY 2020-21 for employee expenses. The following Table shows the escalation considered on base norms for computation of employee expenses:

Table 4-8: CPI Inflation considered for FY 2020-21

Particulars	Actual				Projected
	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2020-21
Annual Average CPI Index	265	276	284	300	
CPI Inflation		4.12%	3.08%	5.45%	4.22%

BSPTCL has hence, considered inflation rate of 4.22% on base norms for computation of employee expenses for FY 2020-21. Based on the above number of employees, transmission line length in ckt. km and No. of Sub-stations and applying escalation on the base values considered by the Hon'ble Commission in the Tariff Order dated 15th February 2019, BSPTCL has estimated employee expenses for FY 2020-21.

The following Table shows the computation of employee expenses in accordance with Regulation 21.1 of BERC MYT Tariff Regulations, 2018:

Table 4-9: Employee Expenses for FY 2020-21

Sl. No.	Particulars	Norms considered for FY 2019-20	FY 2020-21	
			Approved in MYT Order	Projected in ARR
1	Average annual CPI Inflation		4.28%	4.22%
2	Norms-Number of personnel per ckt. km	0.085	0.089	0.089
3	Norms-Number of personnel per substation	6.923	7.223	7.215
4	Transmission line length in ckt. km		18,500	16,696
5	No. of Sub-stations		155	152
6	Norms-Annual expenses per personnel (Rs. lakh)	7.776	8.1132	8.103
7	Employee cost (Number of personnel per ckt. km) (2*4*6)/100 (Rs. Crore)		134.16	120.49
8	Employee cost (Number of personnel per substation) (3*5*6)/100 (Rs. Crore)		90.84	88.87
9	Total Employee cost for the year (7+8) (Rs. Crore)		225.00	209.36

The Hon'ble Commission is requested to approve Employee expenses of Rs. 209.36 Crore in ARR of FY 2020-21.

Repairs and Maintenance Expenses (R&M)

Regulation 21.2 of the BERC MYT Regulations, 2018 specify R&M expenses to be allowed as a percentage of opening gross fixed assets (excluding land cost). Regulation 21 (i) specifies that norms shall be determined based on audited accounts of operations of last three years. The Hon'ble Commission in Tariff Order dated 15th February 2019 computed the 'K' factor (i.e., R&M norm) based on available three (3) years audited accounts from FY 2015-16 to FY 2017-18. The Hon'ble Commission computed 'K factor' at 1.36% for the Control Period from FY 2019-20 to FY 2021-22.

BSPTCL has considered 'K factor' of 1.36% as approved in previous Tariff Order and applied the same on the Opening GFA (net of Land) for computation of R&M expenses for FY 2020-21, as shown in the following Table:

Table 4-10: R&M Expenses for FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	FY 2020-21 (Approved)	FY 2020-21 (As in ARR)
1	Opening GFA (net of Land)	8,393.13	7,591.95
2	% on GFA	1.36%	1.36%
3	R&M Expenses on Opening GFA (1*2)	114.15	103.25

The Hon'ble Commission is requested to approve R&M Expenses of Rs. 103.25 Crore in ARR of FY 2020-21.

Administration and General Expenses (A&G)

A&G Expenses mainly comprise rent charges, telephone and other communication expenses, professional charges, conveyance and travelling allowances and other debits.

As discussed in the previous Section, the Hon'ble Commission in previous Tariff Order has stipulated norms for A&G expenses in terms of A&G expense per personnel and A&G expense per substation. The following Table shows the norms stipulated by the Hon'ble Commission in previous Tariff Order:

Table 4-11: Base value norms for A&G Expenses

Sl. No.	Particulars	Base Value
1	A&G Expenses per personnel	0.9996
2	A&G Expenses per sub-station (Rs. Lakh)	12.026

Regulation 21.3 of the BERG MYT Regulations, 2018 provides for escalation of base value norms for consideration of A&G Expenses. The relevant extracts are as follows:

"21.3 Administrative and General (A&G) Expense

A&G expense shall be computed as per the norm escalated by wholesale price index (WPI) and Consumer Price Index (CPI) in the ratio 60:40 and adjusted by provisions for confirmed initiatives (IT etc. initiatives as proposed by the Transmission Licensee and validated by the Commission) or other expected one-time expenses, and shall be governed by following formula:

$$A\&G_n = (A\&G_b * WPI \text{ inflation}) + Provision$$

Where:

A&G_n: A&G expense for the year n

A&G_b: A&G expense as per the norm

WPI inflation: is the average increase in the Wholesale Price Index (WPI) for immediately preceding three years.....”

BSPTCL has considered average of preceding three years of escalation in CPI and WPI indices for escalation of base norm for A&G expenses. The following Table shows the escalation considered on base norms for computation of A&G expenses:

Table 4-12: CPI: WPI Inflation considered for FY 2020-21

Particulars	Actual				Projected
	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2020-21
Annual Average CPI Index	265	276	284	300	
CPI Inflation		4.12%	3.08%	5.45%	4.22%
Annual Average WPI Index	110	112	115	120	
WPI Inflation		1.73%	2.92%	4.32%	2.99%
WPI: CPI (60:40)					3.48%

BSPTCL has hence, considered inflation rate of 3.48% on norms considered for FY 2019-20, for computation of A&G expenses for FY 2020-21. BSPTCL has estimated number of sub-stations and number of employees for FY 2020-21 as discussed in Table 4-7.

The following Table shows the computation of A&G expenses in accordance with Regulation 21.3 of BERC MYT Tariff Regulations, 2018:

Table 4-13: A&G Expenses for FY 2020-21

Sl. No.	Particulars	Norms considered in FY 2019-20	FY 2020-21	
			Approved in Tariff Order	Projected in ARR
1	Average annual WPI & CPI Index		2.70%	3.48%
2	Norms-A&G Expenses per personnel	1.0371	1.0543	1.0704
3	Norms-A&G Expenses per substation (Rs. Lakh)	12.4775	12.6848	12.8784
4	No. of Employees		3,275	2,342
5	No. of Sub-stations		155	152
6	A&G Expenses (No. of employees) (2*4) (Rs. Crore)		34.53	25.07

7	A&G Expenses (No of substations) (3*5) (Rs. Crore)		19.66	19.58
8	Total A&G Expenses for the year (Rs. Crore) (6+7)		54.19	44.65

The Hon'ble Commission is requested to approve A&G Expenses of Rs. 44.65 Crore in ARR of FY 2020-21.

Holding Company Expenses

BSPTCL submits that BSP(H)CL, which is the Holding Company of all the State Utilities and Generating Company, recovers its expenses from its subsidiary Companies. The cost sharing between the subsidiary Companies including BSPTCL is as per the amount of equity shares issued by the Holding Company to the Subsidiary Company. In light of the above, all the Utilities have to bear the cost of the Holding Company. BSPTCL is claiming holding expenses separately in line with the methodology adopted in previous Tariff Order.

BSPTCL has claimed Holding Company expenses for FY 2020-21 on the basis of actual expenses for FY 2018-19. BSPTCL has not considered any increase in Holding Expenses for FY 2020-21. Any variation with respect to the submitted expenses shall be claimed in True-up of FY 2020-21.

Table 4-14: Holding Company Expenses for FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	FY 2020-21 (Approved)	FY 2020-21 (As in ARR)
1	Holding Company Expenses for FY 2019-20	10.63	13.18
2	Inflationary Increase	0.03	-
3	Holding Company Expenses	10.66	13.18

The Hon'ble Commission is requested to approve Holding Company Expenses of Rs. 13.18 Crore in ARR of FY 2020-21.

The following Table shows the total O&M expenses claimed by BSPTCL based on projected expenses of FY 2020-21 as per Regulations 21.1, 21.2 and 21.3 of BERC MYT Tariff Regulations, 2018:

Table 4-15: Operation and Maintenance Expenses for FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	Approved in MYT Order	Projected in ARR
1	Employee Expenses	225.00	209.36
2	Repairs and Maintenance Expenses	114.15	103.25
3	Administration and General Expenses	54.19	44.65
4	Holding Company Expenses	10.66	13.18
5	Total Operation and Maintenance Expenses	404.00	370.45

The Hon'ble Commission is requested to approve Operation and Maintenance Expenses of Rs. 370.45 Crore in ARR of FY 2020-21.

4.9 Return on Equity

BSPTCL has considered closing equity of Rs. 375.41 Crore as on 31st March 2015 (approved in the True up for FY 2014-15), as opening equity for FY 2015-16 in respect of assets capitalised before 31st March 2015.

Further, in respect of projects commissioned with effect from 1st April 2015, the opening equity is considered at Rs. 1,452.58 Crore based on the closing equity considered in APR for FY 2019-20. The addition to equity during FY 2020-21 is considered at Rs. 401.33 Crore as projected in Table 4-4 of this Petition.

Regulation 22 read with Regulation 27 has considered rate of return on equity on pre-tax basis. The relevant extracts are as follows:

"22 (b) The return on the equity invested shall be allowed from the date of start of commercial operation and after put to use:

(c) Return on equity shall be computed at the rate of 15.5% for the project which is commissioned w.e.f. 01.04.2015 and further incentive equivalent to 0.5% will be allowed in the form of RoE, if the project is completed within schedule as per the Annexure A or original schedule period as the case may be. However, Return on Equity for the project commissioned prior to 01.04.2015 shall be allowed at the rate of 14%....

....27 (2) Rate of return on equity shall be rounded off to two decimal places and shall be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

Where "t" is the effective tax rate in accordance with Clause

(1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of licensee/SLDC paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess..."

BSPTCL has considered the MAT rate of 18.50%, which was revised for FY 2019-20.

BSPTCL has computed pre-tax RoE of **19.02%** (15.5% / (1-18.50%)) for assets capitalized after 31st March 2015 and pre-tax RoE of **17.18%** (14.00% / (1-18.50%)) for the assets capitalised before 31st March 2015.

The following Table shows the Return of Equity computed by BSPTCL for FY 2020-21:

Table 4-16: Return on Equity for FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	FY 2020-21	
		Approved in MYT Order	Projected in ARR
1	Opening Equity as on 1.4.2015	375.41	375.41
2	Rate of Return on Equity	14.00%	14.00%
3	Tax/MAT rate %	21.55%	18.50%
4	Rate of Return on Equity (Pre-tax)	17.85%	17.18%
5	Return on Equity (1*4)	67.01	64.51
	Equity on projects commissioned w.e.f.1.4.2015		
6	Opening Equity	1,591.51	1,452.58
7	Addition during the year	398.09	401.33
8	Closing Equity (6+7)	1,989.60	1,853.91
9	Average Equity	1,790.56	1,653.24
10	Rate of Return on Equity	15.50%	15.50%
11	Tax/MAT rate %	21.55%	18.50%
12	Rate of Return on Equity (Pre-tax)	19.76%	19.02%
13	Return on Equity (9*12)	353.81	314.42
14	Total Return on Equity (5+13)	420.82	378.93

The Hon'ble Commission is requested to approve pre-tax Return on Equity of Rs. 378.93 Crore in ARR of FY 2020-21.

4.10 Interest on Working Capital

Regulation 26 of the BERC MYT Regulations, 2018 specifies the method for computation of Interest on Working Capital for the Control Period. The relevant extracts are as follows:

"26 Interest on working Capital

The Transmission Licensee shall be allowed interest on the estimated level of working capital for the financial year, computed as follows:

(i) Receivables equivalent to two (2) month of transmission charges calculated on target availability level.

(ii) O&M Expenses of one (01) month.

(iii) Maintenance spares @ 15% of O&M expenses for one month.

Less:

(iv) Depreciation return on equity and contribution to contingency reserves equivalent to two months.

(v) Amount of security deposits from Transmission System users, if any, held during the year except the security deposits held in the form of Bank Guarantee from Transmission System Users.

b) Interest on working capital shall be on normative basis and rate of interest shall be equal to the State Bank one-year Marginal Cost of Funds-based Lending Rate ('MCLR') as of the date on which petition for determination of tariff is filed plus 150 basis points. The rate of interest for the purpose of Truing-up shall be the weighted average MCLR of the concern Financial Year plus 150 basis points.

(c) Interest shall be allowed on the amount held as security deposit from Transmission System Users at the Bank Rate as at the date on which the application for determination of tariff is filed. The interest allowed shall be subject to true up at weighted average Bank Rate of the concern Financial Year.

(d) If the State Government is providing resource gap grant and/or subsidy, the working capital shall be reduced by two months equivalent of that amount."

In accordance with the above provisions, BSPTCL has computed the interest on working capital for FY 2020-21. Regulation 26 (b) specifies that the rate of interest shall

be equal to State Bank of India (SBI) one-year MCLR as of the date on which Tariff Petition is filed plus 150 basis points.

BSPTCL has considered SBI MCLR rate of 8.00% for one year tenure revised with effect from 10th November 2019 as available on SBI website (<https://www.sbi.co.in/portal/web/interest-rates/mclr>), and accordingly added 150 basis points as provided in the Regulation. BSPTCL has therefore considered interest rate of 9.50% (8.00%+1.50%) for computation of interest on working capital for FY 2020-21. The maintenance spares are considered at 15% of 1-month O&M in accordance with the Regulations.

BSPTCL has computed the working capital and interest on working capital considering the expenses projected in ARR of FY 2020-21 at an interest rate of 9.50% for FY 2020-21, as given in the Table below:

Table 4-17: Interest on Working Capital for FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	FY 2020-21	
		Approved in MYT Order	Projected in ARR
1	Receivables equivalent to two (2) month of transmission charges	267.27	239.39
2	O&M Expenses of one month	33.67	30.87
3	Maintenance spares @15% of 1-month O&M expenses	5.05	4.63
4	Less: Depreciation, RoE and Contribution to Contingency Reserve for 2 months	137.03	118.68
	Total Working Capital	166.95	156.21
5	Interest on Working Capital (%)	10.00%	9.50%
6	Interest on Working Capital	16.69	14.84

The Hon'ble Commission is requested to approve Interest on Working Capital of Rs. 14.84 Crore in ARR of FY 2020-21.

4.11 Non-Tariff Income

BSPTCL submits that it has considered Non-Tariff Income for FY 2020-21 based on actual expenses of FY 2018-19 as per audited accounts:

Table 4-18: Non-Tariff Income for FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	FY 2020-21	
		Approved in MYT Order	Projected in ARR
1	Non-Tariff Income of FY 2019-20	76.50	121.28
2	Escalation	5%	-
3	Increase	3.83	-
4	Non-Tariff Income for the Year	80.33	121.28

The Hon'ble Commission is requested to approve Non-Tariff Income of Rs. 121.28 Crore in ARR of FY 2020-21.

4.12 Aggregate Revenue Requirement for FY 2020-21

Based on the discussions made in previous sections of this Chapter, BSPTCL has computed the ARR for Transmission Business for FY 2020-21, as shown in the Table below:

Table 4-19: Annual Transmission Charges/ARR of Transmission Business for FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	FY 2020-21	
		Approved in MYT Order	Projected in ARR
1	O&M expenses (a+ b+ c+ d)	404.00	370.45
	a. Employee cost	225.00	209.36
	b. R&M expenses	114.15	103.25
	c. A&G Expenses	54.19	44.65
	d. Holding Company expenses	10.66	13.18
2	Depreciation	401.36	333.16
3	Interest on Loan Capital	440.85	460.27
4	Interest on Working Capital	16.90	14.84
5	Return on Equity	420.82	378.93
6	Less: Non-Tariff Income	80.33	121.28
7	Net ARR	1,603.60	1,436.36

The Hon'ble Commission is requested to approve Net ARR of Rs. 1,436.36 Crore in ARR of FY 2020-21.

4.13 Trued-up Revenue Gap/(Surplus) of FY 2018-19

BSPTCL had arrived at net Revenue Gap of Rs. 83.45 Crore in the truing up for FY 2018-19. BSPTCL, in accordance with Regulation 22 of the BERC Tariff Regulations, 2007 has carried forward the Trued-up gap of FY 2018-19 along with carrying cost to the ARR of FY 2020-21.

BSPTCL, in accordance with Bihar Gazette dated 27th March 2014 (2nd amendment) Regulations 2014, has considered carrying cost @ 12.20% (SBI Base Rate of 8.70%+3.50%) as on 1.4.2018 for half year of FY 2018-19, @ 10.05% ((SBI MCLR Rate 8.55%+1.50%) as on 1st April 2019 for 1 year of FY 2019-20, and @ 9.50% (SBI MCLR 8.00%+1.50%) as on 15th November 2019 for half year of FY 2020-21.

The following Table shows the Revenue Gap considered by BSPTCL after computing the carrying cost as per methodology adopted by the Hon'ble Commission in last Tariff Order:

Table 4-20: Revenue Gap of FY 2018-19 along with Holding Cost

Sl. No.	Particulars	Amount (Rs. Crore)
1	Revenue Gap in True up for FY 2018-19	83.45
2	Interest for FY 2018-19 [SBI Base Rate 8.70%+3.5%) @12.20%] for 6 months	5.09
3	Interest for FY 2019-20 [SBI MCLR Rate 8.55%+1.5%) @10.05%] for 1 year	8.39
4	Interest for FY 2020-21 [SBI MCLR Rate 8.00%+1.5%) @10.05%] for 6 months	3.96
5	Total Gap with carrying cost/interest	100.89
6	Total Revenue Gap to be adjusted in ARR of FY 2020-21	100.89

The Hon'ble Commission is requested to approve Revenue Gap with Carrying Cost of Rs. 100.89 Crore for ARR of FY 2020-21.

4.14 APR Revenue Gap/(Surplus) of FY 2019-20

BSPTCL has arrived at a Revenue Surplus of **Rs. 150.25 Crore** in APR of FY 2019-20. As discussed in the previous Chapter of APR for FY 2019-20, BSPTCL in accordance

with the Regulations has considered the Revenue Surplus to be adjusted in ARR of FY 2020-21.

BSPTCL has not computed any holding cost on the Revenue Surplus to be adjusted in ARR of FY 2020-21 as it is humbly requested to the Hon'ble Commission to kindly allow BSPTCL to adjust this Revenue Surplus in FY 2019-20 itself. However, for the purpose of this Petition, BSPTCL has adjusted this Revenue Surplus in ARR of FY 2020-21, without any holding cost.

4.15 Annual Transmission Charges for FY 2020-21

BSPTCL has considered the components of ARR as discussed in this Chapter and has considered Revenue Gap along with carrying cost for FY 2018-19 and adjustment of Revenue Surplus of FY 2019-20 to arrive at Annual Transmission Charges for FY 2020-21, as shown in the following Table:

Table 4-21: Revenue Gap/(Surplus) for FY 2020-21 (Rs. Crore)

Sl. No.	Particulars	FY 2020-21
1	Net ARR considered for FY 2020-21	1,436.36
2	Add: Revenue Gap of FY 2018-19 along with carrying cost	100.89
3	Less: Standalone Revenue Surplus of FY 2019-20	(150.25)
3	Annual Transmission Charges for FY 2020-21 (1+2-3)	1,387.00

The Hon'ble Commission is requested to approve Transmission Charges of Rs. 1,387.00 Crore for FY 2020-21

4.16 Methodology of Recovery of ARR

Regulation 33 specifies the procedure for recovery of Annual Transmission Charges, as reproduced below:

“33.1 The annual Transmission charges of the transmission system shall be computed on annual basis, in accordance with norms contained in these regulations, aggregated as appropriate, and recovered on monthly basis as transmission charge from the users.

33.2 The Transmission charge (inclusive of incentive/disincentive) for AC system payable for a calendar month shall be:

$$\text{ARR} \times (\text{NDM}/\text{NDY}) \times (\text{TAFM}/\text{NATAF})$$

Where;

$$\text{NATAF} = 98\%$$

NDM = Number of days in the month

NDY = Number of days in the year

TAFM = Transmission System availability factor for the month, in percent computed in accordance with Appendix-II....

34. Sharing of charges for Intra-State Transmission Network

34.1 The Aggregate Revenue Requirement of the Transmission Licensee, as approved by the Commission, shall be shared by all long-term users and medium-term users of the transmission system on monthly basis in the ratio of their respective contracted transmission capacities to the total contracted transmission capacity, in accordance with the following formula:

$$\text{TC}_n = (\text{Transmission ARR net of incentive/disincentive}) \times (\text{NDM}/\text{NDY}) \times \text{CC}_n/\text{SCC}$$

Where,

TC_n = transmission charges for the month payable by the nth long-term user or medium-term user of the transmission system;

Transmission ARR = Aggregate Revenue Requirement of the Transmission Licensee, determined in accordance with Regulation 16 of these Regulations;

CC_n = capacity contracted in MW by the nth long-term user or medium term user of the transmission system during the month;

SCC = sum of capacities contracted in MW by all long-term users and medium-term users of the transmission system during the month:

NDM= Number of days in the month

NDY= Number of days in the year

Provided that the TC_n shall be payable on monthly basis by each long-term user or medium-term user of the transmission system and shall be collected by the State Transmission Utility (STU)."

In accordance with the above Regulation, BSPTCL requests the Hon'ble Commission to permit BSPTCL to kindly recover the Annual Transmission Charges of Rs. 1,387.00 Crore in 12 monthly instalments, subject to normative transmission availability of 98%.

For the purpose of determination of Transmission Charges, BSPTCL has segregated the Annual Transmission Charges of Rs. 1,387.00 Crore between NBPDC/ SBPDCL and Railways based on the Maximum Projected Load during FY 2020-21.

Maximum Peak Load of BSPTCL projected for FY 2020-21 is 6,016 MW, which is considered for computation of Transmission Charges. Maximum Load of NBPDC and SBPDCL is considered at 5,916 MW. Maximum Load of Railways is considered at 100 MW based on contracted capacity.

Transmission Charges for NBPDC and SBPDCL

BSPTCL has bifurcated the total ARR based on the maximum projected load of individual long-term open access consumers. The combined maximum load of NBPDC and SBPDCL is considered at 5,916 MW.

The Monthly Transmission Charges of BSPTCL to be recovered from both the Distribution Companies is as follows.

Table 4-22: Transmission Charges for NBPDC and SBPDCL (Rs. Crore)

Sl. No.	Particulars	FY 2020-21
1	Annual Transmission Charges for FY 2020-21 (Rs. Crore)	1,387.00
2	Total Maximum Projected Load (in MW)	6,016
3	Total Maximum Load of NBPDC and SBPDCL	5,916
4	Annual Transmission Charges to be levied to NBPDC and SBPDCL (Rs. Crore)	1,363.94
5	Monthly Transmission Charges to be levied to NBPDC and SBPDCL (Rs. Crore)	113.66

The Hon'ble Commission is requested to allow BSPTCL to recover monthly Transmission Charges of Rs. 113.66 Crore from NBPDC and SBPDCL in proportion to the power sharing ratio, subject to target availability.

Transmission Charges for Railways

BSPTCL has bifurcated the total ARR based on the maximum projected load of individual long-term open access consumers. The combined maximum load of Railway is considered at 100 MW based on contracted capacity.

The Monthly Transmission Charges of BSPTCL to be recovered from Railways is as follows

Table 4-23: Transmission Charges for Railways (Rs. Crore)

Sl. No.	Particulars	FY 2020-21
1	Annual Transmission Charges for FY 2020-21 (Rs. Crore)	1,387.00
2	Total Maximum Projected Load (in MW)	6,016
3	Total Contracted Capacity of Railway	100
4	Annual Transmission Charges to be levied to Railway (Rs. Crore)	23.06
5	Monthly Transmission Charges to be levied to Railway (Rs. Crore)	1.92

The Hon'ble Commission is requested to allow BSPTCL to recover monthly Transmission Charges of Rs. 1.92 Crore from Railways, subject to target availability.

4.17 Transmission Charges for Short Term Open Access Consumers

BSPTCL has determined Short Term Open Access charges in accordance with the methodology adopted by the Hon'ble Commission in previous Tariff Order.

Transmission Charges payable by Short Term Open Access Consumer shall be determined by the following formula.

$$\text{Transmission Charges} = \text{ATC} / (\text{PLST} \times 8760)$$

Where,

ATC = Annual Transmission Charges arrived for FY 2020-21 for BSPTCL in Rs. Crore

PLST = Peak Load Projected to be served by the State Transmission System.

BSPTCL for the purpose of computation of Transmission Charges has considered peak load of 6,016 MW.

$$\begin{aligned}\text{Transmission Charges for Short Term Open Access Consumer} &= 1,387 / (6016 \times 8760) \\ &= \mathbf{Rs. 263.19/MWh}\end{aligned}$$

The Transmission Charges for Short Term Open Access shall be payable on the basis of energy actually scheduled for short-term transactions.

5 Compliance to Directives

The Hon'ble Commission in Tariff Order dated 15 February 2019, had issued certain directives to Bihar State Power Transmission Company Limited (BSPTCL). This chapter deals with the compliance status of directives for compliance and implementation by the petitioner

5.1 Directive 1: Energy Auditing and Transmission Loss

a) Original Directive issued by the Hon'ble Commission

The direction issued by the Hon'ble Commission in this regard is as follows:

"The Commission has observed that in the absence of meters in working conditions at all the required locations, energy audit cannot be carried out and transmission losses cannot be properly estimated. The Commission had, therefore, directed the BSPTCL to take urgent action to provide meters at all the locations and to replace all the defective meters with good working meters and report compliance by end of June 2018"

b) Commission's Observation and Direction in Order dated 15 February 2019

The Hon'ble Commission in its Order dated 15 February 2019, observed as follows:

"The Commission directs the Petitioner to take urgent action to provide meters at the balance locations and also to replace all the defective meters with good working meters and sent quarterly compliance report to the Commission beginning June 2019."

c) Commission's directive as per letter dated September 27, 2019:

1. BSPTCL shall expedite and complete installation of meters in their operational GSS up to 33 kV Level.
2. Energy loss shown by BSPTCL for the month of April 2019, May 2019, and June 2019 are 1.394%, 1.912%, and 2.124%, respectively. However, calculation for losses are not in conformity with overall monthly losses and there are numerous errors apparent in supplemented documents furnished for transmission losses calculation. BSPTCL shall furnish corrected and holistic transmission losses of their entire system supplemented in lucid manner from April 2019 onwards.

-
3. Energy Loss furnished for 142 no.s GSS of BSPTCL having individual GSS loss either in negative or above 4%, may be taken care by BSPTCL while furnishing the compliance.

d) Compliance Status and Actions

1. In compliance of the direction, BSPTCL has taken up the project for supply, installation, testing & commissioning of DLMS compliant 0.2s class ABT type energy meter with implementation of 100% metering, data acquisition and online ABT monitoring & AMC for a period of 5 years. The project cost is Rs. 73.06 crore and is executed by M/s Secure Meters Ltd.

The status of the project is as below:

- Total number of GSS as per order: 96 nos.
 - Total no. of meters to be installed as per order: 1600 Nos.
 - Approval for additional 46 nos. of GSS has been accorded thereby making total number of GSS: 142 nos.
 - Total number of meters assessed for 142 Nos. of GSS: 1769 Nos
 - All ABT meters and Metering Panels have been installed in all 142 Nos. GSS of BSPTCL
 - Report is enclosed as **Annexure C1**
2. In compliance of the directions, BSPTCL hereby submits the transmission loss and its calculations for the month of June, July and August 2019 (**Annexure C2**) with relevant supporting data of voltage-wise import and export of the system, along with the revised transmission loss calculations of April 2019, May 2019, as **Annexure C3**.
 3. BSPTCL hereby submits the Energy loss for 68 Nos. of GSS with metering data for the Month of September 2019 in **Annexure C1**.

5.2 Directive 2: Maintenance of Asset/Property Register

a) Original Directive issued by the Hon'ble Commission

The direction issued by the Hon'ble Commission in this regard is as follows:

"The Commission had directed the BSPTCL to maintain asset/ property register showing details nature of equipment, value of equipment, details of land, extent of

land, buildings etc., and shall submit the details along with tariff petition to be filed every year”

b) Commission’s Observation and Direction in Order dated 15 February 2019

The Hon’ble Commission has observed that the Petitioner has submitted the details of equipment available at various substations in the form of scan copy/excel sheet but no details for lines have been furnished. The equipment details furnished do not depict the value, i.e., cost of equipment and other details. The property register should contain all the details of the equipment available at the location, i.e. substation, etc., showing the details of nature of equipment, year of installation, value, rate of depreciation, depreciation (year on year as well as the accumulated depreciation), residual value, whether the equipment is in working condition or not, etc. Therefore, the Commission again directs the BSPTCL to submit the property register showing all the particulars by 30th September 2019.

c) Commission’s directive as per letter dated September 27, 2019:

BSPTCL shall expedite the process of preparation of Asset Register and submit it positively in the next compliance report. BSPTCL shall ensure furnishing of Asset Register along with filing of ensuing year ARR Petition, failing which it shall be constrained to disallow depreciation, RoE and interest on loan in absence of Asset Register from next ARR for FY 2020-21.

d) Compliance Status and Actions

In compliance of the directive, BSPTCL respectfully submits that the Hon’ble Commission will appreciate that physical verification of the fixed assets and preparation of Asset Register with all the desired details is a time-consuming activity, and BSPTCL will require the assistance of qualified agencies for undertaking the task. BSPTCL is hence, in the process of appointment of Consultant for undertaking the desired activity. The draft RFP for appointment of Consultant has been prepared and is in the advance stage of finalisation through competent authority. BSPTCL further assures that tendering process will be finalised within 3 months.

It is envisaged that the activity of physical verification of the fixed assets and preparation of Asset Register with all the desired details will take around 1.5 years to 2 years. Hence, BSPTCL respectfully requests the Hon’ble Commission to provide the necessary time for completion of this activity.

5.3 Directive 3: Details of programmed Capital Works

a) Original Directive issued by the Hon'ble Commission

The direction issued by the Hon'ble Commission in this regard is as follows:

"The Commission in its previous tariff order had directed BSPTCL to submit the details of programmed works during FY 2017-18 and FY 2018-19 and their tentative commissioning dates"

b) Commission's Observation and Direction in Order dated 15 February, 2019

The Hon'ble Commission in its Order dated 15 February 2019, observed as follows:

"The Commission directs the petitioner to file the details of works programmed for commissioning during FY 2018-19 and 1st half year of FY 2019-20 by 30th June 2019 and thereafter at end of every quarter, if need be."

c) Commission's directive as per letter dated September 27, 2019

1. BSPTCL furnished details (COD, Mode of finance, cost of project) of 58 Nos. against 79 Nos. projects for FY 2019-20. Remaining 21 Nos. needs to be furnished.
2. Expenditure and capitalization details as on 31.03.2019 not furnished.
3. Justification and supporting documents for cost escalation is not furnished. Rs.44.72 crore cost escalation and time overrun of 10 days to 24 months.
4. Many elements showing scheduled completion dates beyond FY 2019.
5. Status of work including Power flow status element stated in Serial 79 scheduled to be commissioned on 31.12.2018 has not been mentioned.
6. Most of ADB funded projects are delayed ranging from 5 months to 16 months and appearing to be delayed more.

d) Compliance Status and Actions

1. In compliance of the direction, BSPTCL has attached the details of date of commissioning of projects, mode of finance, and cost of all 79 projects as **Annexure C4**.
2. In compliance of the direction, BSPTCL has attached details of expenditure incurred and capitalized as on 31.03.2019 as **Annexure C4**.
3. The reasons for quantity variation are submitted as **Annexure C5 and Annexure C6**. Further, BSPTCL respectfully submits that the time overruns of the project are due to technical constraints and various aspects such as problems in Right of

Way, Land Acquisition, etc., involving the co-operation of other agencies. BSPTCL's officers are regularly following up with concerned authorities for resolving the issues.

4. For point no 4 to 6, detailed description is submitted as **Annexure C4 and Annexure C5.**

5.4 Directive 4: Synchronising the Planned Transmission Work with BGCL

a) Original Directive issued by the Hon'ble Commission

The direction issued by the Hon'ble Commission in this regard is as follows:

"The Commission had directed the BSPTCL to program its works connected with BGCL programmed works in such a way that as soon as the programmed works of BGCL are energized, the same are immediately put into use simultaneously by completing the connected interlinking works etc"

b) Commission's Observation and Direction in Order dated 15 February, 2019

Since the original directive has yet not been complied with and the Petitioner has given assurance only, the Commission has no option but reiterates the directive for the Control Period. No laxity on this score will be entertained. The quarterly report of the compliance be submitted to the Commission.

c) Commission's directive as per letter dated September 27, 2019

1. BSPTCL shall furnish Minutes of Meeting.
2. BSPTCL shall also submit report of works, which are linked with works of BGCL for evacuation of power.

d) Compliance Status and Actions

1. In compliance of the direction, BSPTCL is enclosing the Minutes of Meeting as **Annexure C7.**
2. As per the meeting held with BGCL officials on November 14, 2019, it was confirmed that there is no work of BSPTCL that is held-up on account of delay on BGCL's side or vice-versa. as on date. The Minutes of Meeting is being submitted as **Annexure C13.**

5.5 Directive 5: Meters at interface points of BSPTCL & BGCL

a) Original Directive issued by the Hon'ble Commission

The direction issued by the Hon'ble Commission in this regard is as follows:

"The Commission had directed the BSPTCL to record the energy transmitted by BGCL transmission system into BSPTCL system at various interface points, on monthly basis, and submit the same for Commission's perusal"

b) Commission's Observation and Direction in Order dated 15 February 2019

Since the monthly report, as directed, has not been submitted to the Commission, the Commission reiterates this earlier directive so that Commission could validate the reports independently to satisfy itself. The report to the Commission be submitted on quarterly basis.

c) Commission's directive as per letter dated September 27, 2019

1. BSPTCL shall verify the reading with BGCL and shall furnish the correct data.
2. BSPTCL shall ensure that reference date and time of capturing of initial reading and final reading should be same for both BSPTCL and BGCL.
3. Further, BSPTCL shall furnish energy transmitted from BGCL system to their system for the month of June 2019 and onwards.

d) Compliance Status and Actions

Report of energy transmitted by BGCL transmission system into BSPTCL system at all interface point for the months of June, July and August 2019 is being enclosed as **Annexure C8**.

Further, it is submitted that a meeting was held with BGCL officials on November 14, 2019, in which it was decided that both BGCL and BSPTCL will take meter reading at midnight of the last date of the month to ensure synchronisation of data. This will be followed from last date of November 2019. The minutes of meeting is being submitted as **Annexure C13**. Further, it is submitted that the DISCOMs also need to be involved so that there is complete synchronisation in this regard.

5.6 Directive 6: Colony Consumption and Electricity Charges

a) Original Directive issued by the Hon'ble Commission

The direction issued by the Hon'ble Commission in this regard is as follows:

"The BSPTCL was directed to furnish the details of auxiliary consumption and colony consumption in the prescribed format vide tariff order dated March 7, 2018"

b) Commission's Observation and Direction in Order dated 15 February, 2019

The Hon'ble Commission in its Order dated 15 February 2019, observed as follows:

"Commission feels that the petitioner is not serious about complying the orders. Therefore, the Commission reiterates this directive failing which the BSPTCL may face punitive action."

c) Commission's directive as per letter dated September 27, 2019

1. BSPTCL shall furnish information regarding colony consumption of remaining GSS and any other GSS, which have attained CoD till date.
2. BSPTCL shall furnish GSS wise auxiliary consumption and colony consumption and corresponding amount of bill paid to Discoms at least for the first quarter of FY 2019-20 and shall utilize the SST only for the purpose of auxiliary consumption of GSS and immediately remove the colony consumption from SST.
3. In Annexure II of BSPTCL submission in their % loss calculations for the months of April, May and June 2019, it has been shown that among 142 Nos. GSS, 68 Nos. SST having zero reading. BSPTCL may furnish the reason for the same.
4. BSPTCL shall obtain separate connection from Discoms for their auxiliary consumption and colony consumption and submit a report along with ensuing year ARR, failing which penalty may be imposed to BSPTCL apart from compensation to Discoms for electrical charges from ARR of BSPTCL.

d) Compliance Status and Actions

In compliance of the direction, BSPTCL has intimated SBPDCL and NBPDCCL for installation of separate meter for auxiliary consumption and colony consumption. Out of 142 GSS of BSPTCL, only 72 GSS are having colonies. Out of this, 9 GSSs are having separate metering for auxiliary consumption and colony consumption and 4 GSS are availing supply from DISCOM. For rest of the GSS, field officers of BSPTCL and

DISCOM are coordinating for early installation of separate metering for auxiliary consumption and colony consumption. BSPTCL is submitting the correspondence with DISCOM as **Annexure C9**. BSPTCL requests the Hon'ble Commission to intervene and direct the DISCOMs to ensure compliance with the Hon'ble Commission's directions.

5.7 Directive 7: Adherence to BERC (Procedure for filing Capital investment and Capitalisation plan) Regulations, 2018

a) Directive issued by the Hon'ble Commission in Order dated 15 February, 2019

The direction issued by the Hon'ble Commission in this regard is as follows:

“BSPTCL is directed that it will strictly adhere to the Regulation 6 of the above Regulations in its next ARR filing, failing which the Commission will not approve any new capital expenditure scheme.

- a. A physical completion certificate (PCC) issued by Tender awarding authority, certifying that the work in question has been fully executed physically and the assets created are put in use.*
- b. A financial completion certificate (FCC) shall follow the PCC certifying that the assets created have been duly entered in to the fixed asset register and have been transferred from CWIP register to GFA register. The FCC shall be issued by the concerned HoD of finance Department.*
- c. The PCC and FCC shall have to be submitted to the Commission within 30 days of completion of the work.”*

b) Commission's directive as per letter dated September 27, 2019

1. 34 Nos of PCC have been submitted out of 79 nos. of elements/NITs as mentioned in Table 6.3 of Tariff Order for FY 2019-20 of BSPTCL. Further, in place of furnishing summarised quantity and complete description of work in PCC, BSPTCL has simply stated that “construction of work has been physically completed and compliance of site observation/ punch points report is under progress”.
2. PCC submitted against ICB No. 27/Package G-1/BSPTCL /ADB/ 2016 for the work has not been provided in Table 6.3 of Tariff Order for FY 2019-20 of BSPTCL. Reason shall be furnished by BSPTCL.

-
3. Against work of 21 Nos. of GSS for ICB No. 26/ Package F-1/BSPTCL/ ADB/ 2016, PCC for only 12 nos. have been provided by BSPTCL. Reason shall be furnished by BSPTCL.
 4. With respect to FCC, BSPTCL has submitted internal details of payments made to contractor/supplier. BSPTCL shall furnish proper FCC with reference to PCC separately showing at least heads of capitalization with complete descriptions of assets created, original award cost bifurcating IDC and IEDC, amount actually capitalized bifurcating IDC and IEDC, original scheduled start date of work, original scheduled completion date of work, source of actual funding approved by BERC in case of part capitalization of original scope of work.

c) Compliance Status and Actions

1. PCC for 68 Nos. of completed projects have been submitted as Annexure C10 as per directive. These elements are already being used and are serving the intended purpose. For further details, LOA and reconciliation details are being submitted shortly.
2. Due to typographical error, some elements were deleted. The same have been added and are enclosed at Serial No. 80 in Annexure C5 submitted.
3. Sites of ICB -26/Package F-1/ ADB /2016 have not been completed till March 2019. PCC of 12 sites out of 21 sites have been issued and PCC for the remaining sites could not be submitted as they were commissioned in August 2019. The PCC for the remaining sites will be issued and be sent to the Hon'ble Commission separately.
4. The updated FCCs with details are submitted as Annexure C11. BSPTCL will submit the remaining FCCs shortly.

5.8 Directive 8: Timely Completion of Projects/Schemes

a) Directive issued by the Hon'ble Commission in Order dated 15 February, 2019

The direction issued by the Hon'ble Commission in this regard is as follows:

“BSPTCL shall take all possible measures to ensure that the projects/ schemes taken up are completed as per schedule. In this regard, it is clarified that the Commission will not allow any interest during construction (IDC) for delays exceeding:

-
- a. *one month in respect of projects/schemes with completion schedules of up to one year; and*
 - b. *three months for projects/ schemes with completion schedule of more than one year unless the Commission's approval for extension in the completion schedule is obtained in advance"*

b) Compliance Status and Actions

BSPTCL wishes to submit that this issue is relevant only in cases where IDC is being claimed, i.e., only for the projects that are funded through ADB loan. The details of Project packages funded by ADB loan are attached as **Annexure C12**. Amongst these, few packages are complete and have been already capitalized.

Project-wise status and expected schedule of delayed projects mentioning period of delay has been submitted as **Annexure C5 and Annexure C6**.

5.9 Directive 9: Utilisation / Loading Levels of Transmission Assets

a) Directives issued by the Hon'ble Commission in Order dated 15 February, 2019

The direction issued by the Hon'ble Commission in this regard is as follows:

"BSPTCL shall on its website, upload and regularly update the loading levels of its transmission lines, transformers and sub-stations. It will identify the critical lines and substations of its network. Compliance to this directive be sent to the Commission with documentary evidence by 30.06.2019."

b) Compliance Status and Actions

Complied with and data uploaded in website in coordination with IT department on 03.10.2019 (<https://www.bsptcl.in/Noticeboard.aspx?id=41271>). The data furnished in the website is submitted as **Annexure C8**.

5.10 Directive 10: Utilisation / Loading Levels of Transmission Assets

a) Directives issued by the Hon'ble Commission in Order dated 15 February, 2019

The direction issued by the Hon'ble Commission in this regard is as follows:

“BSPTCL is not only a transmission company but stated to be a State Transmission Utility (STU) and as STU, the BSPTCL has to perform the coordinating role with other transmission companies i.e. Bihar Grid Company Limited (BGCL) and Discoms of the State for integrated planning and execution of the infrastructure projects in the State. The distribution of geographical area and projects between the two transmission companies of the State namely BSPTCL and BGCL should be properly documented and a Composite Power Map clearly delineating the infrastructure of each transmission separately be prepared by the STU and submitted to the Commission and Discoms by 30.09.2019.”

b) Compliance Status and Actions

In compliance of the direction, BSPTCL hereby submits the detailed Power Map. The Map depicts the distribution of the geographical area and projects between the two Transmission Companies of the State and the composite Power Map clearly delineating infrastructure of BSPTCL and BGCL.

Further it is submitted that Regular meetings are being held at STU with all the Transmission system users to address the common issues being faced. This will help to identify the areas and scope of improvement.

5.11 Directive 11: Disclosure with respect to quantitative details no. of employees, total transmission lines in Ckt KM, no. of Substations and no. of bays

a) Directive issued by the Hon’ble Commission in Order dated 15 February 2019

The direction issued by the Hon’ble Commission in this regard is as follows:

“The Commission directs BSPTCL to include quantitative details of no. of personnel per Ckt KM, no. of personnel per bay along with no. of personnel per Ckt/km, no. of personnel per bay and no. substations in their audited accounts or submit separate audit report of above quantitative details for truing up of each of the year of the control period as specified in BERC (Multi Year Transmission Tariff and SLDC charges) Regulations 2018”.

b) Compliance Status and Actions

Complied in the audited accounts of FY 2018-19. This incorporation will reflect in the Truing up Petition of BSPTCL for FY 2018-19.