

**BEFORE THE HON'BLE APPELLATE TRIBUNAL FOR
ELECTRICITY AT NEW DELHI
APPELLATE JURISDICTION**

APPEAL NO.....OF 2019

IN THE MATTER OF:

Bihar State Power Transmission Company LtdAppellant

Versus

Bihar Electricity Regulatory CommissionRespondent

PAPER BBOK

(INDEX VOLUME – I)

**ADVOCATE FOR THE APPELLANT
SHRI SUNIL KUMAR JHA**

OPENING SHEET
(To be enclosed at the time of filing)

Appeal/ AFR No.	Date of filing	Appellants	Respondents	Counsel of Appellants	Full DD Details	Relief sought- briefly & accurately for permanent record purpose with provisions of law involved.
	12.02.2019	Bihar State Power Transmission Company Ltd. 4 th Floor, Vidyut Bhawan, Bailey Road Patna - 800 021	Bihar Electricity Regulatory Commission, Vidyut Bhawan - II, J L Nehru Marg, Patna - 800 021.	Sunil Kumar Jha, Room No. 'M', Consultation Room, Lawyers' Chambers Block-I, Delhi High Court New Delhi 110003 Mob:9811109776 Email: advocatesunil@gmail.com	DD No. 093482 dated 06.02.2019 for Rs. 203175/- drawn on Canara Bank, New Delhi	The Appellant is filing the present appeal under Section 111 of Electricity Act 2003 praying for the modification of Tariff Order dated 07.03. 2018 to the extent as mentioned in the grounds of the appeal and setting aside of impugned order dated 20.11.2018 passed in Review Petition No. 15 of 2018.

**BEFORE THE HON'BLE APPELLATE TRIBUNAL FOR
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(INDEX VOLUME – I)

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1.	Synopsis and list of Dates		A - C
2.	Composite Appeal under Section 111 of the Electricity Act 2003 against the Tariff Order dated 07.03.2018 and Order dated 20.11.2018 passed by the Bihar Electricity Regulatory Commission along with affidavit	Rs. 202000/-	1 - 25
3.	ANNEXURE -A-1 True downloaded copy of Impugned Tariff Order dated 07.03.2018 passed by BEREC in case No. 37 of 2017.	Rs. 25.00	26 - 186
4.	ANNEXURE -A-2 (Colly) True downloaded copy of impugned order dated 20.11.2018 passed by BEREC in Review Petition No. 15 of 2018 along with copy of covering letter dated 27.11.2018.	Rs. 25.00	187 -206A

APPELLANT

Through

Sunil Kumar Jha, Advocate
Room No. "M" Consultation Room,
Lawyers Chambers Block-I
Delhi High Court, New Delhi-110003
Mobile 9811109776
Email: advocatesunil@gmail.com

Place: New Delhi

Dated: February 2019

A

SYNOPSIS AND THE LIST OF DATES

The Appellant by the present appeal is challenging the legality, validity and propriety of the impugned Tariff Order dated 07.03.2018 in case No. 37 of 2017 and impugned order dated 20.11.2018 passed in Review Case No. 15 of 2018 whereby the Ld. Bihar Electricity Regulatory Commission in gross violation of their own regulation 68 rejected the claims of Rs. 2.81 Crore of the appellant towards incentive @1% of equity for each percentage point of increase in annual availability beyond the target availability which is 98%. The Appellant had achieved the Annual Transmission Availability at 98.918% for the FY 2016-17.

The Ld Commission, further in the absence of any provisions mentioned in the Regulations prescribing the terms and conditions for determination of tariff 2007 disincentivized for the technical transmission loss and retained the Transmission Loss level at normative level of 3.92% in the impugned Tariff Order dated 07.03.2018 and disallowed Rs. 2.05 Crore for not achieving transmission loss target by the Commission.

B

The appellant has taken loan from PFC of Rs. 90 Crore due to delay in BRGF funding. The said loan was availed from December 31, 2016 to February 20, 2017, for creation of fixed assets, for 52 days which incurred an interest of Rs. 1.31 Crore. The Ld. BERC Commission despite approving the average loan of Rs. 763.46 crore declined to allow the additional interest of Rs. 29.62 lakh in gross violation of BERC Terms and Conditions of Tariff Regulations 2007.

The analysis and findings by the BERC in Tariff Order are not based on the cogent reason and the impugned Tariff Order and order passed in the Review Petition filed by the Appellant are contrary to the facts as well as material on record. Disallowance of Rs.2.05 Crore, rejection of claim of the appellant of Rs. 2.81 Crore and not considering the interest of Rs. 131 Crore incurred and actually paid by the Appellant on the loan are not in consonance with the BERC Regulations and the material/record produced before the Ld BERC.

LIST OF DATES AND EVENTS LEADING TO APPEAL

The Relevant and important dates as regards this appeal are recorded below:

24.11.2017	Petition for True up for FY 2016-17, Annual Performance Review (APR) FOR FY 2017-18 and
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C

	Revised Annual Revenue Requirement (ARR) for FY 2018-19 filed which was registered as Case No. 37 of 2017
07.03.2018	Tariff Order, Truing up for FY 2016-17, Annual Performance Review for FY 2017-18 and Annual Revenue Requirement (ARR) and determination of Transmission Charges for FY 2018-19 issued in case No. 37 of 2017.
April 2018	The Appellant filed a Review Petition against the Tariff Order dated 07.03.2018
20.11.2018	The review petition of the Appellant was rejected by the Ld. BERC Commission
27.11.2018	The Appellant received the Order on its review petition.
	Hence this Appeal

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**BEFORE THE HON'BLE APPELLATE TRIBUNAL FOR ELECTRICITY AT
NEW DELHI**

APPEAL NO. 2019

IN THE MATTER OF:

Composite Appeal under Section 111 of the Electricity Act, 2003 challenging the legality, validity and propriety of the orders dated 07.03.2018 passed by the Ld. Bihar Electricity Regulatory Commission in case No.37 of 2017 and the order dated 20.11.2018 in Review Petition No. 15 of 2018.

AND

IN THE MATTER OF:

Electricity Act 2003,

AND

IN THE MATTER OF:

Bihar State Power Transmission Company Ltd. (BSPTCL)
4th Floor, Vidyut Bhawan, Bailey Road Patna 800021. ...Appellant

Versus

Bihar Electricity Regulatory Commission
Vidyut Bhawan-II, J. L. Nehru Marg,
Patna- 800 021

..... **Respondent**

**APPEAL UNDER SECTION 111 OF THE ELECTRICITY ACT
2003 AGAINST THE IMPUGNED ORDER DATED**

The Appellant most respectfully submits as under:

1. Details of Appeal:

1.1 The Appellant is a transmission Company constituted under Bihar State Electricity Reforms Transfer Scheme 2012 having its registered office at 4th Floor, Vidyut Bhawan, Bailey Road Patna 800021. The present appeal relates to the Tariff

Order issued on 7 March 2018 to be effective from 1ST April 2018.

1.2 The respondent is Bihar Electricity Regulatory Commission which was constituted by the Government of Bihar under Section 17 of the Electricity Regulatory Commission Act, 1998 vide Government of Bihar notification No. 1284 dated 15th April 2002. The Electricity Regulatory Commission Act, 1998 was repealed by Section 185(1) of the Electricity Act 2003. The first proviso of Section 82 (1) of the Electricity Act 2003 has ensured continuity of the Bihar Electricity Regulatory Commission by laying down that the State Electricity Regulatory Commission established by the State Government under Section 17 of Electricity Regulatory Commission Act, 1998 and functioning as such, immediately before the appointed date, shall be the State Electricity Regulatory Commission for the purpose of the Act.

1.3 The Appellant is filing the present appeal challenging the legality and validity of the Tariff Order dated 7th March passed by the Ld. Bihar Electricity Regulatory Commission in Case No. 37 of 2017 and the order dated 20.11.2018 Review Petition No. 15 of 2018. True downloaded copy of Tariff Order dated 7th March 2017 and True downloaded Copy of Order dated

20.11.2018 from the respondent's website are annexed herewith as ANNEXURE A- 1 and A-2.

2. Date on which the order appealed against is communicated and proof thereof, if any:

The impugned Tariff Order in Case No. 37 of 2017 was passed on 7th March 2018 and impugned Order under Review Case No. 15 of 2018 was passed on 20.11.2018 which was communicated to the Appellant on 27.11.2018.

3. The address of the Appellant for service is that of its advocates which is hereunder:

Sunil Kumar Jha, Advocate
Room No. 'M' Consultation Room,
Lawyers Chambers Block-I,
Delhi High Court, New Delhi-110003
Mobile 9811109776
Email: advocatesunil@gmail.com

4. The address of the Respondent for service of all notices in the appeal are as set out hereunder:

The address of the respondent is the same as mentioned in the Memo of Parties.

5. **Jurisdiction of the Appellate Tribunal:** The Appellant declares that the subject matter of the appeal is within the jurisdiction of this Hon'ble Tribunal in terms of Section 111 of the Act.

6. **Limitation:** The appellant submits that there is a delay of 296 days for challenging the impugned Tariff Order dated 07.03.2018 owing to the pendency of review petition before Id. BERC and 31 days delay in challenging the impugned order dated 20.11.2018 passed in the review petition and duly received by the Appellant on 27.11.2018 owing to official exigencies. The appellant is filing application for condonation of delay in preferring the composite appeal against the above impugned orders.

7. **Facts of the case:**
 - 7.1 The Appellant filed a petition before the Ld. BERC in accordance with the provisions of section 61 and 62 of the Electricity Act, 2003 and taking into consideration of the BERC (Terms and Conditions for Determination of Tariff) Regulations, 2007 as amended time to time for True-up for FY 2016-17, Annual Performance Review (APR) for FY 2017-18, Annual Revenue Requirement (ARR) for FY 2018-19 considering the approval values of MYT order dated 21.03.2016 and tariff

order dated 09.03.2017. The said petition was filed by the appellant on independent basis.

7.2 The Appellant along with the petition submitted the regulatory formats with data and information to the extent applicable, with submission to make available any further information/additional data required by the Commission during the course of the proceedings. A copy of the petition filed before BEREC along with documents is annexed and marked herewith as **ANNEXURE-A-3**.

7.3 It is submitted that the Transmission loss trajectory approved by the Ld. BEREC in the MYT order dated 21.03.2016 and Tariff Order March 9, 2017 was as follows:

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Transmission Loss	3.92	3.92	3.92

The actual Transmission loss for FY 2016-17 was 4.47 as per the audited accounts of the appellant. The appellant analyzed the losses in each GSS as well as losses in transmission lines and observed that out of 119 GSS of appellant 60 GSS had transmission loss less than 2% and 6 GSS have less than 3% and

very few GSS had losses more than 3% and negative which was on account of defective energy meters or error in connection of CT & PT. It was further submitted that steps were being taken for replacement of defective meters.

7.4 It is submitted that that the average transmission lines losses at 220KV level is 1.52% and at 132 KV level is 1.47% and some of the Transmission lines have not been calculated due to defective meter or non-availability of meter reading at PGCIL end. It was emphasized before the Commission that the transmission losses of the Appellant are generally less than 3% and are the technical loss only and are not caused by any other reason such as theft etc.

7.5 It is submitted that the Ld. BEREC approved the Transmission Loss Trajectory in the MYT order dated 21.03.2016 and 09.03.2017 at 3.92%. The appellant submits that the transmission loss as projected before the Ld. BEREC at 4.74% was as per audited accounts of the appellant which were on the higher side and 100% metering would show the exact loss which would be less than 3%.

7.6 It is further submitted that the direction to install appropriate energy meters in working condition at all 33 KV feeders are being complied with by the appellant and necessary approval and sanctions are already been taken by the competent authority. It is reiterated by the appellant that the transmission loss is not more than 3%.

7.7 It is submitted that Ld. BERC vide Tariff Order dated 07.03.2018 retained the transmission loss level at normative level of 3.92% as approved in Tariff Order dated 21.03.2016 and accordingly disallowed Rs. 2.05 Crore in the Tariff Order dated 07.03.2018 which is not in accordance with the BERC Tariff Regulations, 2007. As per the BERC Tariff Regulations, 2007, transmission loss levels have no material impact on determination of Annual Revenue Requirement. It is submitted that there is no provision of the incentivizing and de-incentivizing for transmission loss in BERC Regulations 2007.

7.8 It is submitted that the appellant before Id. BERC submitted that Regulation 76 specifically speaks about the incentive for transmission licensees @1% of equity for each percent point of increase in annual availability beyond the target level prescribed by the respondent under Regulations for

prescribing the terms and conditions for determining the tariff.

BERC Regulation 76 is reproduced herein below:

"76. Incentive

- (1) *The Transmission Licensee shall be entitled to incentive @1% of the equity for each percentage point of increase in annual availability beyond the target availability prescribed under Regulation 68 in accordance with the following formula:*

$$\text{Incentive} = \text{Equity} \times (\text{Annual availability achieved} - \text{target availability}) \div 100$$

- (2) *Incentive shall be shared by long term customers in the ratio of their average allotted transmission capacity for the year.*

For recovery of full transmission charges, the availability of transmission system is fixed at 98 % and the appellant, having achieved the target beyond 98% as set out under Regulation is entitled to incentive@1% of the equity for .918% increase in annual availability beyond the availability target fixed under Regulation 68 which comes to Rs. 5.10 Crores whereas the Ld. Commission has approved only a sum of Rs. 2.29 Crores. The Regulation 68 is reproduced herein below:

"68 Target Availability for recovery of full transmission charges:

(i)	AC System	98%
(ii)	HVDC System	95%

Note: Recovery of fixed charges below the level of target availability shall be on pro rata basis. At zero availability, no transmission charges shall be payable."

7.9 It is pertinent to mention here that the Ld Commission observed from the data furnished by the appellant that there are some discrepancies in the computation of month-wise TAF. The appellant vide letter no. 17 dated 10.01.2018 has furnished the revised month-wise TAF and the TAF achieved at Rs.98.918 for FY 2016-17 which was found in order by the Ld Commission. But instead of approving a sum of Rs. 5.10 crores against incentive for achieving more than the target fixed under BEREC Regulation 68 approved only Rs. 2.29 Crore in violation of its own Regulation. A copy of the letter No. 17 dated 10.01.2018 is annexed and marked herewith as **ANNEXURE A-4.**

7.10 As regard to the fixing the target for availability of transmission system is considered it is submitted that it is amply clear from reading the Regulation 68 (BERC Regulation, 2007) the Transmission System availability target is fixed at

98% instead of 98.5% as mentioned in CERC guidelines. It is the target set under the BEREC Regulations which is binding on the appellant and not given in the guidelines of CERC as the same would be inconsistent with the BEREC Terms and Conditions of Tariff Regulations 2007. The appellant is entitled to the incentive @1% of equity for each percentage point of increase in annual availability beyond the target availability which is 98% amounting to Rs. 5.10 Crore for the FY 2016-17 out of which the Id. Commission approved a sum of Rs. 2.29 and the appellant is entitled to Rs. 2.81 Crores more.

7.11. It is submitted that the appellant had availed a loan of Rs. 90 Crore from PFC in FY 2016-17 for creation of fixed assets owing to delay in BRGF Funding and as soon as the BRGF Funding was made available to the appellant the entire loan was repaid immediately. The said loan was availed from December 31, 2016 to February 20, 2017 i.e. for a period of 52 days and utilized accordingly. The actual interest paid was Rs. 1.31 Crore and average loan for the PFC loan for that period was Rs. 12.82 Crore ($90 \times 52 / 356$).

7.12 The Appellant herein submitted the revised Computation /calculation of average rate of interest before the Commission in its Review Petition as shown below:

Sl No.	Particulars	Opening Balance as on 1.4.2016	Addition	Closing Balance as on 31.3.2017	Avg Loan	Interest Incurred during 2016-17	Average rate of interest
1.	State Govt Loan	195.96	144.59	340.55	268.26	26.06	
2	ADB Loan	136.89	68.1	204.98	170.94	12.04	
3	PFC Loan	-	90	-	12.82	1.31	
4	Total	332.85	302.69	545.53	452.01	39.41	8.72%

7.13 The appellant in the review case calculated the interest on loan in the following manner:

Sl No.	Particulars (in Rs. Crore)	Approved in Tariff Order dated 07.03.2018 for FY 2016-17	Revised Computation for FY 2016-17
1	Opening Loan	454.40	454.40
2	Additions during the	695.15	695.15

	year		
3	Normative Repayment	77.04	77.04
4	Closing Loan (1+2-3)	1072.51	1072.51
5	Average Loan $((1+4)/2)$	763.46	763.46
6	Interest Rate	8.68%	8.72%
7	Interest on Loan $(5*6)$	66.27	66.56
8	Additional Interest on Loan to be Allowed		0.2962 $(=66.56-66.27)$

It is submitted that the Id. Commission while truing up for FY 2016-17 did not consider the loan amount of Rs. 90 Crore and the interest incurred on it which is contrary to the BERC Terms and Conditions of Tariff Regulation 2007. The appellant herein prayed before the Id Commission to consider the revised weighted average rate of interest for FY 2016-17 as 8.72% instead of 8.68 as approved in the impugned Tariff Order. Id. Commission, despite considering the average loan of Rs. 763.46 Crore approved in the impugned Tariff Order dated March 7, 2018, erred in not allowing the additional interest of Rs. 29.62 lakh as shown in the above table.

7.14 The appellant being aggrieved by the order dated 07.03.2018 passed by the Id Commission in case no. 37 of 2017 for FY 2016-17 (Truing up), FY 2017-18 (APR) and FY 2018-19 determining the Aggregate Revenue Requirement (ARR) and Transmission Charges filed a Review Petition being Review Petition No. 15 of 2018. A copy of the said Review Petition is annexed and marked herewith as **ANNEXURE A-5**.

7.15 The Ld Commission vide order dated 20.11.2018 dismissed the review petition of the appellant arbitrarily without going into the merit of the case.

8. **QUESTION OF LAW:**

The present appeal raises the following questions of law for adjudication and settlement by this Hon'ble Tribunal:

- (a) Whether the BERC has correctly applied the relevant provisions of the BERC Regulations, 2007 while determining the Tariff for the FY 2016-17 in Tariff Order dated 07.03.2018?
- (b) Whether the BERC ignored the material on record in passing the impugned orders?

- (c) Whether disallowance of Rs. 2.05 Crore is not illegal in the absence of any provision in BERC Regulations, 2007?
- (d) Whether the appellant is not entitled to incentive @ 1% of the equity for each percentage point of increase in annual availability beyond the target availability i.e. 98%?
- (e) Whether the Ld. Commission was justified in fixing the Transmission System Availability target at 98.5% instead of 98% as provided in BERC Regulations 2007?
- (f) Whether the Ld Commission was justified in disallowing recovery of Rs. 2.05 Crore after without amending the BERC Regulations 2007?
- (g) Whether Ld Commission was justified for not giving incentive @1% of the equity for each percentage point of increase in annual availability beyond the target availability after approving the higher transmission system availability achieved by the appellant?

- (h) Whether non-consideration of interest paid on actual loan utilized for creation of fixed assets is not contrary to BERC Regulations, 2007?
- (i) Whether the Ld Commission has not erred in not taking into consideration of the interest component in the Tariff Order?
- (j) Whether the ld BERC Commission was correct in not allowing additional interest of Rs. 29.62 lakh on the loan in its impugned Tariff Order ?
- (k) Whether the Ld Commission rightly dismissed the review petition of the Appellant?

9. **GROUNDS OF RELIEF:**

A. DIS-INCENTIVE FOR NON-ACHIEVING OF TRANSMISSION LOSS TRAJECTORY

- (i) Because introduction of provision to incentivize the utility for achieving the reduced transmission loss than the transmission loss target set by the Commission and dis-incentivize the utility for not achieving transmission loss target set by the Commission is contrary to the provisions of BERC Regulations.

(ii) Because there is no provision in the CERC Regulations or BERC Regulations to incentivize for achieving the reduced transmission loss or de-incentivize the utility for not achieving the transmission loss target.

(iii) Because the Appellant after taking the 10 to 15 sample checking at 220 KV level and 132 KV level found that the Transmission loss at 220 KV level was 1.52% and at 132 KV level 1.47% which was less than 3% and inferred that the actual transmission loss of the appellant was less than 3% and fixing the transmission loss for the appellant for FY 2016-17 at normative level of 3.92% in the MYT order dated 21.03.2016 is on the higher side.

(iv) Because the appellant cannot be penalized for any technical Transmission loss under BERC Regulation 13(2) as the same is contrary to provisions of BERC Regulation 4 which sets out the guidelines for determining Tariff in accordance with the guidelines and principles specified by the CERC as there is no provision of penalizing the Transmission Licensee for technical transmission loss to bear the entire loss on account of its failure to achieve the targets laid down by the commission.

(v) Because as per the BERC Tariff Regulations, 2007, Transmission loss levels has no material impact on determination of ARR. Therefore, the disallowance of recover of Rs. 2.05 Crores is illegal and not in consonance with the BERC Tariff Regulation, 2007.

(vi) Because the Id. Commission failed to appreciate that the transmission loss of the appellant is the technical loss and is not attributable to any other reason such theft or otherwise and de-incentivize the appellant to the tune Rs. 2.05Crore is not justified.

B. FIXING THE TARGET AT 98.50 FOR INCENTIVE CONSIDERATION:

(i) Because under BERC Tariff Regulation 68 the target availability for recovery of full transmission charges for AC System is fixed at 98% and under Regulation 76 the transmission licensee is entitled to incentive at 1% of equity for each percentage point of increase in annual availability beyond the target availability prescribed under Regulation 68. The appellant having achieved .918% beyond the target as prescribed under Regulation 68 is entitled to an additional incentive of Rs. 2.81 Crore.

(ii) Because the provision of Tariff Regulation 4 has wrongly been applied by the Id Commission in the instant case. The provisions BERC Tariff Regulations entitling a transmission licensee for incentive have no ambiguity in respect of the entitlement criteria. Therefore, fixing the target at 98.50% for incentive consideration is wrong and not in consonance with the provisions of BERC Tariff Regulations, 2007.

(iii) Because in the absence of any amendment in the BERC Tariff Regulation 68 and 76, relying on CERC Regulation 38 for the purpose of approving incentive is not justified.

C. INTEREST RATE FOR FINANCIAL YEAR 2016-17

(i) Because the Ld. Commission failed to appreciate that the loan amount of Rs. 90 Crore was availed through PFC in FY 2016-17 for discharging the capital liabilities paid and not considering the loan and interest for arriving at the effective rate of interest for FY 2016-17 is contrary to the Regulation 73(1)(f) of BERC Tariff Regulations 2007.

(ii) Because not considering interest paid on the actual loan utilized for creation of fixed assets is not in accordance with BERC Terms and Conditions of Tariff

Regulations, 2007 and excluding the same tantamount to error apparent on the face of record.

(iii) Because Appellant had explained the reason for availing the loan of Rs. 90 Crore from PFC and the observation of the Commission of not finding any rationale for drawing PFC loan and disallowing the additional interest of Rs. 29.62 is arbitrary and suffers from non-application of mind.

10. **Matter not previously filed or pending with in any other court:** The impugned orders have not been challenged by the appellant before any fore.
11. **Specify below explaining the grounds for such relief (s) and the legal provisions if any relied upon:** The appellant further craves leave to rely upon Para 9 above.
12. **Details of interim application if any:** The appellant has filed Interlocutory applications for condonation of delay and exemption for filing certified copy of order dated 20.11.2018.
13. **Details of appeal/s if any preferred before this Appellate Tribunal against the same Impugned Order/direction by respondent:** The appellant is not aware of the if any appeal has

been preferred against the same impugned order before this Hon'ble Tribunal.

14. **Details of Index:** An Index containing the details of the documents relied upon is enclosed in the beginning of the Appeal.

15. **Particulars of the Fee payable and details of the bank draft in favour of Pay and Account Officer, Ministry of Power, New Delhi:** DD No. 093482 dated 06.02.2019 for Rs. 203175/- drawn on Canara Bank.

16. **List of Enclosures:**
ANNEXURE A-1
Certified Copy of impugned Tariff Order dated 07.03.2018 passed in Case No. 37 of 2017.

ANNEXURE- A-2
Downloaded Copy of impugned Order dated 20.11.2018 passed by the Ld Commission in Case No.15 of 2018 along with covering letter.

ANNEXURE A-3
A true Copy of Petition for Truing up of FY 2016-17, Annual Performance Review (APR) for FY 2017-18 and Determination

of Annual Revenue Requirement (ARR) and Tariff for FY 2018-19 under BERC (Terms and Conditions for Determination of Tariff) dated 24.11.2017 (Colly)

ANNEXURE A-4

A true copy of Review Petition (Colly)

ANNEXURE A-5

A true copy of letter No. 17 dated 10.01.2018.

17. **Whether the order appealed as communicated in original is filed: If not, explain the reason for not filing the same: Yes.**
18. **Whether the appellant/s is ready to file written submissions/arguments before the first hearing after serving the copy of the same to the respondent: No.**
19. **Whether the copy of memorandum of appeal with all enclosures has been forwarded to all respondents and all interested parties, if so enclose postal receipt/courier receipt in addition to payment of prescribed process fee: Yes.**
20. **Any other relevant or material particulars/details which the appellant(s) deems necessary to set out: The appellant submits that it would rely on all such documentary/submissions,**

which may be necessary for proper adjudication for the issues involved in the present appeal.

21. **Relief Sought:** The Appellant most respectfully prays this Hon'ble Tribunal may be pleased to

- (a) allow the present appeal of the appellant and modify the impugned order dated 07.03.2018 passed by BERC in Case No. 37 of 2017 to the extent as stated in the grounds;
- (b) Set aside the impugned order dated 20.11.2018 passed in the Review Petition No. 15 of 2018.
- (c) pass such order or further orders as the Hon'ble Tribunal may deem fit and proper in the facts and circumstances of the case.

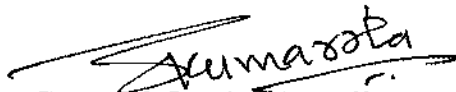
Dated at New Delhi on this day of February 2019

Filed By:

Sunil Kumar Jha, Advocate
Room No. "M" Consultation Room,
Lawyers Chambers Block-I
Delhi High Court, New Delhi-110003
Mobile 9811109776
Email: advocatesunil@gmail.com

DECLARATION BY THE APPELLANT

The Appellant abovenamed solemnly declares that nothing material has been concealed or suppressed and further declares that the enclosures and typed set of material papers relied upon and filed herewith are true copies of the originals/fair reproduction of the originals/true translation thereof.


Counsel for the Appellant


Appellant


Resident Engineer
Bihar State Power (Holding) Co. Ltd.
New Delhi

VERIFICATION

I, Umang Anand s/o Dr. Braj Kishore Singh aged about 28 working as Resident Engineer in the BSPTCL, resident of 498/19, Nehru Gali, Chandan Vihar, Sant Nagar (West), New Delhi do hereby affirm that the contents of para 1 to 7 are believed to be true to my knowledge derived from the office records of the appellant company and 8 to 21 are believed to be true on legal advise and that I have not suppressed any material facts.

Date: 11 February 2019

Place: N. Delhi


Signature of the Appellant or Authorized Officer
Resident Engineer
Bihar State Power (Holding) Co. Ltd.
New Delhi

**BEFORE THE HON'BLE APPELLATE TRIBUNAL FOR
ELECTRICITY AT NEW DELHI**

APPELLATE JURISDICTION

APPEAL NO. 2019

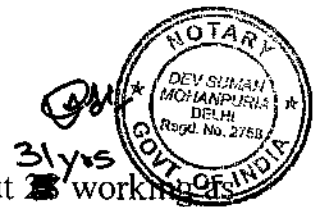
IN THE MATTER OF:

Bihar State Power Transmission Company LtdAppellant

Versus

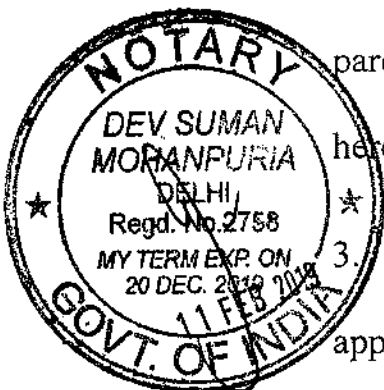
Bihar Electricity Regulatory CommissionRespondent

AFFIDAVIT



I, Umang Anand s/o Dr. Braj Kishore Singh aged about 31 yrs working as Resident Engineer in the BSPTCL, resident of 498/19, Nehru Gali, Chandan Vihar, Sant Nagar (West), New Delhi do hereby solemnly affirm and declare as under:

1. I am the authorized representative of the Appellant Company in the above-mentioned case and am fully conversant with the records of the case and am duly authorized and competent to sign and swear this affidavit on behalf of the Appellant Company.
2. That the accompanying appeal has been drafted under my instructions and the contents thereof may please be read as part and parcel of the present affidavit, as the same are not being repeated herein for the sake of brevity.
3. That I have gone through the contents of the accompanying appeal being filed on behalf of the appellant and state that the contents



thereof are true and correct based on the records of the case and nothing material has been concealed therefrom. That the Annexures accompanying are the true copies of their originals.

4. The contents of paragraph 1 to 7 are within my knowledge as derived from the office records of the Appellant Company and 8 to 21 are based on the information received by me which I believe to be true and correct.

Place: New Delhi

Date: 11 February 2019

I identify the deponent who has signed / put in my presence

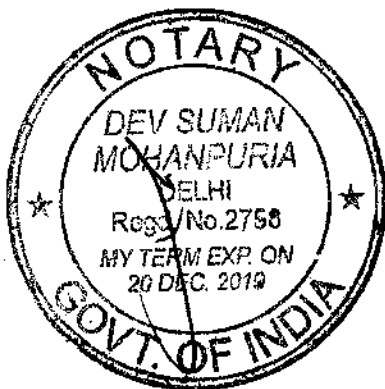
(Name) Sunil Kumar Jha Adv

Signature of the Deponent
Resident Engineer
Bihar State Power (Holding) Co. Ltd.
New Delhi

Identified by:

Before me

Sworn/solemnly affirmed before me on thisday of February 2019



(Name and Designation of the Attesting Authority with seal)

CERTIFIED THAT THE DEPONENT
Shri/Smt./Ken. U. Sunil Kumar
Shri/Smt./Ken. C. Dr. Sunil Kumar
Identified by Shri/Smt. Dev Suman Mohanpuria
has solemnly affirmed before me at Delhi
on 11-2-19, as Sh. N. Jha Adv
that the contents of the affidavit which
have been read and explained to him are
true and correct to his knowledge.

Dev Suman Mohanpuria
Notary Public, Delhi (IN/01A)

Bihar Electricity Regulatory Commission**Case No. 37 of 2017****Tariff Order**

**Truing up for FY 2016-17,
Annual Performance Review for FY 2017-18 and
Annual Revenue Requirement (ARR) and determination of
Transmission charges for FY 2018-19**

for

**Bihar State Power Transmission Company Limited
(BSPTCL)**

Issued on 7th March, 2018(With effect from 1st April, 2018)

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ABBREVIATIONS

A&G	Administration and General Expenses
ACT	Electricity Act, 2003
ARR	Annual Revenue Requirement
BERC	Bihar Electricity Regulatory Commission
BSHPS	Bihar State Hydro Power Station
BSEB	Bihar State Electricity Board
BSPHCL	Bihar State Power (Holding) Company Limited
BSPTCL	Bihar State Power Transmission Corporation Limited
BTPS	Barauni Thermal Power Station
CAGR	Compounded Annual Growth Rate
CAPEX	Capital Expenditure
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CGS	Central Generating Station
CTU	Central Transmission Utility
CWIP	Capital Work in Progress
DISCOM	Distribution Company
FC	Fixed Charges
FPPCA	Fuel and Power Purchase Cost Adjustment
FY	Financial Year
GFA	Gross Fixed Asset
KBUNL	Kanti Bijlee Utpadan Nigam Limited
KVA	Kilo Volt Ampere
KVAH	Kilo Volt Ampere Hour
KWH	Kilo Watt Hour
MoP	Ministry of Power
MU	Million Unit
MVA	Mega Volt Ampere
MW	Mega Watt
MYT	Multi-Year Tariff
NBPDCL	North Bihar Power Distribution Company Limited
NFA	Net Fixed Asset
NHPC	National Hydro Power Corporation
NTPC	National Thermal Power Corporation
O&M	Operation and Maintenance
PLF	Plant Load Factor
R&M	Repair and Maintenance
RE	Revised Estimates
RoE	Return on Equity
SAC	State Advisory Committee
SBPDCL	South Bihar Power Distribution Company Limited
SERC	State Electricity Regulatory Commission
TPS	Thermal Power Station

**Bihar Electricity Regulatory Commission**

Ground floor, Vidyut Bhawan –II

Jawaharlal Nehru Marg,

Patna – 800021

Case No: 37 of 2017**In the matter of:**

Truing-up for FY 2016-17, Annual Performance Review (APR) for FY 2017-18 and Annual Revenue Requirement (ARR) and determination of Transmission tariff for FY 2018-19 for Bihar State Power Transmission Company Limited (BSPTCL).

AND

Bihar State Power Transmission Company LimitedPetitioner

Present:

Shri S. K. Negi - Chairman
Shri Rajeev Amit - Member
Shri R. K. Choudhary - Member

ORDER**(Passed on 7th March 2018)**

Bihar Electricity Regulatory Commission (Terms and conditions for determination of Tariff) Regulations, 2007 specify that the Transmission Companies shall file the Petition for Annual Revenue Requirement (ARR) and Tariff for ensuing year, complete in all respects along with requisite fee as specified in the BERC (Fees, Fines and charges) Regulations, 2005 on or before 15th November of the preceding year. Accordingly, the BSPTCL filed the present petition for truing-up for FY 2016-17, review for ARR of FY 2017-18 and determination of ARR and Transmission tariff for FY 2018-19 on 27th November 2017.

In exercise of the powers vested with Bihar Electricity Regulatory Commission under Section 62(1)(b) read with Section 64 (3) of the Electricity Act, 2003 and Bihar Electricity Regulatory

Commission (Terms and conditions for Determination of Tariff) Regulations, 2007 (hereinafter referred to as 'Tariff Regulations') and other enabling provisions in this behalf, the Commission has issued this order, Truing -up of ARR for FY 2016-17, Reviewing of ARR for FY 2017-18, determining the ARR and Transmission Tariff for FY 2018-19 for transmission of electricity by Bihar State Power Transmission Company Limited in the State of Bihar.

As per Regulation 6(5) of the Tariff Regulations and for providing adequate opportunities to all stakeholders and general public for making suggestions/objections on the petition as mandated under section 64(3) of the Electricity Act, 2003, the Commission directed BSPTCL to publish the petition in an abridged form as "Public Notice" in newspapers having wide circulation in the State inviting suggestions/objections on the tariff petition. Accordingly, BSPTCL published the tariff petition in the abridged form as public notice in various newspapers. The petition was also placed on the BSPTCL's website. The last date of submission of suggestions/objections was fixed as 29.01.2018. The Commission, vide Advertisement No.5/BERC dated 12.02.2018, has extended the last date up to 20.02.2018 for submission of suggestions/objections by the stakeholders.

The Commission, in order to ensure transparency in the process of dealing with the above petition and for providing proper opportunity to all stakeholders and general public for making suggestions/objections on the tariff petition, decided to hold the public hearing in its office at Patna and accordingly the Commission held public hearing in the Court Room of BERC office at Patna on 22.02.2018.

The above petition submitted by BSPTCL was also placed before the State Advisory Committee on 06.02.2018 and the various aspects were discussed by the Committee. The Commission took the advice of the State Advisory Committee on the petition of BSPTCL during the meeting of the Committee.

The Commission took into consideration the facts presented by the BSPTCL in its petition and subsequent various filings, the suggestion/objections received from stakeholders/consumer organizations/ general public and State Advisory Committee and response of the Bihar State

Power Transmission Company Limited and has true-up ARR for FY 2016-17, reviewed the ARR for FY 2017-18 and determined the ARR and Transmission tariff for FY 2018-19.

BSPTCL has estimated the Annual Revenue Requirement (ARR) of Rs.388.66 Crore in the true-up for FY 2016-17 against which the Commission has approved Rs.380.16 Crore.

BSPTCL has estimated ARR of Rs.700.36 Crore in the review for FY 2017-18 (RE) against which the Commission has approved Rs.653.10 Crore.

BSPTCL has projected the Annual Revenue Requirement of Rs.1248.92 Crore for FY 2018-19 against which the Commission has approved Rs.1194.38 Crore (including carried forward revenue gap of FY 2016-17 with carrying cost of Rs.85.09 Crore).

The Commission directs BSPTCL to bill the transmission charges on monthly basis to the Distribution Companies i.e., NBPDC and SBPDCL in their power sharing ratios. The monthly Transmission charges shall be fully recovered from NBPDC and SBPDCL only if BSPTCL achieves at least 98% of Transmission system availability, else recovery of monthly Transmission charges shall be on pro-rata basis in terms of Regulation 68 and 74 of the BERC (Terms and Conditions for Determination of Tariff) Regulations, 2007.

This order shall be effective from 1st April 2018 and shall remain in force till 31st March, 2019 or till the next tariff order of the Commission.

This order will be placed on the website of the Commission and copies will be sent to BSPHCL, BSPGCL, BSPTCL, BGCL, NBPDC, SBPDCL, Department of Energy of Government of Bihar, Central Electricity Regulatory Commission and Central Electricity Authority.

Pronounced in the open court on this day of 7th March, 2018.

Sd/-
(R.K.Choudhary)
Member

Sd/-
(Rajeev Amit)
Member

Sd/-
(S.K.Negi)
Chairman

1. Introduction

1.1 Bihar Electricity Regulatory Commission (BERC)

The Bihar Electricity Regulatory Commission (hereinafter referred to as "Commission" or "BERC") was constituted by the Government of Bihar under Section 17 of the Electricity Regulatory Commission Act, 1998 vide Government of Bihar notification No.1284 dated 15th April 2002. The Electricity Regulatory Commission Act, 1998 along with Indian Electricity Act, 1910 and Electricity (Supply) Act, 1948 was repealed by Section 185 (1) of the Electricity Act, 2003 (hereinafter referred to as the "Act"). The first proviso of Section 82 (1) has ensured continuity of the Bihar Electricity Regulatory Commission by laying down that the State Electricity Regulatory Commission established by the State Government under Section 17 of Electricity Regulatory Commission Act, 1998 and functioning as such, immediately before the appointed date, shall be the State Electricity Regulatory Commission for the purpose of the Act.

1.2 Functions of BERC

As per Section 86 of the Electricity Act 2003, the State Commission shall discharge the following functions, namely:

- a) Determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State. Provided that where open access has been permitted to a category of consumers under section 42, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;
- b) Regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;
- c) Facilitate intra-state transmission and wheeling of electricity;
- d) Issue licenses to persons seeking to act as transmission licensees distribution

- licensees and electricity traders with respect to their operations within the State;
- e) Promote co-generation and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee;
 - f) Adjudicate upon the disputes between the licensees, and generating companies and to refer any dispute for arbitration
 - g) levy fee for the purposes of this Act;
 - h) specify State Grid Code consistent with the Indian Electricity Grid Code specified with regard to grid standards;
 - i) specify or enforce standards with respect to quality, continuity and reliability of service by licensees;
 - j) fix the trading margin in the intra-state trading of electricity, if considered, necessary; and
 - k) discharge such other functions as may be assigned to it under this Act.

1.3 Bihar State Power Transmission Company Limited (BSPTCL)

The Government of Bihar under the provision of Bihar Electricity Reforms Transfer Scheme 2012 notified vide Notification No.17 dated 30.10.2012 of the Energy Department, Govt. of Bihar restructured the Bihar State Electricity Board with effect from 1st November, 2012. The Generation, Transmission and Distribution Businesses of the erstwhile Bihar State Electricity Board were transferred to four successor companies with one Holding Company as listed below:

- 1) Bihar State Power Holding Company Limited (BSPHCL)
- 2) Bihar State Power Generation Company Limited (BSPGCL)
- 3) Bihar State Power Transmission Company Limited (BSPTCL)
- 4) North Bihar Power Distribution Company Limited (NBPDC) and
- 5) South Bihar Power Distribution Company Limited (SBPDCL)

1.4 Profile of BSPTCL

BSPTCL is a company registered under the Companies Act 1956 in June 2012, to which the State Government through the Department of Energy has vested transmission undertakings in Bihar of the erstwhile Bihar State Electricity Board and is a fully owned subsidiary company of BSPHCL.

BSPTCL owns and operates the transmission system above 33kV i.e., at 132kV and 220kV system in Bihar state. The existing transmission system as on 15th November, 2017 is as given below:

Table 1.1: Power Transformer capacity (MVA)

Sub-stations	FY 2016-17
220/132 kV	6590
132/33 kV	10890
132/25 kV	109.90

Table 1.2: Transmission line length (Ckm)

Transmission lines (Ckt.km)	FY 2016-17
400 kV	--
220 kV	3080.30
132 kV	9081.59

1.5 Commission's Orders issued earlier to BSPTCL

BSPTCL filed the petition for true up of FY 2014-15, Annual Performance Review for FY 2015-16, ARR for the second control period FY 2016-17 to FY 2018-19 and determination of Transmission Charges for FY 2016-17 on 28th December, 2015 and the Commission issued the order on 21st March, 2016 for approval of true up for FY 2014-15, review for FY 2015-16, ARR for the control Period FY 2016-17 to FY 2018-19 and also determined Transmission Charges for FY 2016-17 effective from 1st April, 2016.

1.6 Admission of Current Petition and Public Hearing Process

BSPTCL has filed the present petition on 27th November 2017 for Truing-up for FY 2016-17, Review for FY 2017-18 and approval of revised Annual Revenue Requirement (ARR) for FY 2018-19 and determination of Transmission Charges for FY 2018-19 under Section

62 of Electricity Act 2003 read with Bihar Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2007.

On preliminary verification of the petition, the Commission required certain clarifications/additional data/information to be furnished by the Petitioner. Accordingly, the Commission directed the Petitioner to submit such additional data/information and clarification vide letter No.1419 dated 08.12.2017. The Petitioner has submitted such additional data/information and clarifications vide Letter No.298 dated 15.12.2017. The Commission has admitted the petition as Case No. 37 of 2017. In accordance with section 64 of the Electricity Act, 2003 and sub clause 6(5) of BERC (Terms and Conditions of Determination of Tariff) Regulations, 2007, the Commission directed the BSPTCL to publish the petition in an abridged form in at least two daily newspapers, one in English and the other in Hindi, having wide circulation in the State inviting objections and suggestions from its stakeholders on the ARR and Tariff Petition filed by it.

BSPTCL was also directed to publish the schedule for Public Hearing along with the public notice inviting objections/suggestions.

The public notice was published in the following newspapers as given below:

Sl. No.	Name of the News Paper	Language	Date of First Publication
1	Hindustan (Hindi)	Hindi	03.01.2018
2	Dainik Bhaskar (Hindi)	Hindi	06.01.2018
3	Hindustan (Hindi)	Hindi	07.01.2018
4	Hindustan (Hindi)	English	07.01.2018
5	Dainik Bhaskar (Hindi)	English	07.01.2018

The tariff petition was also placed on the website of BSPTCL for inviting objections and suggestions on the petition and copies of the petition along with Annexures were also made available for sale in the Office of the Electrical Superintending Engineer/ Training & Inter-State Cell, BSPTCL. The interested parties/stakeholders were asked to file their objections/ suggestions on the Petition on or before 29.01.2018. The

Commission, vide Advertisement No.5/BERC dated 12.02.2018, has extended the last date up to 20.02.2018 for submission of suggestions/objections by the stakeholders. The Commission also uploaded the petition on its website.

The Commission has received written objections/suggestions from South Bihar Power Distribution Company Limited, Patna and Bihar Industries Association, Patna. The Commission directed the Petitioner to submit the replies/response to the suggestions/objections to the objector with a copy to the Commission. The Petitioner has submitted the reply vide letter no.46 dated 15.02.2018 and letter no.47 dated 16.02.2018.

The proposal of BSPTCL was also placed before the State Advisory Committee (SAC) in its meeting held on 06.02.2018 and various aspects of the petition was discussed by the Committee. The Commission took the advice of the State Advisory Committee on the petition filed by BSPTCL during the meeting of the Committee. The minutes of the meeting are given in **Annexure-I**.

The public hearing was conducted as scheduled in the Court Room of BERC on 22.02.2018. A note on the main issues raised by the objectors in the written submissions and also in the public hearing in respect of the petition, along with the response of BSPTCL and the Commission's views on the response are given in Chapter-3.

1.7 Approach of this Order

The BERC (Terms and Conditions for Determination of Tariff) Regulations, 2007 provides for truing up of previous year (FY 2016-17), Review of current year (FY 2017-18) and for determination of ARR and Transmission Charges for ensuing year i.e., FY 2018-19.

The BSPTCL has now approached the Commission with the present petition for Truing-up for FY 2016-17 Review for FY 2017-18, revised Annual Revenue Requirement and determination of Transmission Charges for FY 2018-19.

The Commission has examined the petition and observed that certain additional

data/information and clarifications are required for taking up detailed analysis of the Petition. The Commission directed the petitioner to submit the additional data/information and clarifications in the following references:

1. Letter No. BERC-Case No.37/2017-1419 dated 08.12.2017
2. Letter No. BERC-Case No.37/2017-12 dated 04.01.2018
3. Letter No. BERC-Case No.37/2017-55 dated 12.01.2018
4. Letter No. BERC-Case No.37/2017-97 dated 19.01.2018

The Petitioner has submitted additional information/data/clarifications in the following Letter No's:

1. Letter No. 298 dated 15.12.2017
2. Letter No.17 dated 10.01.2018
3. Letter No.21 dated 15.01.2018
4. Letter No.46 dated 15.02.2018

The Commission has undertaken Truing-up for FY 2016-17, Review (APR) for FY 2017-18 and determination of Annual Revenue Requirement (ARR) and Transmission Charges for FY 2018-19 based on the BERC (Terms and Conditions for Determination of Tariff) Regulations, 2007.

1.8 Contents of this order

The order is divided into Seven (7) chapters for BSPTCL as detailed below:

1. The **First Chapter** provides a background of BSPTCL, Commission's Orders in earlier years, admission of the Petition, details of public hearing process, and the approach adopted for this order.
2. The **Second Chapter** contains a summary of present Tariff petition of BSPTCL.
3. The **Third Chapter** provides a brief account of the public hearing process, including the objections raised by stakeholders, Petitioner's response and Commission's views on the same.
4. The **Fourth Chapter** deals with the Truing-up for FY 2016-17.
5. The **Fifth Chapter** deals with the Review of ARR for FY 2017-18.

6. The **Sixth Chapter** deals with the Annual Revenue Requirement for FY 2018-19 and Transmission Charges for FY 2018-19.
7. The **Seventh Chapter** deals with the compliance of directives issued in Tariff Order dated 09.03.2017.

2. Summary of Petition for Truing-up for FY 2016-17, Review for FY 2017-18 and Annual Revenue Requirement for FY 2018-19

2.1 Truing-up for FY 2016-17, Review for FY 2017-18 and Aggregate Revenue Requirement (ARR) for FY 2018-19

The summary of Truing up for FY 2016-17, Review for FY 2017-18 and Aggregate Revenue Requirement (ARR) for FY 2018-19 as filed by BSPTCL are as given in Tables below:

Table 2.1: ARR claimed in Truing-up for FY 2016-17

Sl. No.	Particulars	FY 2016-17		
		Approved in MYT Order dated 21.03.2016	Approved in Review Tariff Order Dated 09.03.2017	Now claimed in True-up
1	O&M Expenses	156.49	162.51	182.13
a	Employee Expenses	102.23	101.55	101.90
b	R&M Expenses	39.98	37.11	47.24
c	A&G Expenses	9.28	16.56	28.04
d	Holding Company Expenses	5.00	7.29	4.95
	Less: O&M Expenses capitalised	0.00	0.00	0.00
2	Less: IDC	12.56	1.88	0.00
3	Depreciation	61.17	84.31	77.04
4	Interest and Finance Charges	71.39	61.39	68.51
5	Interest on Working	14.88	13.61	14.00
6	Return on Equity	84.11	85.42	79.26
7	Income Tax			0.46
8	Prior Period Expenses			1.26
9	Incentive			5.10
10	Gross Annual Revenue Requirement	388.04	405.36	427.76
11	Less: Non Tariff Income	35.49	25.36	39.10
12	Net Revenue Requirement	352.55	380.00	388.66

Table 2.2: Revenue Gap/(Surplus) claimed for FY 2016-17 (Rs. Crore)

Sl. No.	Particulars	FY 2016-17		
		Approved in MYT Order dated 21.03.2016	Approved in Review in T.O Dated 09.03.2017	Now claimed in True-up
1	Aggregate Revenue Requirement for FY 2016-17	352.55	380.00	388.66
2	Less: Trued up surplus of FY 2014-15	74.71	74.71	74.71
3	Net Annual Transmission Charges	277.84	305.26	313.95
4	Less Transmission charges recovered	277.84	277.84	237.55
5	Revenue Gap (-)/Surplus (+) for FY 2016-17	0.00	(-)27.46	(-)76.41

Table 2.3: Revenue Gap / Surplus for FY 2016-17 along with carrying cost (Rs. Crore)

Sl. No.	Particular	Amount
1	Revenue Gap Approved for FY 2016-17 to be carry forward	76.41
2	Interest for FY 2016-17 @12.8% for six Months	4.89
3	Interest for FY 2017-18 @12.8%	9.78
4	Interest for FY 2018-19 @12.45% for six Months	4.76
5	Total Gap with interest	95.83

Table 2.4: Projected ARR for FY 2017-18 (RE) and for FY 2018-19 (Rs. Crore)

Sl. No.	Particulars	FY 2017-18			FY 2018-19	
		Approved in MYT Order dated 21.03.2016	Approved in Review in T.O dated 09.03.2017	Now estimated in RE	Approved in MYT Order dated 21.03.2016	Now Projected
1	O&M expenses	163.54	161.28	180.94	170.91	188.17
a)	Employee Cost	106.99	100.41	99.13	111.96	103.09
b)	R&M expenses	41.84	37.02	48.07	43.79	49.99
c)	A&G expenses	9.71	16.56	28.59	10.16	29.73
d)	Holding Company Expenses	5.00	7.29	5.15	5.00	5.35
2	Depreciation	116.01	158.48	182.22	177.47	331.15
3	Interest & Finance Charges	146.75	125.52	183.37	227.81	337.69
4	Interest on working capital	21.76	19.77	21.99	29.33	35.00
5	Return on Equity	137.20	152.65	172.89	169.16	304.19
6	Total Fixed Cost	585.25	616.15	741.42	774.67	1196.19
7	Less: Non Tariff Income	37.26	26.63	41.05	39.13	43.11
8	Add: Revenue					95.83

Sl. No.	Particulars	FY 2017-18			FY 2018-19	
		Approved in MYT Order dated 21.03.2016	Approved in Review in T.O dated 09.03.2017	Now estimated in RE	Approved in MYT Order dated 21.03.2016	Now Projected
	Gap/(Surplus) for FY 2016-17 with carrying Cost				-	
9	Net Fixed Cost/ ARR	547.99	589.52	700.36	735.54	1248.92

2.2 Request to the Commission

BSPTCL has requested the Commission to:

- a) Admit this petition;
- b) Examine the proposal submitted by the Petitioner in the petition for a favourable dispensation;
- c) Pass suitable orders with respect to the True-up for FY 2016-17 for Rs.388.66 Crore, APR for FY 2017-18 for Rs.700.36 Crore and ARR for FY 2018-19 for Rs.1248.92 Crore.
- 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) Condone any inadvertent omissions, errors, short comings and permit BSPTCL to add/change/modify/alter this filing and make further submissions as may be required at a future date; and
- g) Pass such Order as the Commission may deem fit and appropriate keeping in view the facts and circumstances of the case.

3. Stakeholder's Objections/Suggestions, Petitioner's Response and Commission's Observation

3.1 Background

In response to the public notice (abridge form of the petition) inviting objections / suggestions of the stakeholders on the Tariff Petition filed by BSPTCL, no written objections were received before the stipulated last date i.e. 29th January 2018. The Commission, vide Advertisement No.5/BERC dated 12.02.2018, has extended the last date up to 20.02.2018 for submission of suggestions/objections by the general public / stakeholders. The Commission has received two written objections from SBPDCL, Patna and Bihar Industries Association (BIA), Patna. BIA has requested that the Objections / suggestions mentioned for BGCL may also be considered as objections for BSPTCL as the nature of business of both the companies is similar and to avoid repetition.

3.2 Public Hearing

The Commission has also published the 'Notice' on 13th February 2018 in three daily Hindi Newspapers i.e. Dainik Jagran, Dainik Bhaskar, Prabath Kabar and Times of India (English) intimating that the Commission will hear the case on 22.02.2018 at 10.30 AM in its Court Room of BERC office at Patna and inviting the suggestions/ objections/ comments of the general public/stakeholders on the petition filed by the BSPTCL (Case on 37 of 2017).

The public hearing, as scheduled was held in the Court Room of BERC office, Patna on 22nd February, 2018 wherein the representatives of South Bihar Power Distribution Company Limited, Patna and Bihar Industries Association (BIA), Patna have put forth their comments and suggestions before the Commission in the presence of the Petitioner, BSPTCL. The list of participants in the public hearing is appended to this order as Annexure –II.

BSPTCL has submitted their reply on the objection/suggestions vide their letter no.58 dated 27.02.2018 and letter no.59 dated 27.02.2018. The Commission has examined the

comments/suggestions submitted by the Stakeholders in response to the ARR petition, the replies given by the Petitioner and the views of the Commission have been summarized under various sub-heads as given below.

Name of the Objector/Stakeholders: M/s. South Bihar Power Distribution Company Limited, Patna

Issue 1: Transmission System availability certificate to be submitted every month

As per Regulations 68 and 74 of BERC (Terms and conditions for determination of Tariff) Regulations 2007 transmission charges shall be fully recovered from Discoms only if BSPTCL/BGCL achieves at least 98% of the Transmission System Availability, else shall be on pro-rata basis. The Commission has directed the Petitioner to ensure submission of the State Transmission System Availability as per guidelines provided in the CERC Tariff Regulations for 2014-19 in all its future petitions.

It may be made mandatory for BGCL to submit the 98% system availability certificate from SLDC to Discoms along with the bill every month.

Petitioner's submission:

Certificate regarding Transmission System Availability Factor (TAF) for FY 2016-17 and FY 2017-18 (till August 2017) as per guidelines provided in CERC Tariff Regulations 2014 has been submitted along with tariff petition.

Commission's view:

The Regulation 68 read with Regulation 74 of BERC (Terms and conditions for determination of Tariff) Regulations 2007 specifies transmission charges shall be recovered/paid fully if transmission licensee achieves atleast 98% of TAF, else shall be recovered/paid on prorata basis. The Commission directs the Petitioner to submit the TAF every month along with the monthly transmission bills invariably.

Issue 2: Installation of appropriate energy meters at all interface points

To install appropriate energy meters at all interface points to record actual energy flow through transmission lines (input and output) and energy handled. A report shall be made available to SLDC and Discoms and SLDC shall verify the same based on the REA

data.

Petitioner's submission:

1991 interface meters are provided till date and 1923 meters are in working condition for 220kV/132kV/33kV voltage levels. For complete installation of energy meters at all interface points Special Energy Meters with communication facility will be installed in the GSS of BSPTCL. These meters will have facility to communicate/receive data online and on real time basis which help in monitoring data along-with energy accounting and audit. The tender process under SAMAST is likely to be completed and installation of metering system will be completed within a year.

Commission's view:

The Commission has noted the objection and response of the Petitioner. The Commission has been directing through its tariff orders year on year to fix appropriate energy meters at all interface points for energy accounting and audit. The Petitioner has not provided appropriate meters at all interface points, even if they were provided, some are not in working condition. The Commission views it seriously and directs the Petitioner to provide appropriate energy meters at all interface points and ensure that they are in working condition and meter readings recorded and provided to the Commission as and when data is sought for.

Name of the Objector/Stakeholders: M/s. Bihar Industries Association, Patna

Issue 3: BGCL as a STU, JV and geographical area of operation

BGCL was granted license on 21.06.2013. BGCL is a Joint Venture (JV) between BSPHCL and PGCIL, whether BSPHCL was empowered to form JV and notified as State Transmission Utility (STU) by the State Government and geographical area of operation is defined to ascertain energy transmitted and to prevent overlap and double charging.

Petitioner's submission:

The Grid map detailing the assets owned and in operation by BSPTCL is furnished.

Commission's view:

The Commission had granted transmission licence to the Bihar Grid Company Limited vide Letter No. BERC/Case No.7/2013-792-01-Tr.L. dated 21 June 2013 and will function

as transmission intra-state utility parallel to BSPTCL in the State of Bihar. BGCL is a joint venture between BSPHCL and PGCL with a share holding of 50:50.

The Commission has directed the BGCL and BSPTCL to fix appropriate meters at all interface points to measure the energy flow. The lines and substations of BSPTCL and BGCL are interconnected facilities and the assets are separately maintained by both the utilities and there is no overlapping of assets.

Issue 4: Report under Regulation 4(3) of BERC Tariff Regulations 2007

As per Regulation 4(3) of BERC Tariff Regulations 2007, the STU shall submit a report on assets mentioned in the application for licensee form part of intra-state transmission system, completion schedule, technical suitability of assets, etc. The report may be provided/put on public domain.

Petitioner's submission:

The petitioner has not furnished the response.

Commission's view:

The Commission has noted the stakeholder's suggestion. The Commission in its tariff orders has depicted the scheme-wise/work-wise capital investment plan year on year.

Issue 5: Transmission charges based on actual power transmitted

BSPTCL is creating huge transmission assets and Discoms seem not to use this whole network adequately. It is suggested to bill on per unit basis based on actual energy handled/transmitted. If the required number of units to be evacuated are not achieved a separate bill for shortfall of units may be raised by the transmission companies which may be excluded in the ARR of DISCOMs as a controllable cost. The inefficiencies of the licensees shall not be passed on to the consumers.

Petitioner's submission:

The BERC in its order dated March 12, 2015 in Case No. 50 of 2014 had ruled as follows:

“The transmission charges approved above for FY 2015-16 shall be fully realized from the Distribution Companies on monthly basis in proportion of power delivered to the Distribution Companies”

In addition to above, the BEREC with regard to per unit transmission charges computed in the order has further clarified as under.

“Transmission charges per unit works out to Rs.0.16 and is representative purpose only and not for the billing on the basis of actual energy.”

However, the BEREC in its Tariff Order dated-21.03.2016 has ruled as follows:

“The transmission charges per unit approved above for FY 2016-17 shall be realized from the Distribution Companies on monthly billing on the joint meter reading of the energy meters at all interface points of the Distribution Companies. The transmission charges (net fixed cost) approved (Table 6.41) above for FY 2017-18 and FY 2018-19 are provisional and shall be revised considering the gap/(surplus) of the truing up of FY 2015-16 and FY 2016-17 and accordingly, the revised transmission charges shall be notified in the tariff orders of relevant year for realization from the Distribution Companies on monthly basis in proportion of power delivered to the Distribution Companies.”

The above methodology of recovery of transmission charges for FY 2016-17 is in deviation with the BEREC (Terms and conditions for determination of Tariff) Regulations, 2007 under clause 68 and 74. However for FY 2017-18 the Hon'ble Commission has approved the transmission charges in accordance to the BEREC (Terms and conditions for determination of Tariff) Regulations, 2007, and hence the same should be followed in the subsequent years.

Further, the transmission charges are in the nature of capacity charges and should not be linked to energy delivered. Further, energy scheduling is not in control of transmission licensees and is done by distribution utilities. Further in case carrying cost is applied it would entail an interest rate of 13.50% to 14% per annum which is very high. This will lead to unnecessary burdening of the consumers and transmission licensees.

Commission's view:

The Commission has noted the stakeholder's suggestion and response of the petitioner. The Commission has proposed disallowance of transmission charges for non achievement of transmission loss target during FY 2016-17 in truing up.

Issue 6: Geographical operational area and demarcation of assets of BSPTCL and BGCL.

The transmission network in Bihar is owned and operated by BSPTCL and separate areas of activity and supply of BSPTCL and BGCL must be defined under regulation 16 of BERC (Transmission Licensing) Regulations 2007. The details of transmission lines and substations have been given, however not mentioned these are new assets created. The geographical area of operation and demarcation of assets of two utilities may be ensured to prevent double charge for the same assets.

It may be clarified whether old asset of BSPTCL is taken over by BGCL, if so the value of old asset shall be reduced.

Petitioner's submission:

The Grid map detailing the assets owned and in operation of BSPTCL is submitted.

Commission's view:

The transmission network of BSPTCL and BGCL will function as intra-state transmission utility parallel to each other. The assets are being maintained separately by the utilities. The details of assets furnished in the petition are new assets created and added during FY 2016-17 by BSPTCL. There is no takeover of assets belonging to BSPTCL by the BGCL.

Issue 7: Transmission loss

To ensure that the transmission loss is charged only once on the entire power being

transmitted as it appears that transmission loss is being charged in addition to transmission loss of BGCL.

Petitioner's submission:

The Transmission losses for FY 2014-15, FY 2015-16 and FY 2016-17 are at 5.11%, 4.89% and 4.74% respectively. A survey had been conducted to analyse the losses in each GSS as well as in transmission lines at 220kV and 132 kV level and it was observed the losses are around 3% to 3.5%. After 100% metering, it is expected that the losses would come within 3.5% in the coming years. Actual losses can be ascertained after 100% metering and request the Commission to consider the approved normative losses till 100% metering.

Commission's view:

The Commission has noted the objection and response of the Petitioner. The Commission has been directing through its tariff orders year on year to fix appropriate energy meters at all interface points for energy accounting and audit. The Petitioner failed to provide appropriate meters in working condition at all interface points. The Commission views it seriously and directs the Petitioner to provide appropriate meters at all interface points and ensure that they are in good working condition and meter readings recorded and provided to the Commission as and when data is sought for.

Issue 8: O&M expenses

O&M expenses increased by Rs.22 crore for FY 2016-17 over the expenses approved in APR for FY 2016-17 in tariff order dated 09.03.2017 mainly due to increase in R&M and A&G expenses. Disallow entire claim of increase in O&M expenses as these are controllable expenses.

Petitioner's submission:

BSPTCL has submitted that the increase in R&M is due to substantial expenditure done by the petitioner to upkeep & strengthen the existing intra state transmission infrastructure to evacuate large quantum of power matching with demand. The main reasons for increase in A&G expenses for FY 2016-17 are due to payment of long

pending electricity charges (of Rs. 9.91 Crore) which was a one-time expense incurred during FY 2016-17.

BSPTCL would like to submit that main reasons for increase in O&M expenses in FY 2016-17 is due to increase in R&M and A&G expenses.

The O&M Expenses for FY 2017-18 and FY 2018-19 are calculated based on normative projections, which would be revised at the time of truing up.

Commission's view:

The Commission has considered the O&M expenses based on audited accounts and prudent check in truing up for FY 2016-17 and in terms of regulations for FY 2017-18 and FY 2018-19. The Commission has deliberated the issue under the relevant heads in the tariff order.

Issue 9: Capitalisation

Major addition to GFA is projected for FY 2017-18 and FY 2018-19 which appears not practical in view of addition to GFA during FY 2016-17. The capitalisation has bearing on Depreciation, Interest and RoE resulting in high fixed charges for FY 2017-18 and FY 2018-19.

Petitioner's submission:

BSPTCL would like to submit that details of projected capitalization for both FY 2017-18 and FY 2018-19 has been submitted in Annexure-2 of the Tariff Petition (deviation of cost, year wise Capex and capitalization).

Further, there are many on going works which shall be completed in the following two years for which BSPTCL has to lay the infrastructure keeping in view the steep increase in the demand in view of aggressive steps taken by Government towards 100% electrification.

Further, the per capita consumption of Bihar is 258 units, as compared to national per capita consumption is 1057 units in FY 2015-16. In order to bridge this gap, capital investment in T&D infrastructure is must. The ratio of opening GFA per unit of input

energy at State periphery depicts the amount of Gross fixed assets required per unit of energy.

From the Table below, it can be seen that during FY 2015-16 in order to handle energy of 22560.06 MU, at state periphery BSPTCL has existing transmission infrastructure to the tune of Rs 3954.28 Cr i.e. Rs 1.75/ unit. Thus, it can be seen that capex per unit energy handled for BSPTCL is quite modest and low as compared to that of Punjab (PSPTCL), Gujarat (GETCO) and Rajasthan (RVPN). It is evident that, considerable augmentation is required considering future demand growth in the state.

FY 2015-16	Opening GFA (in Rs Crore)	Input Energy at State Periphery (MU)	GFA/Unit handled (Rs/kWh)
BSPTCL	3954.28	22560.06	1.75
PSPTCL (Punjab)	8054.17	32414.04	2.48
GETCO (Gujarat)	15520.57	78389.00	1.98
RVPN (Rajasthan)	13313.89	73810.00	1.80

Source: Tariff Orders of Utilities

In order to meet the huge capitalization requirement of distribution utilities, BSPTCL is working actively to achieve the planned capacity additions in the coming years.

Commission's view:

The Commission has noted the stakeholder's suggestion and response of the Petitioner.

Issue 10: BRGF grants treated as Equity

Funding received under BRGF scheme capital expenditure as grants has been shown as equity which may be rejected and considered as Grants and reduced from GFA and net GFA should be taken for calculating allowable cost only after such assets have been actually put to productive use.

Petitioner's submission:

BSPTCL would like to submit that even though the State Government receives the funds from the Central Government as grants, the same has been given to BSPTCL as equity.

The documentary evidence against the same was submitted and noted by the

Commission in its Tariff Order dated 9 March, 2017. Therefore, BSPTCL would request the Commission to treat funds pertaining to BRGF as equity and approve the same.

Commission's view:

The Commission had considered the funding of BRGF schemes through equity in accordance with the letter no. 02/SBPDCL-35/2013 – 205 dated 30.01.2017 of the Energy Department, Govt. of Bihar wherein it was informed that the State Government had decided that the funds extended to power utilities by GoB for power infrastructure and strengthening of Rural and urban area shall be in the form of Equity investment. The GoB letter further states that the funds released under Main Head 4801 Power infrastructure capital expenditure vide its order no.5150 dated 07.11.2013 for BRGF (Special Plan) scheme shall be capital investment in the power utilities. The Bihar Industries Association (BIA), Patna filed Appeals No.120 and 121 of 2017 before the APTEL. The Commission subject to judgement in appeals no.120 and 121 of 2017 has considered funding of BRGF schemes through Equity from GoB.

The case is posted for hearing on 03.05.2018.

4. True-up for FY 2016-17

4.1. Background

The Commission had issued Tariff Order dated 21st March, 2016 approving Multi Year ARR for the Control Period FY 2016-17 to FY 2018-19 and also reviewed the Annual Performance for FY 2016-17 in the Tariff Order dated 09.03.2017

BSPTCL has now submitted the present Tariff petition on 27th November, 2017 for Truing-up for FY 2016-17, Annual performance review for FY 2017-18 and determination of Annual Revenue Requirement and transmission tariff for FY 2018-19.

Truing-up for FY 2016-17 is to be done according to the Regulation 22 (1) & (2) of the BERC (Terms and Conditions for Determination of Tariff) Regulations, 2007 which is reproduced below:

“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, the “Truing-up” exercise for FY 2016-17 has been undertaken by the Commission on the basis of audited annual accounts for FY 2016-17 and BERC (Terms

and Conditions for determination of Tariff) Regulations 2007. However, wherever deemed necessary, the Commission has considered expenses based on prudence check.

4.2. Transmission Losses

BSPTCL has submitted that the Transmission Loss trajectory approved by the Commission in the MYT order dated 21.03.2016 and also in Tariff Order dated 09.03.2017 is as shown in the Table below:

Table 4.1: Transmission Loss approved by the Commission

Particulars	FY 2016-17	FY 2017-18	FY 2018-19
Transmission Loss	3.92%	3.92%	3.92%

BSPTCL has submitted that the actual transmission loss for FY 2016-17 is 4.74% as per the audited accounts of the Petitioner as shown in the Table below:

Table 4.2: Actual Transmission Loss for FY 2016-17

S. No.	Particulars	FY 2016-17
1	Energy Input (in kWh)	23977916298
2	Energy Output (in kWh)	22841024473
3	Transmission Loss (in kWh)	1136891825
4	Transmission Loss (%)	4.74%

Commission's Analysis

The Commission finds that despite repeated directives in year on year tariff orders to install appropriate energy meters in working condition at all 33kV feeders, BSPTCL does not seem to have been serious in this regard and no such meters in good working condition have yet been installed at all 33kV feeders, resulting into inaccurate capturing of meter reading data at sending points which results in inaccurate and inflated calculation of transmission loss. The Commission opines that there is no reason to have transmission losses more than 4% in the transmission system. Hence, the Commission, retains the transmission loss trajectory for BSPTCL for FY 2016-17 at 3.92% in truing-up for FY 2016-17. However, for computing the Energy Balance of the DISCOMs and disincentive for non-achieving the stipulated transmission loss trajectory, the

Commission considers the State Transmission losses at 4.74% as per the audited accounts of BSPTCL for FY 2016-17 and as shown in the Table 4.2 above.

The Commission reiterates to adhere to its earlier directive to install appropriate energy meters at all the interface points up to 33kV voltage level in good working condition.

4.3. Capitalisation

Petitioner's submission

BSPTCL has submitted that as per the audited annual accounts for FY 2016-17, capitalisation is at Rs.993.08 Crore. The Petitioner has furnished the actual Vs approved capital expenditure and capitalisation for truing up for FY 2016-17 as shown in the Table below:

Table 4.3 : Capital expenditure and Capitalisation proposed for FY 2016-17

(Rs. Crore)

S. No.	Particulars	Approved for FY 2016-17 in Tariff Order dated 21.03.2016	Approved for FY 2016-17 in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17
1	Opening CWIP	2164.11	2249.69	2236.14
2	New Investment	2456.13	1953.49	1871.77
3	Less: Capitalisation	1664.32	1256.03	993.08
4	Closing CWIP	2955.92	2947.15	3114.83

BSPTCL has requested the Commission to approve the capitalisation as proposed for FY 2016-17.

Commission's Analysis:

The Commission had approved closing CWIP at Rs.2249.69 Crore in true up for FY 2015-16 in the Tariff Order dated 09.03.2017 and the same is considered as opening CWIP for FY 2016-17.

The Petitioner has furnished scheme-wise details of capitalisation for FY 2016-17 as given hereunder:

Table 4.4: Scheme-wise details of capitalisation

Sl. No.	Name of the Scheme	Capitalisation (Rs. Crore)
1	BRGF schemes	760.41
2	ADB schemes	56.04
3	Old schemes	20.31
4	New schemes	149.97
5	IRF schemes	6.36
6	Total Capitalisation	993.09

The Commission, based on the audited annual accounts of FY 2016-17, has considered the total investment in capital expenditure at Rs.1871.77 crore and capitalisation at Rs.993.08 crore during the year 2016-17 as detailed in the Table below:

Table 4.5: Capital investment and capitalization approved in truing up for FY 2016-17 (Rs. Crore)

Sl. No.	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17	Now approved in truing up for FY 2016-17
1	Opening CWIP	2164.11	2249.69	2236.14	2249.69
2	Add: New investment	2456.13	1953.49	1871.77	1871.77
3	Total Investment (1+2)	4620.24	4203.18	4107.91	4121.46
4	Less: Capitalisation from CWIP	927.48	879.22	993.08	993.08
5	Less: Capitalisation from New Investments	736.84	376.81		
6	Total capitalisation (4+5)	1664.32	1256.03	993.08	993.08
7	Net closing CWIP (3-6)	2955.92	2947.15	3114.83	3128.38

The Commission approves Rs.3128.38 Crore as Net closing CWIP for FY 2016-17

4.4. Gross Fixed Assets

Petitioner's submission:

BSPTCL has submitted the value of Opening GFA, Additions to GFA and Closing GFA based on the audited annual accounts for FY 2016-17 as detailed in the Table below:

Table 4.6: Gross Fixed Assets proposed for truing up for FY 2016-17

(Rs. Crore)

Sl. No.	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17
1	Opening GFA as on 01.04.2016	4883.78	4033.62	4033.63
2	Add: Additions during the year	1664.32	1256.03	993.08
3	Add: Interest during construction (IDC)	12.56	1.88	--
4	Closing GFA (1+2+3)	6560.66	5291.53	5026.71

Commission's analysis:

The Commission had approved closing GFA at Rs.4033.62 Crore in true up for FY 2015-16 in Tariff Order dated 9th March 2017 and the same is adopted as opening GFA for FY 2016-17.

The net addition to the GFA during FY 2016-17 is considered at Rs.993.08 crore based on the audited annual accounts for the year 2016-17.

The Commission considers the GFA in true up for FY 2016-17 as detailed in the Table below:

Table 4.7: Gross Fixed Assets approved in truing up for FY 2016-17

(Rs. Crore)

Sl. No.	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17	Now approved in truing up for FY 2016-17
1	Opening GFA	4883.78	4033.62	4033.63	4033.62
2	Add: Net additions during the year	1664.32	1256.03	993.08	993.08
3	Add: Interest during construction (IDC)	12.56	1.88	--	--
4	Sub-total (2+3)	1676.88	1257.91	993.08	993.08
5	Closing GFA (1+4)	6560.66	5291.53	5026.71	5026.70

The Commission approves Rs. 5026.70 Crore as closing GFA for FY 2016-17.

4.5. Depreciation**Petitioner's submission:**

BSPTCL has submitted that depreciation for FY 2016-17 as per audited accounts is Rs.160.71 Crore. The land and land rights value is excluded from the value of GFA and then applied the weighted average rate of depreciation of 5.11% for computation of depreciation. BSPTCL has claimed depreciation of Rs.77.04 Crore in truing up for FY 2016-17 as detailed in the Table below:

Table 4.8: Depreciation proposed in truing up for FY 2016-17

(Rs. Crore)				
Sl. No.	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17
1	Opening GFA	3517.66	2650.58	2650.88
2	Additions during the year	1634.32	1256.03	993.08
3	Less: Value of Land	--	--	9.11
4	Less: Asset retirement/deductions	--	--	--
5	Interest during construction	12.56	1.88	--
6	Closing GFA (1+2-3-4+5)	5194.54	3908.48	3634.55
7	Average GFA (1+6)/2	4356.10	3279.53	3142.57
8	Weighted average rate of depreciation	3.36%	5.13%	5.11%
9	Depreciation (7*8)	146.36	168.24	160.71
10	Opening Grants	2187.48	1636.04	1636.04
11	Add: Grants during the year	696.32	--	--
12	Less: Amortisation during the year	--	--	--
13	Total Grants (10+11-12)	2883.80	1636.04	1636.04
14	Average Grants (10+13)/2	2535.64	1636.04	1636.04
15	Weighted average rate of depreciation	3.36%	5.13%	5.11%
16	Depreciation for GFA on Grants (14*15)	85.20	83.93	83.67
17	Net Depreciation for GFA on loans (9-16)	61.17	84.31	77.04

Commission's analysis:

The Commission has examined the computation of depreciation as submitted by the Petitioner. The Commission observes that depreciation, as per the audited annual accounts for FY 2016-17 is at Rs.159.05 Crore for the year 2016-17. The opening GFA as

per audited accounts for FY 2016-17 is at Rs.4001.23 crore. The opening GFA includes value of land Rs.1383.05 Crore. As land is not a depreciable asset and accordingly, the Commission has reduced the value of land for arriving at the effective weighted average rate of depreciation. The effective weighted average rate of depreciation works out to 5.11% on the depreciable assets i.e. excluding land value as detailed below:

Table 4.9: Weighted average effective rate of depreciation for FY 2016-17

(Rs. Crore)		
Sl. No.	Particulars	Actuals as per audited accounts for FY 2016-17
1	Opening GFA	4001.23
2	Less: opening value of Land as per audited accounts	1383.05
3	Opening depreciable value of GFA (1-2)	2618.18
4	Net Additions during the year	993.08
5	Less: Value of Land added during the year	9.11
6	Closing depreciable value of GFA (3+4-5)	3602.15
7	Average depreciable value of GFA (3+6)/2	3110.16
8	Depreciation as per audited accounts	159.05
9	weighted average rate of depreciation ((8/ 7)*100)	5.11%

Regulation 73(2)(a)(i) of the BERC (Terms and Conditions for Determination of Tariff) Regulations, 2007 specify that ***“the value base for the purpose of depreciation shall be the historical cost of the asset”***.

Regulation 73(2)(a)(ii) of the BERC (Terms and Conditions for Determination of Tariff) Regulations, 2007 specify that ***“land is not a depreciable asset and its cost shall be excluded from the capital cost”***.

Conjoint reading of the above Regulations explicitly specifies that depreciation shall be computed on the historical value of the asset i.e. original cost of the fixed assets excluding revaluation and cost of land.

The Commission has approved closing GFA at Rs.4033.62 crore in true up for FY 2015-16 and the same is considered as opening GFA for FY 2016-17. Similarly, the Commission has approved closing Grant at Rs.1636.04 crore in true up for FY 2015-16 and the same is considered as opening Grant for FY 2016-17.

As per the audited annual accounts of the Petitioner for FY 2016-17, the opening land value is at Rs.1383.05 Crore and addition to land during FY 2016-17 is at Rs.9.11 crore. The Commission, accordingly, has considered the value of land and excluded the value of land for computation of Depreciation in true up for FY 2016-17.

The Petitioner has considered capitalisation of BRGF schemes through equity.

The Commission in order dated 09.03.2017 in case no.49 of 2015 (Vol.II) NBPDC and 50 of 2015 (Vol.II) SBPDCL had considered the funding of BRGF schemes through equity in accordance with the letter no. 02/SBPDCL-35/2013 – 205 dated 30.01.2017 of the Energy Department, Govt. of Bihar wherein it was informed that the State Government had decided that the funds extended to power utilities by GoB for power infrastructure and strengthening of Rural and urban area shall be in the form of Equity investment. The GoB letter further states that the funds released under Main Head 4801 Power infrastructure capital expenditure vide its order no.5150 dated 07.11.2013 for BRGF (Special Plan) scheme shall be capital investment in the power utilities. The Bihar Industries Association (BIA), Patna filed Appeals No.120 and 121 of 2017 before the APTEL against the Commission's order dated 09.03.2017 in remand case. The case is posted for hearing on 28.02.2018. The instant treatment of funding of BRGF schemes through equity or otherwise is subject to outcome of the judgement in Appeals no.120 and 121 of 2017.

The Commission subject to judgement in appeals no.120 and 121 of 2017 has considered funding of BRGF schemes through Equity from GoB.

The Commission has computed weighted average effective rate of depreciation at 5.11% based on audited accounts for FY 2016-17 as shown in Table 4.9 above.

Accordingly, the Commission has considered the weighted average effective rate of depreciation at 5.11% for the purpose of computation of depreciation. The Commission has considered the depreciation in true up for FY 2016-17 as detailed in the Table below:

Table 4.10: Depreciation approved in truing up for FY 2016-17

(Rs. Crore)

Sl. No.	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17	Now approved in truing up for FY 2016-17
1	Opening GFA	4883.78	4033.62	4033.63	4033.62
2	Less: Value of Land	1366.12	1383.05	1383.05	1383.05
3	Depreciable opening GFA (1-2)	3517.66	2650.58	2650.88	2650.57
4	Net additions during the year (excl. value of land)	1634.32	1256.03	983.97	983.97
5	Interest during construction	12.56	1.88	--	--
6	Closing GFA (3 + 4 +5)	5194.54	3908.48	3634.55	3634.54
7	Average GFA (3+6)/2	4356.10	3279.53	3142.56	3142.56
8	Weighted average rate of depreciation	3.36%	5.13%	5.11%	5.11%
9	Depreciation (7*8)	146.36	168.24	160.71	160.58
10	Opening Grants	2187.48	1636.04	1636.04	1636.04
11	Add: Grants during the year	696.32	--	--	--
12	Less: Amortisation during the year	--	--	--	--
13	Total Grants (10+11-12)	2883.80	1636.04	1636.04	1636.04
14	Average Grants (10+13)/2	2535.64	1636.04	1636.04	1636.04
15	Weighted average rate of depreciation	3.36%	5.13%	5.11%	5.11%
16	Depreciation for GFA on Grants (14*15)	85.20	83.93	83.67	83.60
17	Net Depreciation for GFA on loans (9-16)	61.17	84.31	77.04	76.98

The Commission, accordingly, approves depreciation of Rs.76.98 Crore in truing up for FY 2016-17.

4.6. Interest and Finance Charges

Petitioner's submission:

BSPTCL has submitted that the opening and closing loan balance for FY 2016-17 is considered as per the audited annual accounts of FY 2016-17. The Petitioner has furnished the details of computation of effective rate of interest for FY 2016-17 as detailed in the Table below:

Table 4.11: Weighted Average Rate of Interest on loans proposed for FY 2016-17**(Rs. Crore)**

Sl. No.	Particulars	Opening Balance as on 1.4.2016	Addition	Re-payment	Closing Balance as on 31.3.2017	Avg. Loan	Interest accrued during 2016-17	Average rate of Interest (%)
1	State Government Loan	195.96	144.59	--	340.55	268.26	26.06	10.56%
2	ADB loan	136.89	68.10	--	204.98	170.94	12.04	--
3	PFC Loan	--	90.00	90.00	--	--	1.31	
4	Total	332.84	302.69	90.00	545.53	439.19	39.41	8.97%

BSPTCL has considered the repayment of loans equivalent to depreciation during FY 2016-17. Interest on loans proposed by BSPTCL for FY 2016-17 is as given in the Table below:

Table 4.12: Interest on loans proposed in truing up for FY 2016-17**(Rs. Crore)**

Sl. No.	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17
1	Opening Loan	685.77	454.40	454.40
2	Additions during the year	686.39	880.54	695.15
3	Repayments	61.17	84.31	77.04
4	Closing loan (1+2-3)	1310.99	1250.63	1072.51
5	Average Loan (1+4)/2	998.38	852.51	763.46
6	Rate of Interest	7.15%	7.20%	8.97%
7	Interest on Loan	71.39	61.39	68.51

BSPTCL has further claimed Rs.0.003 Crore towards bank charges, interest on Group Savings Scheme, interest on security deposit from staff, etc. for FY 2016-17 in truing up based on the audited annual accounts for FY 2016-17.

Commission's Analysis:

The Commission has examined the computation of interest on loan claimed by the Petitioner in truing up for FY 2016-17. The Petitioner has incurred Rs.39.41 crore as interest on loan in FY 2016-17 as per the audited accounts.

The Regulation 73 (1) of the BERC Terms and Conditions for Determination of Tariff Regulations, 2007 specify;

- (a) interest on loan capital shall be computed loan-wise, on the loans arrived at in the manner indicated in Regulation 71.
- (b) In the case of existing projects, the actual debt-equity shall be used for tariff determination and any expansion thereto shall be governed as per Regulation 71.
- (c)
- (d)
- (e)
- (f) In case any moratorium period is availed by the transmission licensee, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly.

The Regulation 71 of BEREC Terms and Conditions for Determination of Tariff Regulations, 2007 specify;

“(1) in case of all projects, the debt - equity ratio as on the date of commercial operation shall be 70:30 for determination of Tariff, provided that the Commission may in deserving case consider equity higher than 30% for purpose of determination of tariff, where the transmission licensee is able to establish to the satisfaction of the Commission that the deployment of equity more than 30% was in the interest of general public.

Provided that;

- (i) in case a project, if the actual equity employed is less than 30%. The actual debt and equity employed shall be taken for determination of tariff.
- (ii) in case of existing projects the actual debt : equity ratio shall be used for tariff determination. However, any expansion shall be governed by clause (1) above.”
- (2) the debt and equity amount arrived at in accordance with clause (1) shall be used for calculation of interest on loan, Return on Equity, Advance Against Depreciation and Foreign Exchange Rate Variation”.**

A conjoint reading of the above Regulations explicitly specify that interest shall be provided on actual debt in case of existing projects and at 70% of the project cost for new projects.

As per the audited annual accounts for FY 2016-17, the capitalization amount is Rs.993.08 Crore. The scheme-wise capitalisation considered is furnished in Table 4.4 above.

The Commission, for the purpose of computation of interest, has considered the opening loan at Rs.454.40 Crore for FY 2016-17 based on the closing loan approved in true up for FY 2015-16 in Tariff Order dated 9th March 2017 and loan additions during FY 2016-17 is considered @70% of the capitalisation in terms of Regulation 71 (1)(ii) of the BERC Regulations, 2007 as given below:

Table 4.13: Funding of capitalisation considered for FY 2016-17

Sl. No.	Particulars	Amount (Rs. Crore)
1	Capitalisation during FY 2016-17	993.08
2	Less: Grants	--
3	Net capitalisation	993.08
4	Equity considered (@30% of 3)	297.92
5	Debt considered (@70% of 3)	695.16

The Commission, in terms of Regulation 73 (1) (f) of BERC Tariff Regulations 2007, has considered repayment of loans equivalent to Depreciation allowed in truing up for year 2016-17.

BSPTCL has incurred Rs.39.41 crore as interest on loan in FY 2016-17 as per the audited accounts. The Petitioner has drawn Rs.90 crore Loan from PFC in FY 2016-17 and repaid the same in FY 2016-17 itself. On a query, it was informed by the Petitioner that the PFC loan of Rs.90 crore was drawn due to delay in BRGF funding and was repaid from BRGF funding as soon as the BRGF funding was made available. The Commission does not find any rationale for drawing PFC loan in FY 2016-17 and repaying the same in FY 2016-17 itself as no benefit/discount is availed by the utility for discharging capital liability/bills

paid. Hence the Commission does not consider PFC loan and interest thereon for arriving at the effective rate of interest for FY 2016-17 as detailed hereunder.

Table 4.14: Effective rate of interest on loans considered for FY 2016-17

Sl. No.	Particulars	Opening Balance as on 1.4.2016	Addition	Re-payment	Closing Balance as on 31.3.2017	Avg. Loan	Interest accrued during 2016-17	Average rate of Interest (%)
1	State Government Loan	195.96	144.59	--	340.55	268.26	26.06	9.71%
2	ADB loan	136.89	68.09	--	204.98	170.94	12.04	7.04%
3	Total	332.85	212.68	--	545.53	439.19	38.10	8.68%

Accordingly, the Commission has computed effective rate of interest at 8.68% and considered for arriving interest on loan in the truing up for FY 2016-17 as detailed in the Table below:

Table 4.15 Interest on loans approved in truing up for FY 2016-17

(Rs. Crore)					
Sl. No.	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17	Now approved in truing up for 2016-17
1	Opening loan	685.77	454.40	454.40	454.40
2	Additions during the year	686.39	880.54	695.15	695.16
3	Normative Repayment	61.17	84.31	77.04	76.98
4	Closing Loan (1+2-3)	1310.99	1250.63	1072.51	1072.58
5	Average Loan $\{(1+4)/2\}$	998.38	852.51	763.46	763.49
6	Interest rate	7.15%	7.20%	8.97%	8.68%
7	Interest on loan (5*6)	71.39	61.39	68.51	66.27

The Commission, accordingly, approves the interest on loans of Rs.66.27 Crore for FY 2016-17 in truing up.

The Petitioner has claimed Rs.0.003 crore towards other Finance Charges based on the audited accounts for FY 2016-17. The revenue and expenses of ARR are considered in Rupees crore with two decimal places, the impact of Rs.0.003 crore gets nullified on the ARR due to rounded off to two decimal places.

Thus, the Commission approves the Interest & Finance Charges of Rs.66.27 Crore for FY 2016-17 in truing up.

4.7. Operation and Maintenance expenses

(a) Employee cost

Petitioner's submission:

BSPTCL has 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 Petitioner has claimed employee expenses of Rs.101.90 crore for FY 2016-17 based on the audited annual accounts as detailed in the Table below:

Table 4.16: Employee Expenses proposed for FY 2016-17

(Rs. Crore)				
Sl. No	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17
1	Employee cost	97.69	98.99	101.90
2	indexation	4.65%	2.59%	--
3	Add: Inflationary increase (1*2)	4.54	2.56	--
4	Net employee cost (1+3)	102.23	101.55	101.90

The details of the Employee expenses for FY 2016-17 as per the audited accounts submitted by Petitioner are as below:

Table 4.17: Details of Employee Expenses for FY 2016-17

S. No.	Particulars	Employee Expenses
1	Salaries	38,74,42,715
2	Over Time	4,44,45,611
3	Dearness Allowance	43,76,43,947
4	Other Allowance	3,43,46,956
5	Medical expenses Re-imburement	29,58,410
6	Staff Welfare Expenses	12,85,632
7	Terminal Benefits	11,09,17,486
8	Total	101,90,40,757

The Petitioner has requested to approve the actual employee expenses of Rs.101.90 Crore for FY 2016-17 as the same are as per the audited annual accounts of the Petitioner for FY 2016-17 and which are almost equal to the employee expenses approved by the Commission in review for FY 2016-17 (RE).

Commission's analysis:

As per the audited accounts of FY 2016-17, the Petitioner has incurred Rs.101.90 crore towards Employee cost during for FY 2016-17.

The Regulation 22 of BERC Terms and Conditions for Determination of Tariff Regulations, 2007 specify;

(1) 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.”

“(2) 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.”

The Commission, in terms of above regulations approves the employee expenses in truing up based on audited annual accounts for FY 2016-17 as indicated in the Table below:

Table 4.18: Employee Expenses approved in truing up for FY 2016-17

Sl. No	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17	Now approved in truing up for FY 2016-17
1	Employee cost	97.69	98.99	101.90	101.90
2	indexation	4.65%	2.59%	--	--
3	Add: inflationary increase (1*2)	4.54	2.56	--	--
4	Net employee cost (1+3)	102.23	101.55	101.90	101.90

The Commission, accordingly, approves the employee expenses at Rs.101.90 Crore for FY 2016-17 in the truing up.

(b) Repairs and Maintenance (R&M) Expenses

Petitioner's submission:

BSPTCL has submitted that it 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. It is submitted that R&M expenses claimed in truing up for FY 2016-17 are as per the audited annual accounts and has requested the Commission to approve the R&M expenses as detailed in the Table below:

Table 4.19: R&M Expenses proposed for FY 2016-17

Sl. No	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17
1	R&M Expenses	38.21	36.17	47.24
2	Inflationary index	4.65%	2.59%	--
3	Add: Inflationary increase	1.77	0.94	--
4	R&M Cost	39.98	37.11	47.24

The details of the R&M expenses for FY 2016-17 as per the audited accounts submitted by the Petitioner are as below:

Table 4.20: Details of R&M expenses for FY 2016-17

S. No.	Particulars	R&M Expenses
1	Plant and machinery	28,57,29,023
2	Building	1,84,98,457
3	Civil Works	6,25,98,555
4	Hydraulic Works	27,33,342
5	Line Cable Net Works	10,05,28,766
6	Vehicles	49,979
7	Furniture and Fixture	20,39,873
8	Office Equipment	1,89,757
	Total	47,23,67,752

The Petitioner has requested the Commission to approve the R&M expenses as submitted above for FY 2016-17.

Commission's analysis:

The Commission has examined the R&M expenses claimed by the Petitioner. As per the audited accounts of FY 2016-17, the Petitioner has incurred Rs.47.24 crore towards R&M expenses during for FY 2016-17.

The Commission has observed that the R&M expenses in FY 2016-17 have increased by around 31% over previous year FY 2015-16 and accordingly addressed the Petitioner to furnish the reasons for increase. The Petitioner vide letter dated 15.12.2017 has informed that the increase in R&M expenses over previous year is due to increase in capitalisation/assets put to use during FY 2016-17.

The Commission has considered Repairs and Maintenance expenses at Rs.47.24 crore in truing up based on the actual R&M expenses reported in the audited accounts for FY 2016-17 as indicated in the Table below:

Table 4.21: R&M Expenses approved in truing up for FY 2016-17

(Rs. Crore)

Sl. No	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17	Now approved in truing up for 2016-17
1	R&M Expenses	38.21	36.17	47.24	47.24
2	inflationary index	4.65%	2.59%	--	--
2	Add: Inflationary increase	1.77	0.94	--	--
3	R&M Cost (1+2)	39.98	37.11	47.24	47.24

The Commission, accordingly, approves Rs.47.24 Crore towards R&M expenses for FY 2016-17 in truing up.

(c) Administration & General (A&G) Expenses

Petitioner's submission:

BSPTCL has submitted that Administration and General expenses mainly comprise of cost towards rent charges, telephone and other communication expenses, professional charges, conveyance and travelling allowances and Holding company expenses and other debits.

BSPTCL has submitted, as per audited annual accounts for FY 2016-17, the actual A&G expenses incurred in FY 2016-17 is at Rs.28.04 Crore as detailed in the Table below:

Table 4.22: Administration and General Expenses proposed for FY 2016-17

(Rs. Crore)

Sl. No.	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17
1	A & G Expenses	8.86	16.14	28.04
2	Inflationary index	4.65%	2.59%	--
3	Add: Inflationary increase	0.42	0.42	--
4	A&G expenses (1+3)	9.28	16.56	28.04

The details of A&G expenses for FY 2016-17 as per the audited accounts submitted by the Petitioner are as below:

Table 4.23: Details of A&G Expenses for FY 2016-17

Sl. No	Particulars	A&G Expenses
1	Rent, Rates & Taxes	14,183,415
2	Insurance	20,979,733
3	Telephone Charges, Postage, Telegram and Telax Charges	4,063,794
4	Legal Charges	383,746
5	Audit Fees	162,630
6	Consultancy Charges	2,357,109
7	Director's Sitting Fees	28,000
8	Interest on Taxes Paid	-
9	Technical Fees	1,322,430
10	Other Professional Charges	127,195
11	Conveyance & Travel	33,217,279
12	Preliminary Expenses Written off	3,621,704
13	Other Expenses	
a	Fees & Subscription	26,682,087
b	Books & Periodicals	163,092
c	Printing & Stationary	2,276,371
d	Advertisement	12,821,449
e	Expenditure on CSR	3,621,566
f	Loss on Fire/Theft of Stock	
g	Electricity Charges	99,102,119
h	Entertainment Charges	1,541,568
i	Commission for Sale of Scrap	4,520,931
j	Home Guard/ Security Guard	41,015,159
k	Miscellaneous Expenses	8,057,854
14	Freight	16,540
15	Other Purchase related Expenses	155,300
16	Total	280,421,071

The Petitioner has requested the Commission to approve the A&G expenses as submitted above for FY 2016-17.

Commission's analysis:

The Commission has analysed the A&G expenses claimed by the Petitioner. It is observed that the A&G expenses include Rs.0.36 Crore towards Preliminary expenses written off and Rs.0.36 crore Expenses on CSR.

The Commission has allowed preliminary expenses (Registration charges paid to RoC) in truing up for FY 2012-13 itself and hence has disallowed in truing up for FY 2016-17.

The Section 135 of the Companies Act, 2013 specify:

“135. Corporate Social Responsibility.

- (1) Every company having net worth of rupees five hundred crore or more, or turnover of rupees one thousand crore or more or a net profit of rupees five crore or more during any financial year shall constitute a Corporate Social Responsibility Committee of the Board consisting of three or more directors, out of which at least one director shall be an independent director.
- (2) The Board's report under sub-section (3) of section 134 shall disclose the composition of the Corporate Social Responsibility Committee.
- (3) The Corporate Social Responsibility Committee shall,—
- (a) formulate and recommend to the Board, a Corporate Social Responsibility Policy which shall indicate the activities to be undertaken by the company as specified in Schedule VII;
 - (b) recommend the amount of expenditure to be incurred on the activities referred to in clause (a); and
 - (c) monitor the Corporate Social Responsibility Policy of the company from time to time.
- (4) The Board of every company referred to in sub-section (1) shall,—
- (a) after taking into account the recommendations made by the Corporate Social Responsibility Committee, approve the Corporate Social Responsibility Policy for the company and disclose contents of such Policy in its report and also place it on the company's website, if any, in such manner as may be prescribed; and
 - (b) ensure that the activities as are included in Corporate Social Responsibility Policy of the company are undertaken by the company.
- (5) The Board of every company referred to in sub-section (1), shall ensure that the company spends, in every financial year, at least two per cent. of the average net profits of the company made during the three immediately preceding financial years, in pursuance of its Corporate Social Responsibility Policy:

Provided that the company shall give preference to the local area and areas around it where it operates, for spending the amount earmarked for Corporate Social Responsibility activities:

Provided further that if the company fails to spend such amount, the Board shall, in its report made under clause (o) of sub-section (3) of section 134, specify the reasons for not spending the amount.

Explanation.—For the purposes of this section—average net profit|| shall be calculated in accordance with the provisions of section 198”.

The Companies (Corporate Social Responsibility Policy) Rules 2014, Rule 4, specify that the CSR activity is not normal course of business activity. The budgetary spend on CSR will be based on the profitability of the Company and shall be determined based on the Profit of the Company.

The Companies (Corporate Social Responsibility Policy) Rules 2014, Rule 9 of the Companies (Accounts) Rules, 2014, Comments - 135.44 Deduction of CSR expenses under section 37(1) of the Income-tax Act, 1961 Finance (No. 2) Act, 2014 Explanation 2 provides as under :

“Explanation 2.—For the removal of doubts, it is hereby declared that for the purposes of sub-section (1), any expenditure incurred by an assessee on the activities relating to corporate social responsibility referred to in section 135 of the Companies Act, 2013 (18 of 2013) shall not be deemed to be an expenditure incurred by the assessee for the purposes of the business or profession”.

The Commission, in view of the above, do not consider the expenses incurred on Corporate Social Responsibility (CSR) as pass through in the ARR for FY 2016-17 in true up.

Thus, the Commission has not considered Rs.0.72 Crore expenses relating to preliminary expenses of (Rs.0.36 Crore) (Sl. No. 12) and expenses on CSR (Rs.0.36 Crore) (Sl. No.13(e)) shown in Table 4.23 in truing up for FY 2016-17.

Further, it is observed that the A&G expenses include Rs.9.91 crore towards electricity charges for FY 2016-17. On a query, it was informed by the Petitioner vide letter dated 15.12.2017 that the electricity charges (Rs.9.07 crore) represent payment of long pending dues in FY 2016-17 towards electricity charges of self consumption of various Grid Substations, Circle offices and Division offices. The Commission opines that such long pending dues towards electricity charges paid in FY 2016-17 should not be a part of A&G expenses for FY 2016-17, rather it should be dealt under Prior period expenses. Hence, the Commission has not considered Rs.9.07 crore towards long pending electricity charges under A&G head, rather it has considered under prior period expenses dealt at paragraph 4.12 of this chapter.

The Regulation 22 of BERC Terms and Conditions for Determination of Tariff Regulations, 2007 specify;

(1) 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.”

“(2) 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.”

The Commission in terms of regulation 22(1) and 22(2) of the BERC Terms and Conditions for Determination of Tariff Regulations, 2007 considers the A&G expenses as per the audited annual accounts for FY 2016-17 as detailed in the Table below:

Table 4.24: Administration and General Expenses approved in truing up for FY 2016-17
(Rs. Crore)

Sl. No.	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17	Now approved in truing up for FY 2016-17
1	A & G Expenses	8.86	16.14	28.04	28.04
2	Inflationary index	4.65%	2.59%	--	--
3	Add: Inflationary increase	0.42	0.42	--	--
4	A&G expenses (1+3)	9.28	16.56	28.04	28.04
5	Less: A&G cost disallowed (Preliminary and CSR Expenses)	--	--	--	0.72
6	Less: Prior period electricity charges	--	--	--	9.07
6	Net A&G expenses (4-5)	9.28	16.56	28.04	18.25

The Commission, accordingly, approves the Administration & General Expenses at Rs.18.25 Crore for FY 2016-17 in the truing up.

(d) Allocation of Holding Company Expenses

Petitioner's submission:

BSPTCL submitted that Holding Company Expenses of Rs.4.95 Crore have been reported in the audited accounts for FY 2016-17. Accordingly, the Petitioner has claimed the holding company expenses in truing up for FY 2016-17 as detailed in the Table below:

Table 4.25: Holding company expenses proposed in truing up for FY 2016-17
(Rs. Crore)

Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17
Holding Company Expenses	5.00	7.29	4.95

Commission's analysis:

As per the audited accounts of BSPHCL, the O&M expenses are at Rs.33.84 Crore for FY 2016-17 as given below:

Table 4.26: Holding company expenses as per audited accounts for FY 2016-17

Particulars	Amount (Rs. Crore)
Employee expenses	17.81
R&M expenses	7.00
A&G expenses	9.03
Total holding company expenses	33.84

Based on the above expenses, the expenses to be allocated to the power utilities in the equity sharing ratio works out to as given below:

Table 4.27: Holding Company expenses allocated on the basis of equity deployed ratio

Particulars	BSPHCL	BSPGCL	BSPTCL	NBPDCL	SBPDCL
Equity Deployed Ratio %	100.00%	18.32%	26.11%	28.47%	27.10%
Allocation of expenses for FY 2016-17 (Rs. Crore)	33.84	6.20	8.84	9.63	9.17

The Commission observes that the audited annual accounts of the BSPTCL for FY 2016-17 depict Rs.4.95 Crore towards holding company expenses, which is less than the expenses allocated as above. Based on the audited annual accounts for FY 2016-17, the Commission considers the holding company expenses in true up as detailed in the Table below:

Table 4.28: Holding company expenses approved in true up for FY 2016-17

Particulars	(Rs. Crore)			
	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in trueing up for FY 2016-17	Now approved in true up for FY 2016-17
Holding Company Expenses	5.00	7.29	4.95	4.95

The Commission, accordingly, approves Rs.4.95 Crore towards holding company expenses for FY 2016-17 in the truing up.

4.8. Total O & M expenses

Petitioner's submission:

The total O&M expenses for FY 2016-17 proposed by BSPTCL for truing up is summarized in the Table below:

Table 4.29: Total O&M Expenses proposed in true up for FY 2016-17

(Rs. Crore)

Sl. No.	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17
1	Employee cost	102.23	101.55	101.90
2	R & M Expenses	39.98	37.11	47.24
3	A & G expenses	9.28	16.56	28.04
4	Holding Company expenses allocated	5.00	7.29	4.95
5	Total O&M cost	156.49	162.51	182.13

Commission's analysis:

The Commission, based on the analysis, has approved the total O&M expenses for FY 2016-17 in the truing up as detailed in the Table below:

Table 4.30: Total O&M Expenses approved in truing up for FY 2016-17

(Rs. Crore)

Sl. No.	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17	Approved in truing for FY 2016-17
1	Employee cost	102.23	101.55	101.90	101.90
2	R & M Expenses	39.98	37.11	47.24	47.24
3	A & G expenses (net)	9.28	16.56	28.04	18.25
4	Holding Company expenses allocated	5.00	7.29	4.95	4.95
5	Total O&M cost	156.49	162.51	182.13	172.34

The Commission, accordingly, approves total O&M expenses at Rs.172.34 Crore for FY 2016-17 in the truing up.

4.9. Interest on working capital

Petitioner's submission

BSPTCL has submitted that it has arrived at the working capital requirement according to applicable norms for transmission function provided in the BERC (Terms and Conditions of Tariff) Regulations, 2007 which are reproduced in the following Table:

Table 4.31: Norms for working capital requirement

Sl. No.	Particulars	Norm
1	O&M expenses	One month
2	Maintenance spares	@1% of historical cost of GFA escalated @ 6% per annum
3	Receivables	Two months of transmission charges
4	Rate of interest on working capital	Rate of interest on working capital will be computed at 350 basis points over and above the State Bank of India (SBI) Base Rate. The interest on working capital shall be payable on normative basis notwithstanding that the transmission licensee may not have taken working capital loan from any outside agency or taken at different rates and amounts.

The rate of interest applied on the working capital is SBI Base Rate plus 350 basis points i.e. 12.80%.

BSPTCL has computed interest on working capital for FY 2016-17 as per the above norms as detailed in the Table below:

Table 4.32: Interest on working capital projected for FY 2016-17

(Rs. Crore)				
Sl. No.	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17
1	O&M expenses (1 month)	13.04	13.54	15.18
2	Maintenance spares @1% of opening GFA with 6% escalation	38.46	29.45	29.45
3	Receivables - 2 months	58.73	63.33	64.78
4	Total working capital	110.23	106.32	109.41
5	Rate of interest	13.50%	12.80%	12.80%
6	Interest on working capital	14.88	13.61	14.00

BSPTCL requested the Commission to approve the computation of working capital interest for FY 2016-17 based on the actual components of the normative working capital.

Commission's analysis:

The Commission has examined the computation of interest working capital submitted by the Petitioner.

Regulation 73(4)(ii) of the BERC (Terms and Conditions for Determination of Tariff) Regulations, 2007 specify *"Rate of interest on working capital shall be on normative basis and shall be equal to the short term Prime Lending Rate of State Bank of India on 1st April of the year in which the project or part thereof (as the case may be) is declared under commercial operation. The interest on working capital shall be payable on normative basis not withstanding that the transmission licensee may not have taken working capital loan from any outside agency or taken at different rates and amounts"*.

As per the amended Regulation 73(4)(ii) of the BERC Tariff Regulations, 2007 (amendment notified in the Bihar Gazette dated 27.03.2014 came into force from the date of publication) the rate of interest on working capital will be computed at 350 basis point over and above the **Base Rate**.

The SBI Base Rate as on 1st April 2016 is at 9.30% and the rate of interest to be considered for computing interest on working capital shall be 12.80% (i.e.9.30% + 3.50%) for FY 2016-17 in truing up.

Regulation 73(4)(i)(b) of the BERC Tariff Regulations, 2007 specify *"maintenance spares @ 1% of the historical cost escalated at 6% per annum"*.

The Commission has considered opening GFA at Rs.4033.62 crore approved in Table 4.7 above. The value of GFA includes asset revalued amounting to Rs.1255.06 crore and accordingly, the GFA is adjusted to original value (historical cost) of GFA for considering

maintenance spares as per norms for arriving at the working capital requirement for FY 2016-17. Accordingly, the Commission has considered opening GFA at Rs.2778.56 crore (Opening GFA Rs.4033.62 crore – Asset revalued Rs.1255.06 crore) for computing working capital requirement and interest on working capital for FY 2016-17. The Commission, accordingly considered maintenance spares at 1% of the historical value of GFA (Rs.2778.56 crore) with escalation @6% at Rs.29.45 crore in true up for FY 2016-17

The Commission, as per norms has computed the working capital requirement and interest on working capital based on the approved expenses at an interest rate of 12.80% as on 1st April 2016 as given in the Table below:

Table 4.33: Interest on working capital approved in truing up for FY 2016-17

(Rs. Crore)

Sl. No	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17	Now approved in truing up for FY 2016-17
1	O&M expenses (1 month)	13.04	13.54	15.18	14.36
2	Maintenance spares @1% of opening GFA with 6% escalation	38.46	29.45	29.45	29.45
3	Receivables - 2 months	58.73	63.33	64.78	63.36
4	Total working capital (1+2+3)	110.23	106.32	109.41	107.17
5	Rate of interest'	13.50%	12.80%	12.80%	12.80%
6	Interest on working capital (4*5)	14.88	13.61	14.00	13.72

The Commission approves interest on working capital at Rs.13.72 Crore in truing up for FY 2016-17.

4.10. Return on Equity

Petitioner's submission

The Petitioner, for the purpose of computation of return on equity, has considered the opening equity for FY 2016-17 based on the closing equity approved in true up for FY 2015-16 in Tariff Order dated 09.03.2017 and equity additions during FY 2016-17 is

considered @ 30% of the capitalization (net of grants) in terms of BEREC Regulations, 2007 as detailed in the Table below:

Table 4.34: Return on Equity claimed in truing up for FY 2016-17

(Rs. Crore)				
Sl. No.	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17
1	Opening Equity as on 1.4.2015	325.60	375.41	375.41
2	Rate of Return on Equity	14.00%	14.00%	14.00%
3	Return on Equity (1*2)	45.58	52.56	52.56
	Equity on projects commissioned w.e.f.1.4.2015			
4	Opening Equity	112.91	23.30	23.30
5	Addition during the year	294.17	377.37	297.92
6	Closing Equity (4+5)	407.08	400.67	321.22
7	Average Equity (4+6)/2	203.54	211.98	172.26
8	Rate of Return on Equity %	15.50%	15.50%	15.50%
9	Return on Equity (7*8)	31.55	32.86	26.70
10	Total Return on Equity (3+9)	84.10	85.42	79.26

Commission's analysis:

The Regulation 73 (2) (c) of the BEREC (Terms and Conditions for Determination of Tariff) Regulations, 2007 specify;

- (i) **Return on Equity shall be computed on the equity base determined in accordance with Regulation 71 and shall be @ 14% per annum.**
- (ii) *Equity invested in foreign currency shall be allowed a return up to a prescribed limit in the same currency and the payment on this account shall be made in Indian Rupee based on the exchange rate prevailing on the due date of billing.*

Explanation:

The premium raised by the transmission licensee while issuing share capital and investment of internal resources created out of free reserve of the existing transmission licensee, if any, for funding the project, shall also be reckoned as paid up capital for the purpose of computing return on equity provided such premium amount and internal

resources are actually utilised for meeting the capital expenditure of the project and forms part of the approved financial package. The definition of equity thus would involve all net worth deployed in the capital of the unit. **This shall not include any revaluation of reserves and subsidies**".

The BERG in Gazette Notification dated 26th March 2014 has issued amendment to Regulation 73 (2) (i) of BERG (Terms and Conditions for Determination of Tariff) (2nd Amendment) Regulations, 2014 which specify that **"Return on equity shall be computed on the equity base determined in accordance with Regulation 71 and shall be @15.50% for the projects which are commissioned on and after 01.04.2015"**.

The Regulation 71 of BERG Terms and Conditions for Determination of Tariff Regulations, 2007 specify;

"(1) in case of all projects, the debt - equity ratio as on the date of commercial operation shall be 70:30 for determination of Tariff, provided that the Commission may in deserving case consider equity higher than 30% for purpose of determination of tariff, where the transmission licensee is able to establish to the satisfaction of the Commission that the deployment of equity more than 30% was in the interest of general public.

Provided that;

(j) in case a project, if the actual equity employed is less than 30%. The actual debt and equity employed shall be taken for determination of tariff.

(ii) **in case of existing projects the actual debt : equity ratio shall be used for tariff determination. However, any expansion shall be governed by clause (1) above."**

(2) the debt and equity amount arrived at in accordance with clause (1) shall be used for calculation of interest on loan, Return on Equity, Advance Against Depreciation and Foreign Exchange Rate Variation".

A conjoint reading of Regulations 73 and 71 explicitly specify that Return on Equity shall be provided on the actual Equity in respect of existing projects and at 30% of the project cost for new projects.

The Commission for the purpose of computation of Return on Equity had considered the 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.23.30 crore based on the closing equity approved in true up for FY 2015-16 in Tariff order dated 09.03.2017. The addition to equity during FY 2016-17 is considered at Rs.297.92 crore as approved in Table 4.13 above.

The Commission, in view of the 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 dated 26.03.2014.

The Commission, accordingly, has considered Return on Equity in true up for FY 2016-17 as detailed in the Table below:

Table 4.35: Return on Equity approved in truing up for FY 2016-17

(Rs. Crore)					
Sl. No.	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17	Now approved in truing up for FY 2016-17
1	Equity as on 31.03.2015	325.60	375.41	375.41	375.41
2	Rate of return on Equity	14.00%	14.00%	14.00%	14.00%
3	Return on equity (1*2)	45.58	52.56	52.56	52.56
4	Equity of projects commissioned w.e.f. 1.04.2015	112.91	23.30	23.30	23.30
5	Equity additions during the	294.17	377.37	297.92	297.92

Sl. No.	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17	Now approved in truing up for FY 2016-17
	year				
6	Closing Equity (4+5)	407.08	400.67	321.22	321.22
7	Average equity (4+6)/2	203.54	211.98	172.26	172.26
8	Rate of Return on equity	15.50%	15.50%	15.50%	15.50%
9	Return on equity (7*8)	31.55	32.86	26.70	26.70
10	Total Return on equity (3+9)	84.10	85.42	79.26	79.26

The Commission accordingly approves Return on Equity at Rs.79.26 Crore for FY 2016-17 in the truing up.

4.11. Income Tax/Minimum Alternate Tax (MAT)

Petitioner's submission

BSPTCL has submitted that it has made a payment of Rs.0.46 crore as income tax for FY 2016-17 and requested the Commission to approve the same part of true up for FY 2016-17.

Commission's analysis:

Regulation 16 of BERC (Terms and Conditions for Determination of Tariff) Regulations 2007 specify:

"(1) Tax on income of an integrated utility or a generating company or the transmission licensee or the distribution licensee, as the case may be, from its core business, shall be computed as an expense and shall be recovered from the beneficiaries or consumers.

(2) Under – recovery or over – recovery of any amount from the beneficiaries or the consumers on account of such tax, having been passed on to them shall be adjusted every year on the basis of income-tax assessment under Income Tax Act, 1961, as certified by the statutory auditors. An integrated utility or the generating company or the transmission licensee / distribution licensee, as the case may be, may make such adjustments directly.

Provided that

(i) tax on any income, other than core business, shall not constitute a pass through component in tariff and the tax on such other income shall be borne by the integrated utility or generating company or the transmission / distribution licensee, as the case may be.

(ii)

(iii) the benefit of tax – holiday as applicable in accordance with provisions of Income Tax Act, 1961 shall be passed on to the beneficiaries.

(iv)

(v)

The Commission observes that BSPTCL has paid Advance tax Rs.0.46 crore for FY 2016-17 (Assessment year 2017-18) and furnished the copy of IT return acknowledgement. The Commission, in terms of Regulation-16 above, considers payment of income tax as pass through in the ARR, subject to adjustment based on final assessment orders as per Regulation 16(2) above.

The Commission, accordingly, approves Rs.0.46 crore towards income tax in truing up for FY 2016-17.

4.12. Prior period expenses

Petitioner's submission

BSPTCL has submitted that as per audited accounts for FY 2016-17 the prior period expenses are at Rs.1.26 crore as detailed in the Table below:

Period/Dates	Particulars	Amount (Rs. in lakh)
12.06.2013	Project Deposit	76.92
12.06.2013		2.04
17.06.2013	Service tax on supervision charges	1.58
25.06.2013		8.30
13.07.2013		1.46

Period/Dates	Particulars	Amount (Rs. in lakh)
17.07.2013		1.17
21.12.2013		0.09
30.12.2013		0.78
10.10.2014 & 11.02.2015		3.02
FY 2015-16	CSR expenses	30.57
Total		125.93

BSPTCL has submitted that due to mistake, project deposit of Rs.76.92 lakh was wrongly charged to supervision charges. Total supervision charges received from 12.06.2013 to 11.02.2015 was booked as income without deducting service tax.

Commission's analysis:

The Commission allows the project deposit of Rs.76.92 lakh and service tax on supervision charges of Rs.18.44 lakh totalling to Rs.95.36 lakh wrongly considered as income in accounts for FY 2013-14 and FY 2014-15 as a pass through in ARR for FY 2016-17 in truing up.

The Commission do not consider prior period CSR expenses in true up for FY 2016-17 as the CSR expenses shall be met out of profits earned by the utility as already deliberated at para 4.7 (c) under A&G expenses.

Further, as discussed in foregone para 4.7 (c), the Commission considers Rs.9.07 crore towards long pending electricity charges (claimed by petitioner under A&G expenses) under prior period charges.

The Commission approves the prior period expenses at Rs.10.02 Crore in truing up for FY 2016-17.

4.13. Incentive for achieving higher Transmission System Availability target

Petitioner's submission

BSPTCL has submitted that the Commission in Tariff Order dated 21.03.2016 has approved target availability of 98% for recovery of 100% ARR in FY 2016-17 as per Regulation 68 and 74 of BERC Tariff Regulations, 2007. The actual Transmission System Availability for FY 2016-17 is at 98.93% and hence BSPTCL is entitled for incentive for achieving higher Transmission System Availability over the targeted Transmission System Availability.

The Regulation 76 of BERC Tariff Regulations, 2007 for eligibility of Incentive stipulates as below:

"76. Incentive

(1) The transmission licensee shall be entitled to incentive @ 1% of equity for each percentage point of increase in annual availability beyond the target availability prescribed under Regulation 68 in accordance with the following formula:

$$\text{Incentive} = \text{Equity} \times (\text{Annual availability achieved} - \text{target availability}) \div 100$$

(2) Incentive shall be shared by the long-term customers in the ratio of their average allotted transmission capacity for the year".

BSPTCL has submitted the month-wise transmission system availability duly certified by SLDC vide Lr. No. 294, dated 24.11.2017.

The Petitioner has furnished the incentive computation for FY 2016-17 as given in the Table below:

Table 4.36: Incentive computation by Petitioner for FY 2016-17

Sl. No.	Month	Percentage TAF (%)	Target availability (%)	Difference (%)	Average Equity for FY 2016-17 (Rs. Crore)	Incentive (Rs. Crore)
1	Apr-16	99.36	98	1.36		
2	May-16	99.03	98	1.03		
3	Jun-16	99.13	98	1.13		
4	Jul-16	98.95	98	0.95		
5	Aug-16	98.77	98	0.77		
6	Sep-16	98.74	98	0.74		
7	Oct-16	98.89	98	0.89		
8	Nov-16	98.13	98	0.13		
9	Dec-16	98.87	98	0.87		
10	Jan-17	99.05	98	1.05		
11	Feb-17	99.31	98	1.31		
12	Mar-17	98.94	98	0.94		
	FY 2016-17	98.93	98	0.93	547.67	5.10

BSPTCL has requested to approve the incentive at Rs. 5.10 Crore for FY 2016-17 as detailed in the table above.

Commission's analysis:

The Commission has examined the incentive claim of the Petitioner for FY 2016-17 in truing-up. The Petitioner has furnished the detailed month-wise computation of Transmission system availability and has claimed the incentive as per the formula prescribed in Regulation 76 of the BERC Tariff Regulations 2007.

BERC Tariff Regulations, 2007 stipulates as below:

1. Regulation – 68: Target availability for recovery of full transmission charges for AC system as 98%.
2. Regulations- 76: Incentive – The transmission licensee shall be entitled to incentive at 1% of equity for each percentage point of increase in annual availability beyond the target availability prescribed under Regulation - 68 in accordance with the following formula.

$$\text{Incentive} = \text{Equity} \times (\text{Annual availability achieved} - \text{target availability}) \div 100$$

Incentive shall be shared by the long-term customers in the ratio of their average allotted transmission capacity for the year”.

3. Regulation-4: Guidelines for determination of Tariffs:

The Commission shall be guided in determination of tariff by the following:

“The principles and guidelines specified by Central electricity Regulatory Commission for determination of tariff applicable to an integrated utility or generating company or transmission licensee from time to time”.

Further, Regulation 38 of CERC Tariff Regulation for FY 2014-15 to FY 2018-19 stipulates that Normative Annual Transmission System Availability Factor shall be as under:

For Recovery of AC System – 98%

For incentive considerations:

(i) AC System – 98.50%

Conjoint reading of the above Regulations infers that for incentive consideration the transmission system availability during FY 2014-15 to FY 2018-19 shall be atleast 98.50% and above.

The Commission has observed from the data furnished by the Petitioner that there are some discrepancies in the computation of month-wise TAF. The Petitioner vide letter no. 17 dated 10.01.2018 has furnished the revised month-wise TAF and the TAF achieved at Rs.98.918% for FY 2016-17, which is found in order by the Commission.

Accordingly, the Commission has computed the incentive as follows:

Incentive = $[(98.918 - 98.50) \times 547.67]/100 = 2.29$ Crore

The Commission approves the incentive for achieving higher Transmission System Availability during FY 2016-17 at Rs.2.29 Crore in truing up for FY 2016-17.

4.14. Disallowance of under recovery of transmission charges due to higher Transmission loss target**Commission's analysis:**

The Commission had fixed transmission loss for BSPTCL for FY 2016-17 at normative level of 3.92% in the MYT order dated 21.03.2016. The Commission had been issuing directives to BSPTCL in year on year tariff orders to install appropriate energy meters in working condition at all interface points including all 33kV feeders. However, it had been experienced that BSPTCL had never been serious in this regard and had not been adhering to such directives. As a result the actual transmission losses had always been inaccurately calculated and had been in the range of 5% or more.

In view of above and to make BSPTCL accountable, the Commission stated in the Tariff Order dated 21.03.2016 as under:

"The Commission had decided to incentivise the utility for achieving the reduced transmission loss than the transmission loss target set by the Commission and has also decided to dis-incentivise the utility for not achieving transmission loss target set by the Commission".

Accordingly, the Commission determined transmission charges in paise/kWh and approved transmission charges for FY 2016-17 at 10.40 paise/kWh by dividing approved ARR with the available energy at its sending end at approved transmission loss of 3.92% in compliance of Regulation 13 of BERC Tariff Regulations 2007.

The Petitioner has claimed the actual transmission loss at 4.74% as per audited accounts of BSPTCL for FY 2016-17. Therefore, the Petitioner has not achieved the transmission loss target of 3.92% set by the Commission for FY 2016-17 and accordingly is liable to bear the entire loss on account of its failure to achieve the norms/target laid down by the Commission in the Tariff Order dated 21.03.2016 in accordance with Regulation 13(2) of BERC (Terms and conditions for determination of Tariff) Regulations 2007.

The Petitioner has not computed the disincentive for non achievement of transmission loss target set by the Commission.

The Commission therefore, compute the disincentive for non achieving the transmission loss target for FY 2016-17 in truing up as given in the Table below:

Table 4.37: Disincentive computation for FY 2016-17

Sl. No.	Particulars	UoM	Actuals for FY 2016-17	Normative for FY 2016-17
1	Energy Input	kWh	23977916298	23977916298
2	Energy Output	kWh	22841024473	23037981979
3	Transmission loss	kWh	1136891825	939934319
4	Percentage of loss	%	4.74%	3.92%
5	Transmission loss over and above the target (kWh)			196957506
6	Rate (Paise per unit)			10.40
7	Under recovery of transmission charges (disallowed) (Rs. crore)			2.05

The Commission therefore disallows the under recovery for non achievement of transmission loss target amounting to Rs.2.05 crore in truing up for FY 2016-17.

4.15. Non-Tariff Income

Petitioner's submission

BSPTCL has submitted that non-tariff income accounted for in the audited annual accounts for FY 2016-17 is at Rs.39.10 Crore and accordingly, proposed the non-tariff income is for truing up for FY 2016-17 as detailed in the Table below:

Table 4.38: Non-tariff income claimed in truing up for FY 2016-17

(Rs. Crore)

Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17
Non-tariff income	35.49	25.36	39.10

The details of non-tariff income for FY 2016-17 as per the audited accounts of the Petitioner are as below:

Table 4.39: Details of Non-Tariff Income for FY 2016-17

S. No.	Particulars	FY 2016-17
A	Interest Income	
1	Interest on Staff Loan and Advance	0.00
2	Incomes from Investment (Fixed Deposit)	0.00
3	Interest from Banks (Other than fixed Deposit)	16.40
	Sub-total (A)	- 16.40
B	Other Income	
1	Income from Scrap sale	13.20
2	Miscellaneous Receipts	0.81
3	Application free received	0.00
4	Lease Rental income	0.88
	Sub-total (B)	14.88
C	Other operative income	
1	Supervision charges	6.20
2	Other transmission charges	1.62
	Sub-total (C)	7.82
	Total (A+B+C)	39.10

The Petitioner has requested the Commission to approve the non-tariff Income for FY 2016-17 as submitted in Table above.

Commission's Analysis:

The Petitioner has accounted Rs.98.45 Crore towards other income in the audited annual accounts for FY 2016-17. It is observed that Rs.98.45 Crore is inclusive of Rs.67.14 Crore towards amortization of grants on account of proportionate depreciation on the assets created out of grants.

The Commission has considered the total grants for computation of proportionate depreciation on assets created through grants, hence, has reduced Rs.67.14 crore from the non-tariff income and net non-tariff Income of Rs.31.31 crore (Rs.98.45 crore – Rs.67.14 crore) is considered in true up for FY 2016-17.

The Commission observes from the audited accounts of FY 2016-17 that the supervision charges (Rs.6.20 crore) and other transmission charges (Rs.1.62 crore) totaling to Rs.7.82 crore received in FY 2016-17 was accounted against Transmission charges by the

Petitioner. The Commission considers these charges as non-tariff income in truing up for FY 2016-17. The total non-tariff income considered in true up for FY 2016-17 is as detailed in the Table below:

Table 4.40: Non-tariff income approved in truing up for FY 2016-17

(Rs. Crore)

Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17	Now approved in truing up for FY 2016-17
Non-tariff income	35.49	25.36	39.10	31.31
Supervision charges	--	--	--	6.20
Other transmission charges	--	--	--	1.62
Total non-tariff income	35.49	25.36	39.10	39.13

The Commission approves the non-tariff income at Rs.39.13 Crore in truing up for FY 2016-17.

4.16. Annual Fixed Charges / Transmission ARR for FY 2016-17

Petitioner's submission

BSPTCL has submitted that the annual fixed charges/Transmission charges have been arrived at by aggregating all the expenses detailed in the previous sections i.e. Depreciation, Interest on Loan, interest on working capital, O&M expenses and RoE. The total expenses less non-tariff income are the net Annual Fixed Charges or Transmission charges. The Petitioner has projected the revised ARR in true up for FY 2016-17 as detailed in the Table below:

Table 4.41: Annual Fixed Charges claimed in truing up for FY 2016-17

(Rs. Crore)				
Sl. No.	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17
1	O&M expenses (a+b+c+d)	156.49	162.51	182.13
a	Employee Expenses	102.23	101.55	101.90
b	R&M expenses	39.98	37.11	47.24
c	A&G Expenses	9.28	16.56	28.04
d	Holding company expenses allocated	5.00	7.29	4.95
2	Less: expenses capitalised	--	1.88	--
3	Depreciation	61.17	84.31	77.04
4	Interest and finance charges	71.39	61.39	68.51
5	Interest on working capital	14.88	13.61	14.00
6	Return on equity	84.11	85.42	79.26
7	Income tax	--	--	0.46
8	Prior period expenses	--	--	1.26
9	Incentive	--	--	5.10
10	Gross Annual Revenue Requirement	388.04	405.36	427.76
11	Less: Non-Tariff Income	35.49	25.36	39.10
12	Net Revenue Requirement	352.55	380.00	388.66

Commission's analysis:

Based on the detailed analysis, the annual fixed charges/Transmission charges approved by the Commission in truing-up for FY 2016-17 are as detailed in the Table below:

Table 4.42: Annual Fixed Charges approved in truing up for FY 2016-17

(Rs. Crore)					
Sl. No.	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17	Approved in truing up for FY 2016-17
1	O&M expenses (a+b+c+d)	156.49	162.51	182.13	172.34
a	Employee Expenses	102.23	101.55	101.90	101.90
b	R&M expenses	39.98	37.11	47.24	47.24
c	A&G Expenses	9.28	16.56	28.04	18.25
d	Holding company expenses allocated	5.00	7.29	4.95	4.95
2	Less: expenses capitalised	--	1.88	--	--
3	Depreciation	61.17	84.31	77.04	76.98
4	Interest and finance charges	71.39	61.39	68.51	66.27
5	Interest on working capital	14.88	13.61	14.00	13.72

Sl. No.	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17	Approved in truing up for FY 2016-17
6	Return on equity	84.11	85.42	79.26	79.26
7	Income tax	--	--	0.46	0.46
8	Prior period expenses	--	--	1.26	10.02
9	Add: Incentive for achieving higher transmission system availability	--	--	5.10	2.29
10	Less: Disallowance for exceeding transmission loss target	--	--	--	(2.05)
11	Gross Annual Revenue Requirement	388.04	405.36	427.76	419.29
12	Less: Non-Tariff Income	35.49	25.36	39.10	39.13
13	Net Revenue Requirement	352.55	380.00	388.66	380.16

The Commission approves annual fixed charges/Transmission charges at Rs.380.16 Cröre in truing up for FY 2016-17

4.17. Revenue Gap / (Surplus) for FY 2016-17

Petitioner's submission

BSPTCL has submitted that the Commission in the Tariff Order dated 21st March 2016 had approved transmission charges for FY 2016-17 on per unit basis at 10.40 paise/unit. Review petition was filed on the Tariff Order before the Commission, which was rejected by the Commission as the review petition was time barred. The transmission charges @10.40 Paise per unit works out as shown in the Table below:

Table 4.43: Recovery of transmission charges proposed for FY 2016-17

Sl. No.	Particulars	Claimed by BSPTCL in truing up for FY 2016-17
1	Energy delivered to Discoms (in kWh)	22841024473
2	Rate (Paise per unit)	10.40
3	Transmission charges to be recovered (Rs.Crore)	237.55

BSPTCL has submitted that Discoms were billed based on the approved ARR of Rs.277.84 crore during FY 2016-17 and the same is reflected in audited accounts. It is submitted

that bills are now being revised based on actual energy delivered to Discoms at the rate of 10.40 paise/unit

The Petitioner has computed the revenue gap for FY 2016-17 in true up as detailed in the Table below:

Table 4.44: Revenue Gap projected in true up for FY 2016-17

(Rs. Crore)

Sl. No.	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17
1	Aggregate Revenue Requirement for FY 2016-17	352.55	380.00	388.66
2	Less: Trued up surplus of FY 2014-15	74.71	74.71	74.71
3	Net Annual Transmission Charges	277.84	305.29	313.95
4	Less: Transmission charges recovered	277.84	277.84	237.55
5	Revenue Gap / (Surplus) for FY 2016-17	--	27.46	76.41

BSPTCL has requested the Commission to allow recovery of above revenue gap for FY 2016-17 in the transmission ARR for FY 2018-19 from NBPDC and SBPDCL.

Commission's analysis:

As discussed in foregone paras, the Commission had determined transmission charges in paise/kWh to make BSPTCL accountable with regard to transmission loss target and had approved transmission charges for FY 2016-17 at 10.40 Paise/kWh by dividing approved ARR with the available energy at its sending end at approved transmission loss of 3.92%. The Petitioner had also filed a review petition on this before the Commission which was rejected on the ground of its being time barred.

As per the audited accounts of BSPTCL for FY 2016-17, the Petitioner has billed/received Rs.277.84 crore towards transmission charges from DISCOMs during FY 2016-17. It is observed that the Discoms audited accounts for FY 2016-17 also show total transmission charges of BSPTCL at Rs.277.84 crore (NBPDC Rs.116.49 and SBPDCL Rs.161.35 crore).

The Commission has obtained the details of month-wise bills of transmission charges from the Discoms. On verification of these bills it is found that despite approval of

transmission tariff in Paise/kWh, BSPTCL has billed in Rs/MW/Month. The Commission based on energy delivered to Discoms has computed transmission charges recoverable from Discoms at Rs.237.55 crore as shown in table 4.43 above. Thus, BSPTCL has recovered excess amount of Rs.40.29 crore (Rs.277.84 – Rs.237.55 crore) from both the Discoms – NBPDCCL & SBPDCL.

Regulation 12 of BERC (Terms and conditions for determination of Tariff) Regulations 2007 specify as under:

“12. Charging of permissible tariff.

An integrated utility / a generating company or a licensee shall not charge tariff in excess of the tariff fixed by the Commission. If any integrated utility or a generating company or a licensee recovers a price or charge exceeding the tariff determined by the Commission, the excess amount shall be recoverable by the person who has paid such price or charge along with interest equivalent to the Bank rate without prejudice to any other liability incurred by the integrated utility or generating company or licensee”.

Accordingly, the Commission approves transmission charges recoverable for FY 2016-17 as Rs.237.55 crore and directs BSPTCL to refund excess recovered amount of Rs.40.29 crore along with interest at Bank rate to both the Discoms – NBPDCCL & SBPDCL in their power sharing ratio.

The Commission, based on the detailed analysis, has considered the annual fixed charges/Transmission charges and the revenue gap in true up for FY 2016-17 as detailed in the Table below:

Table 4.45: Revenue Gap approved in truing up for FY 2016-17

(Rs. Crore)

Sl. No.	Particulars	Approved for FY 2016-17 in Tariff order dated 21.03.2016	Approved for FY 2016-17 (RE) in Tariff Order dated 09.03.2017	Claimed by BSPTCL in truing up for FY 2016-17	Now approved in truing up for FY 2016-17
1	Aggregate Revenue Requirement	352.55	380.00	388.66	380.16
2	Less: Trued-up surplus of FY 2014-15	74.71	74.71	74.71	74.71
3	Less: Transmission charges recovered	277.84	277.84	237.55	237.55
4	Revenue Gap / (Surplus) for the year (1-2-3)	--	27.45	76.41	67.90

The Commission, accordingly, has approved **revenue gap** of Rs.67.90 crore in truing-up for FY 2016-17 as detailed in the table above.

The Regulation 22(3) of the BERC Tariff Regulations, 2007, specifies "*the revenue gap of next year shall be adjusted as a result of Review and Truing up exercises*".

Accordingly, the revenue gap of Rs.67.90 crore arising out of the truing up for FY 2016-17 is adjusted in the ARR for FY 2018-19 along with applicable carrying cost.

5. Annual Performance Review (APR) for FY 2017-18

5.1. Background

BSPTCL has filed the present petition on 27th November, 2017, which includes Annual Performance Review (APR) for FY 2017-18. The Petitioner has submitted that the APR for entire year FY 2017-18 has been projected based on the actual expenses of 1st half year i.e. six months from April 2017 to September 2017 in FY 2017-18.

Review for FY 2017-18 is to be done according to the Regulation 22 (1) of BERC (Terms and Conditions for Determination of Tariff) Regulations, 2007 which is reproduced below:

“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”.

Accordingly, the “Review” exercise for FY 2017-18 has been undertaken by the Commission on the basis of annual accounts for FY 2016-17 and revised estimates for FY 2017-18 submitted by the Petitioner as per BERC (Terms and Conditions for Determination of Tariff) Regulations, 2007.

5.2. Performance of Transmission System

Petitioner’s submission

(A) Transmission System Availability

BPTCL has submitted the month-wise transmission system availability from April 2017 to August 2017 as given in the Table below:

Table 5.1: Transmission system availability

Sl. No.	Month	Transmission system availability factor (%)
1	April 2017	99.13
2	May 2017	99.34
3	June 2017	99.32
4	July 2017	98.40
5	August 2017	98.35

(B) Transmission Loss

BSPTCL has requested for approval of transmission loss trajectory for FY 2017-18 at the same level as approved by the Commission in MYT order dated 21.03.2016 as given in the Table below:

Table 5.2: Transmission Loss Trajectory Projected by the Petitioner

Particulars	Approved for FY 2017-18 in Tariff order dated 09.03.2017	Projected for FY 2017-18 (RE)
Transmission Loss	3.92%	3.92%

Commission analysis:

The Commission has noted the transmission system availability during first 5 months of FY 2017-18. The Transmission system availability, month-wise for FY 2017-18 may be submitted along with in next tariff petition.

The Commission has considered the transmission loss trajectory at 3.92% for the control period of FY 2016-17 to FY 2018-19 in the MYT order dated 21.03.2016. The Petitioner has now requested the Commission to approve the transmission loss trajectory at 3.92% for FY 2017-18 in the review. Accordingly, the Commission approves the transmission loss trajectory for FY 2017-18 at 3.92% in review.

The Commission in the Tariff order dated 21.03.2016 has also stated that:

"The Commission has decided to incentivise the utility for achieving the reduced transmission loss than the transmission loss target set by the Commission and has also decided to dis-incentivise the utility for not achieving transmission loss target set by the Commission.

.....

The incentive/disincentive for achieving/not achieving the transmission loss target set by the Commission shall be implemented from FY 2016-17 onwards in truing up process."

BSPTCL shall submit the month-wise transmission loss, details of energy input and energy outflow and the transmission loss for FY 2017-18 in the next tariff petition.

5.3. Capital Investment Plan

Petitioner's submission:

BSPTCL has submitted that the Commission had approved the capital Investment plan of Rs.6081.31 crore for FY 2015-16 to FY 2018-19 in the Tariff Order dated 21.03.2016.

BSPTCL has submitted revised capital investment plan for FY 2016-17 to FY 2018-19 based on the actual expenditure incurred till FY 2016-17 and progress of works. The scheme-wise capex and capitalisation summary furnished by BSPTCL is as detailed in the Table below:

Table 5.3: Revised capital investment plan proposed by the Petitioner

Sl. No.	Planned Scheme	Capital expenditure			Capitalisation		
		2016-17	2017-18	2018-19	2016-17	2017-18	2018-19
1	BRGF	790.86	489.25	48.04	760.41	1828.94	366.56
2	ADB	9.60	446.37	50.80	56.04	466.21	88.12
3	Old schemes	28.68	34.38	42.46	20.31	11.97	257.42
4	New schemes (State Plan)	965.90	1001.78	559.45	149.97	726.75	1877.13
5	Internal Resources (IRF)	8.66	3.18	0.00	6.36	10.44	46.38
6	PSDF	21.21	50.14	0.00	0.00	0.00	71.35
	Total	1824.91	2025.10	700.75	993.09	3044.30	2706.96

Commission's analysis:

The Commission in the Tariff Order dated 21st March 2016 has approved the capital investment plan of Rs.6081.31 Crore from FY 2015-16 to FY 2018-19. The Petitioner has revised certain planned scheme's cost and furnished the revised capex for FY 2016-17 to FY 2018-19. The Petitioner has submitted the work wise details indicating source of funding, capital expenditure and capitalization in Table 4.3 to 4.9 of the petition.

BSPTCL has projected capital investment plan for transmission system development with addition of substations (220/132/33 KV and 132/33 KV level), lines (220 KV, 132 KV and 33 KV level), bays (220 KV, 132 KV and 33 KV level), augmentation of transformer capacities and other associated/related equipment, works, etc. at a total cost of Rs.4550.76 Crore for the period from FY 2016-17 to FY 2018-19 as detailed in Table 5.3 above. The Commission has observed that the Petitioner has revised the capex plan which was approved in earlier tariff order. The Commission has addressed the petitioner vide Letter No.BERC-37/2017-1419 dated 08.12.2017 to furnish the reasons for revising the capex plan for FY 2016-17 to FY 2018-19. In response, the Petitioner vide Letter No. BERC-298 dated 15.12.2017 submitted the revised scheme-wise capex details for FY 2017-18 as shown in Table 5.4 below.

The Commission, in view of the need to develop the transmission system to transmit the additional power from upcoming generating stations and to meet the load demand in the State, provisionally approves the revised capital investment for FY 2017-18 (RE) as detailed in the Table below:

**Table 5.4: Capital Investment considered by the Commission
(Rs. Crore)**

Sl. No.	Planned Scheme	Source of funding	2017-18 (RE)
1	BRGF	Equity	489.25
2	ADB	Loan	446.37
3	Old schemes - Existing	Equity – 43% Loan – 35% Consumer contribution – 22%	34.38

Sl. No.	Planned Scheme	Source of funding	2017-18 (RE)
4	State Plan-New schemes	Equity-93% Loan – 5% Grant – 2%	1001.78
5	Internal Resources	Equity	3.18
6	PSDF	Grant – 90% Loan – 10%	50.14
7	Total		2025.10

5.4. Capitalisation

Petitioner's submission:

BSPTCL has proposed the year-wise capitalisation for FY 2017-18 as detailed in the following Table:

Table 5.5: Capitalisation proposed by the Petitioner for FY 2017-18
(Rs. Crore)

Sl. No.	Particulars	FY 2017-18
1	Opening CWIP	3114.83
4	New Investment	2025.10
3	Less: Capitalisation	3044.30
2	Closing CWIP	2095.62

BSPTCL has submitted that variation in actual capitalisation will be adjusted at the time of truing up.

Commission's analysis:

The Commission has considered the revised capital investment for FY 2017-18, in the foregone paragraph 5.4.

The Petitioner has furnished the scheme-wise details for FY 2017-18 in the petition. Based on the information the scheme-wise capex and capitalisation for FY 2017-18 is as given in the Table below:

Table 5.6: Scheme-wise details of capex and capitalisation considered for FY 2017-18
(Rs. Crore)

Sl. No.	Planned Scheme	Capital Expenditure	Capitalisation
1	BRGF	489.25	1828.94
2	ADB	446.37	466.21
3	State Plan – Existing	34.38	11.97
4	State Plan-New schemes	1001.78	726.75
5	Internal Resources	3.18	10.44
6	PSDF	50.14	--
7	Total	2025.10	3044.30

Source of funding the capitalisation for FY 2017-18

Sl. No.	Planned Scheme	Capitalisation	Equity	Grant	Loan
1	BRGF	1828.94	1828.94	--	--
2	ADB	466.21	--	--	466.21
3	State Plan – Existing	11.97	5.15	2.63	4.19
4	State Plan-New schemes	726.75	475.88	14.53	36.34
5	Internal Resources	10.44	10.44	--	--
6	Total	3044.30	2520.41	17.16	506.74

The Commission opines that the Petitioner shall be in a better position to project the capitalisation based on physical progress of the schemes. Accordingly, the Commission considers the capitalisation for FY 2017-18 as projected by the Petitioner, subject to true up based on audited accounts for FY 2017-18.

The Commission has considered closing CWIP approved in true up of FY 2016-17 as the opening CWIP for FY 2017-18 (RE).

The Commission accordingly, has considered capital investment and capitalisation of capital expenditure/transferred to fixed assets i.e. GFA based on the capital investment approved by the Commission for FY 2017-18 as given in the Table below:

Table 5.7: CWIP and Capitalisation considered by the Commission for FY 2017-18
(Rs. Crore)

Particulars	Approved for FY 2017-18 in MYT order dated 21.3.2016	Approved for FY 2017-18 in Tariff Order dated 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)	Now approved in review for FY 2017-18 (RE)
Opening CWIP (A)	2955.93	2947.15	3114.83	3128.38
New Investment (B)	883.56	1250.00	2025.10	2025.10
Less: Capitalisation (C)	2238.54	1632.26	3044.30	3044.30
Closing CWIP (A+B-C)	1600.94	2564.89	2095.62	2109.18

5.5. Funding of Capitalisation

Petitioner's submission:

BSPTCL has not submitted details of funding of capitalisation for FY 2017-18 in the petition.

Commission's analysis

The Commission has observed that the Petitioner has not furnished the details of funding of capitalisation for FY 2017-18.

As discussed in paragraph 5.4 above, the Commission has considered capex against new investment for FY 2017-18 based on the revised details furnished by the Petitioner, wherein the Petitioner has furnished sources of funding of such capital investment.

The Commission for the purpose of funding of capitalisation in the review for FY 2017-18 has considered same ratio of funding as it has approved scheme wise capital expenditure against new investment in Table 5.4 above for FY 2017-18.

The Commission, accordingly, considers the funding of capitalization in review for FY 2017-18 based on the scheme-wise funding of capex vis-à-vis capitalisation as given hereunder:-

Table 5.8: Capital expenditure and funding of capitalisation

Sl. No.	Particulars	2017-18 (RE)
1	Capitalisation	3044.30
2	Funding of capex (a+b+c)	
3	a. Equity	2520.40
4	b. Grant	17.16
5	c. Loan	506.74

The closing CWIP as approved in the true-up for FY 2016-17 is Rs.3128.38 crore and the same has been considered as opening CWIP for FY 2017-18 (RE). The details of funding of capital expenditure and capitalisation for FY 2017-18 (RE) are given in the Table below:

Table 5.9: Capex, capitalisation and funding of capitalisation considered for FY 2017-18 (RE)
(Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)	Approved for FY 2017-18 (RE)
1	Opening CWIP	2955.93	2947.15	3114.83	3128.38
2	Add: New Investment	883.56	1250.00	2025.10	2025.10
3	Total	3839.49	4197.15	5139.93	5153.48
4	Less: Capitalised (5+6)	2238.54	1632.26	3044.30	3044.30
5	CWIP capitalization	1973.48	1142.58	3044.30	3044.30
6	New Investment capitalization	265.07	489.68	--	--
7	Closing CWIP (1+2-4)	1600.94	2564.89	2095.62	2109.18
8	Funding of capitalization				
9	CWIP capitalisation (a+b+c)	1971.59	1142.58	--	3044.30
	a. Grant	--	--	--	17.16
	b. Equity	1359.04	1125.82	--	2520.40
	c. Loans	612.55	16.76	--	506.74
10	New Investment capitalisation (a to c)	264.81	489.67	--	--
	a. Grant	--	--	--	--
	b. Equity	182.54	482.49	--	--
	c. Loans	82.27	7.18	--	--
11	Total Grants (9a+10a)	--	--	--	17.16
12	Total Equity (9b+10b)	1541.58	1608.31	--	2520.40
13	Total Loans (9c+10c)	694.82	23.95	--	506.74

5.6. Interest during Construction (IDC)**Petitioner's submission:**

The Petitioner has projected IDC at Rs.95.30 crore for FY 2017-18

Commission's analysis

The Commission has considered funding of capex through loan at Rs.506.74 crore as shown in Table 5.9 above for FY 2017-18 (RE). The Commission has considered the same and computed IDC for FY 2017-18 in review as detailed in the Table below:

Table 5.10: Approved IDC for FY 2017-18

(Rs. Crore)					
Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)	Approved for FY 2017-18 (RE)
1	Loan drawn	694.82	23.95	--	506.74
2	Average Loan	347.41	11.97	--	253.37
3	Interest Rate	13.00%	13.00%	--	13.00%
4	IDC (on average loan)	45.16	1.56	95.30	32.94

The Commission approves IDC at Rs.32.94 Crore for FY 2017-18 (RE) as detailed in the Table above.

5.7. Gross Fixed Assets**Petitioner's submission:**

BSPTCL has projected GFA for FY 2017-18 as detailed in the Table below:

Table 5.11: Gross Fixed Assets projected for FY 2017-18

(Rs. Crore)				
Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)
1	Opening GFA	6560.66	5291.53	5026.71
2	Additions during the year	2238.54	1632.26	3044.30
3	Interest During Construction	45.16	1.56	95.30
4	Closing GFA (1+2+3)	8844.36	6925.35	7975.71

Commission's analysis

The Commission has examined the GFA projected by the Petitioner for FY 2017-18 and it is observed that the Petitioner has projected closing GFA at Rs.7975.71 crore whereas, the closing GFA works out to Rs.8166.31 crore. The Petitioner has reduced the IDC from the GFA instead of addition to GFA while arriving at the closing GFA for FY 2017-18.

The Commission has approved closing GFA at Rs.5026.70 crore (Table 4.7) in true up for FY 2016-17 and the same is considered as opening GFA for FY 2017-18 (RE). Addition to the GFA during FY 2017-18 is considered based on capitalisation considered in Table 5.7.

The Commission, considering the capitalisation approved for FY 2017-18 (RE) has arrived at the closing GFA for FY 2017-18 (RE) as given in the Table below:

Table 5.12: Gross Fixed Assets approved in review for FY 2017-18

(Rs. Crore)					
Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)	Approved for FY 2017-18 (RE)
1	Opening GFA	6560.66	5291.53	5026.71	5026.70
2	Additions during the year	2238.54	1632.26	3044.30	3044.30
3	Add : IDC	45.16	1.56	95.30	32.94
4	Closing GFA (1+2+3)	8844.36	6925.35	8166.31	8103.94

5.8. Depreciation**Petitioner's Submission**

BSPTCL has submitted that depreciation is computed in accordance with the Regulations.

In terms of the Regulation 73 (2) (a) (i) & (ii) of the BERC (Terms and Conditions for Determination of Tariff) Regulations 2007, the land value has been excluded based on audited accounts for FY 2016-17 for computation of depreciation. The weighted average rate of depreciation is considered at 5.114% as considered in true up for FY 2016-17 and

addition to grants is considered at 'Nil'. It is submitted by the Petitioner that the funding towards BRGF schemes has not been considered as grant in line with the directions given by the State Government.

BSPTCL has projected the depreciation for FY 2017-18 (RE) as detailed in the Table below:

Table 5.13: Projected Depreciation for FY 2017-18

(Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)
1	Opening GFA	5194.54	3908.48	3634.55
2	Additions during the year	2238.54	1632.26	3044.30
3	Add: IDC	45.16	1.56	95.30
4	Closing GFA (1+2+3)	7478.25	5542.30	6774.15
5	Average GFA $\{(1+4)/2\}$	6336.39	4725.39	5204.35
6	Weighted average rate of depreciation	3.36%	5.13%	5.11%
7	Depreciation (5*6)	212.90	242.41	266.14
8	Opening Grants	2883.80	1636.04	1636.04
9	Grants during the year	--	--	10.00
10	Less: Grants amortized	--	--	--
11	Total Grants (8+9-10)	2883.80	1636.04	1646.04
12	Average Grants $\{(8+11)/2\}$	2883.80	1636.04	1641.04
13	Weighted average rate of depreciation	3.36%	5.13%	5.11%
14	Depreciation on assets created out of grants (12*13)	96.90	83.93	83.92
15	Net Depreciation for GFA on Loans (7-14)	116.01	158.48	182.22

Commission's analysis

The Commission has examined the depreciation computation of the Petitioner.

Regulation 73 (2) (a) (i) of the BERC (Terms and Conditions for Determination of Tariff) Regulations 2007, specifies that "*the value base for the purpose of depreciation shall be the historical cost of the asset*". Regulation 73 (2) (a) (ii) of the BERC (Terms and

Conditions for Determination of Tariff) Regulations 2007, specifies that ***“Land is not a depreciable asset and its cost shall be excluded from the capital cost”***.

Accordingly, the Commission has not considered the total land value of Rs.1392.16 Crore based on the closing land value reported in the audited annual accounts for FY 2016-17. The Commission has considered closing value of depreciable GFA at Rs.3634.54 Crore (excluding value of land) (Sl.No.6 of Table 4.9) in the true up for FY 2016-17. Accordingly, the same is considered as opening GFA as on 1st April 2017 for computation of depreciation for FY 2017-18 in review subject to true up based on audited accounts for FY 2017-18.

The Commission has considered the effective rate of depreciation at 5.11% in truing up for FY 2016-17 based on the value of depreciable assets vis-à-vis depreciation based on the audited accounts for FY 2016-17. The Commission has considered the rate of depreciation for FY 2017-18 (RE) at the same level of rate of depreciation as approved in truing up for FY 2016-17 subject to true up based on audited accounts for FY 2017-18.

The Commission has considered closing value of Grants at Rs.1636.04 Crore in the true up (Sl.No.13 of Table 4.9) for FY 2016-17. Accordingly, the same is considered as opening Grants as on 1st April 2017 and addition to grants of Rs.17.16 crore (Table 5.8 above) is considered based on capitalisation considered for FY 2017-18 for computation of depreciation for FY 2017-18 in review subject to true up based on audited accounts for FY 2017-18.

The opening value of GFA, additions and closing GFA vis-à-vis the Grants considered by the Commission and proportionate depreciation on assets created out of Grants and depreciation on GFA is given in the Table below:

Table 5.14: Approved Depreciation for FY 2017-18

(Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)	Approved for FY 2017-18 (RE)
1	Opening GFA	5194.54	3908.48	3634.55	3634.54
2	Additions during the year	2238.54	1632.26	3044.30	3044.30
3	Add: IDC	45.16	1.56	95.30	32.94
4	Closing GFA (1+2+3)	7478.25	5542.30	6774.15	6711.78
5	Average GFA $\{(1+4)/2\}$	6336.39	4725.39	5204.35	5173.16
6	Weighted average rate of depreciation	3.36%	5.13%	5.11%	5.11%
7	Depreciation (5*6)	212.90	242.41	266.14	264.35
8	Opening Grants	2883.80	1636.04	1636.04	1636.04
9	Grants during the year	696.32	--	10.00	17.16
10	Less: Grants amortized	--	--	--	--
11	Total Grants (8+9-10)	2883.80	1636.04	1646.04	1653.20
12	Average Grants $\{(8+11)/2\}$	2883.80	1636.04	1641.04	1644.62
13	Weighted average rate of depreciation	3.36%	5.13%	5.11%	5.11%
14	Depreciation on assets created out of grants (12*13)	96.90	83.93	83.92	84.04
15	Net Depreciation for GFA on Loans (7-14)	116.01	158.48	182.22	180.31

The Commission, accordingly, approves depreciation of Rs.180.31 Crore in review for FY 2017-18.

5.9. Interest on Loans

Petitioner's Submission

The Petitioner has submitted that interest on loans is projected in accordance with the Regulation 73 of BERC (Terms and Conditions for Determination of Tariff) Regulations, 2007. Normative funding pattern of 70:30 Debt : Equity has been considered as per

Regulation 71 of BERC Terms and Conditions for Determination of Tariff Regulations, 2007.

"71 (1) In case of all projects, the debt - equity ratio as on the date of commercial operation shall be 70:30 for determination of Tariff, provided that the Commission may in deserving case consider equity higher than 30% for purpose of determination of tariff, where the transmission licensee is able to establish to the satisfaction of the Commission that the deployment of equity more than 30% was in the interest of general public.

Provided that;

- i. in case a project, if the actual equity employed is less than 30%. The actual debt and equity employed shall be taken for determination of tariff.*
- ii. in case of existing projects the actual debt : equity ratio shall be used for tariff determination. However, any expansion shall be governed by clause (1) above."*

Further, effective rate of interest has been considered as 8.97% for FY 2017-18. The Petitioner has considered repayment equivalent to depreciation in accordance with the Regulations.

BSPTCL has projected the interest on loans for FY 2017-18 (RE) as detailed in the Table below:

Table 5.15: Projected Interest on Loan for FY 2017-18 (RE)

(Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)
1	Opening loan balance	1311.00	1250.63	1072.52
2	Additions during the year	1598.59	1143.67	2124.01
3	Repayment	116.01	158.48	182.22
4	Closing Loan (1+2-3)	2793.58	2235.81	3014.30
5	Average Loan $\{(1+4)/2\}$	2052.29	1743.22	2043.41
6	Interest rate	7.15%	7.20%	8.97%
7	Interest & Finance Charges (5*6)	146.74	125.51	183.36
8	Finance Charges	0.01	0.01	0.01
9	Total interest and finance charges	146.75	125.52	183.37

Commission's analysis

The Commission has examined the computation of interest on loan projected by the Petitioner for FY 2017-18 (RE).

The Regulation 73 (1) of the BERC Terms and Conditions for Determination of Tariff Regulations, 2007 specify;

- (a) *Interest on loan capital shall be computed loan-wise, on the loans arrived at in the manner indicated in Regulation 71.*
- (b) *In the case of existing projects, the actual debt-equity shall be used for tariff determination and any expansion thereto shall be governed as per Regulation 71.*
- (c)
- (d)
- (e)
- (f) *In case any moratorium period is availed by the transmission licensee, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly.*

The Regulation 71 of BERC Terms and Conditions for Determination of Tariff Regulations, 2007 specify;

"(1) in case of all projects, the debt - equity ratio as on the date of commercial operation shall be 70:30 for determination of Tariff, provided that the Commission may in deserving case consider equity higher than 30% for purpose of determination of tariff, where the transmission licensee is able to establish to the satisfaction of the Commission that the deployment of equity more than 30% was in the interest of general public.

Provided that;

- i. in case a project, if the actual equity employed is less than 30%. The actual debt and equity employed shall be taken for determination of tariff.*

ii. in case of existing projects the actual debt : equity ratio shall be used for tariff determination. However, any expansion shall be governed by clause (1) above.”

(2) the debt and equity amount arrived at in accordance with clause (1) shall be used for calculation of interest on loan, Return on Equity, Advance Against Depreciation and Foreign Exchange Rate Variation”.

A conjoint reading of the above Regulations explicitly specify that interest shall be provided on the actual debt in case of existing projects and at 70% of the project cost in case of new projects.

The Commission, in view of the above Regulations, for the purpose of computation of interest, has considered the closing loan Rs.1072.58 crore (Table 4.15) as per true up for FY 2016-17 as opening loan for FY 2017-18 (RE) and loan addition @70% of the new investment capitalised during FY 2017-18. The repayment is considered equivalent to depreciation considered for FY 2017-18 (RE). The capitalisation, grants and funding of capitalisation for FY 2017-18 is shown hereunder:

Capitalisation

Sl. No.	Particulars	2017-18
1	Capitalisation during the year	3044.30
2	IDC capitalised	32.94
3	Less: Grants	17.16
4	Net capitalisation	3060.08
5	Equity considered (@30% of 4)	918.02
6	Debt considered (@70% of 4)	2142.05

The Commission has considered the rate of interest at 8.68% for FY 2017-18 as was considered in true up based on audited accounts for FY 2016-17 subject to true up.

The Commission, accordingly, has considered interest for FY 2017-18 (RE) as detailed in the Table below:

Table 5.16: Interest & finance charges approved for FY 2017-18
(Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)	Approved for FY 2017-18 (RE)
1	Opening loan	1311.00	1250.63	1072.52	1072.58
2	Additions during the year	1598.59	1143.67	2124.01	2142.05
3	Normative Repayment	116.01	158.48	182.22	180.31
4	Closing Loan (1+2-3)	2793.58	2235.81	3014.30	3034.32
5	Average Loan $\{(1+4)/2\}$	2052.29	1743.22	2043.41	2053.45
6	Interest rate	7.15%	7.20%	8.97%	8.68%
7	Interest on loans (5*6)	146.74	125.51	183.36	178.24
8	Finance charges	0.01	0.01	0.01	0.00
9	Interest & Finance charges	146.75	125.52	183.37	178.24

The Commission accordingly, approves the interest & finance charges of Rs.178.24 Crore for FY 2017-18 (RE).

5.10. Operation and Maintenance (O&M) Expenses

5.10.1. Escalation rate / Inflation Index

Petitioner's submission:

BSPTCL has submitted that as per Regulation 73(3) of BERC (Terms and Conditions for Determination of Tariff) Regulations 2007:

"(3) Operation and Maintenance Expenses

Norms for operation and maintenance expenses per ckt km and per bay shall be as under

(a) The Commission shall, for the purpose of fixing normative rates for operation and maintenance expenses, study the O&M expenses incurred over the last 4 to 5 years and fix appropriate rates per ckt-km of transmission line and per bay. The norms so fixed for 2008-09 shall be escalated at 4% per annum.

(b) The total allowable O&M expenses for a transmission licensee shall be calculated by multiplying the numbers of bays and ckt-km of line length with the applicable norms for O&M expenses per bay and per ckt-km respectively".

The Petitioner has further submitted that as no norms for O&M has been stipulated by the Commission, the petitioner has followed the inflation index methodology considered in Tariff order dated 9.3.2017 based on CPI and WPI for projection of Employee expenses, Repairs and Maintenance Expenses and Administration & General expenses for FY 2017-18. The Petitioner has furnished the computation of indexation based on CPI and WPI as given in the table below:

Table 5.17: Weightage of indexation/inflation factor

Sl. No.	Particulars	WPI	CPI	Total
1	Weightage	0.45	0.55	1.00
2	Index points for FY 2016-17	183.16	275.92	
3	indexation n (index point * weightage)	82.42	151.75	234.18
4	Index points for FY 2015-16	176.51	265.01	
5	Indexation n-i (index point * weightage)	79.43	145.76	225.19
6	Combined inflation (3-5) / 5)			3.99%

The Petitioner has further submitted that it has started focusing on Operation and Maintenance of its transmission system and this has started resulting in improvement in power supply position in the State of Bihar. The increase in actual O&M Expenses in FY 2015-16 with respect to FY 2014-15 was around 12% and increase in actual O&M expenses in FY 2016-17 with respect to FY 2015-16 was around 15% as shown in Table below:

Table 5.18: Actual/approved O&M expenses

Particulars	(Rs. Crore)			
	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
Actual O&M expenses	111.49	141.52	158.59	182.13
% increase over previous year		27%	12%	15%

Hence, at this stage it would not be appropriate to consider the O&M expenses by applying the escalation rate linked to WPI and CPI. The escalation rate linked to WPI and CPI can be applied once the system is properly maintained for regular O&M expenses. Further, the improvements envisaged through huge capex schemes which are supposed

to be capitalised in FY 2017-18 and FY 2018-19 will also result in increased O&M Expenses.

Commission's analysis:

Regulation 73(3) of BERC (Terms and Conditions for Determination of Tariff) Regulations, 2007 specify;

"Norms for operation and maintenance expenses per ckt km and per bay shall be as under

(c) The Commission shall, for the purpose of fixing normative rates for operation and maintenance expenses, study the O&M expenses incurred over the last 4 to 5 years and fix appropriate rates per ckt-km of transmission line and per bay. The norms so fixed for 2008-09 shall be escalated at 4% per annum.

(d) The total allowable O&M expenses for a transmission licensee shall be calculated by multiplying the numbers of bays and ckt-km of line length with the applicable norms for O&M expenses per bay and per ckt-km respectively".

The Commission in the Tariff Order dated 21.03.2016 had observed that;

"The Bihar State Electricity Board (BSEB) has been restructured and Bihar State Power Transmission Company Limited (BSPTCL) has been formed with effect from 1st November, 2012. The BSPTCL has been functioning independently from 01.11.2012 and accordingly, reporting operational and financial performance. The BSPTCL has two years of full year (12 months period) financial statements i.e. annual accounts for FY 2013-14 and FY 2014-15. As per the regulation, the norms shall be determined based on last/previous 4 to 5 years of O&M expenses. Since the BSPTCL has only two years of audited annual accounts of FY 2013-14 and FY 2014-15, the Commission observes that the norms shall be determined from the next MYT control period to be notified by the Commission at a later date. Hence, the Commission considers appropriate to follow the methodology adopted for the 1st MYT control period of FY 2013-14 to FY 2015-16 for determination of O&M expenses for the 2nd MYT control period of FY 2016-17 to FY 2018-19.

The Commission has proposed following inflation index methodology for 1st MYT control period for computation of O&M expenses.

$$INDX_n = 0.55 * CPI_n + 0.45 * WPI_n$$

- CPI_n is the consumer price index increase for immediate preceding year over previous year.
- WPI_n is the wholesale price index increase for immediate preceding year over previous year".

The Commission has adopted the methodology as above and projected the O&M expenses for 2nd MYT control period of FY 2016-17 to FY 2018-19 in Tariff order dated 21.03.2016.

The Commission opines that, since no norm for O&M expenses are fixed, the methodology adopted for 1st and 2nd MYT control period may be appropriate to be adopted for FY 2017-18 (RE) also subject to true up based on the audited accounts of FY 2017-18.

The Commission, accordingly, has followed the inflation index methodology, based on the available full financial year CPI on official website (www.labourbureaunew.nic.in) and WPI on official website (www.eaindustry.nic.in) for computation of employee expenses, Repairs & Maintenance expenses and Administration & General expenses for FY 2017-18 (RE) as detailed in the table below:

Table 5.19: Weightage of indexation/inflation factor

Sl. No.	Particulars	WPI	CPI	Total
1	Weightage	0.45	0.55	1.00
2	Index points for FY 2016-17	111.62	275.92	
3	Indexation n (index point * weightage)	50.23	151.75	201.98
4	Index points for FY 2015-16	109.72	265.01	
5	Indexation n-i (index point * weightage)	49.37	145.75	195.13
6	Combined inflation (3-5) / 5)			3.51%

5.10.2. Employee Costs

Petitioner's submission:

BSPTCL has submitted that the employee cost comprises of salaries, dearness allowance, bonus, staff welfare, medical benefits, leave travel and earned leave encashment and the terminal benefits in the form of pension, gratuity, etc.

BSPTCL has submitted that employee expenses for FY 2017-18 (RE) are projected considering an increase of 3.99% over the actual expenses for FY 2016-17.

The Petitioner has projected the employee expenses for FY 2017-18 (RE) as detailed in the Table below:

Table 5.20: Employee Cost projected by the Petitioner for FY 2017-18 (RE)
(Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)
1	Employee cost	102.23	101.55	101.90
2	Indexation	4.65%	2.59%	3.99%
3	Add: Inflationary increase (1*2)	4.75	2.63	4.07
4	Gross Employee Cost (1+3)	106.99	104.18	105.97
5	Less: Employee cost relating to SLDC business	--	3.77	6.84
6	Net Employee cost	106.99	100.41	99.13

Commission's analysis:

The Commission has examined the computation of employee cost by the Petitioner. It is observed that the Petitioner has considered Rs.6.84 crore towards employee cost of SLDC and has deducted the same from projected employee cost of BSPTCL. The Commission has already approved employee cost of Rs.3.12 crore of SLDC separately in review of FY 2017-18 of SLDC in Case No.38 of 2017. Accordingly, the Commission has deducted Rs.3.12 crore towards employee cost related to SLDC business from the total employee cost of BSPTCL for FY 2017-18 (RE).

It is also observed that the Petitioner has not factored the effect of 7th Pay commission recommendation of Pay revision with effect from 1st April 2017. Accordingly, the

Commission has also not considered the same. The Commission shall consider the pay revision effect in true up for FY 2017-18 based on the actual employee cost reported through audited accounts for FY 2017-18.

The Commission has considered the employee cost based on audited annual accounts of BSPTCL for FY 2016-17 with escalation at 3.51% for inflation indexation as discussed in Paragraph 5.10.1. The Commission, accordingly, has considered the employee cost for FY 2017-18 as detailed in the Table below:

Table 5.21: Employee Cost approved for FY 2017-18

Sl. No.	Particulars	(Rs. Crore)			
		Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)	Approved for FY 2017-18 (RE)
1	Employee cost	102.23	101.55	101.90	101.90
2	Indexation	4.65%	2.59%	3.99%	3.51%
3	Add: Inflationary increase (1*2)	4.75	2.63	4.07	3.58
4	Gross Employee Cost (1+3)	106.99	104.18	105.97	105.48
5	Less: Employee cost relating to SLDC business	--	3.77	6.84	3.12
6	Net Employee cost	106.99	100.41	99.13	102.36

The Commission approves employee cost at Rs.102.36 Crore for FY 2017-18 (RE).

5.10.3. Repairs and Maintenance (R&M) Expenses

Petitioner's submission:

BSPTCL has submitted that for projecting R&M expenses for FY 2017-18 (RE), the petitioner has considered an increase of 3.99% (based on weighted average inflationary indices) over actual R&M expenses for FY 2016-17 as given in the Table below:

Table 5.22: Projected Repairs and Maintenance expenses for FY 2017-18 (RE)
(Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)
1	Base R&M expenses	39.98	37.11	47.24
2	Inflationary index	4.65%	2.59%	- 3.99%
3	Inflationary increase	1.86	0.96	1.88
4	Gross R&M expenses (1+3)	41.84	38.07	49.12
5	Less: R&M cost relating to SLDC business	--	1.05	1.05
6	Net R&M expenses (4-5)	41.84	37.02	48.07

BSPTCL has requested the Commission to consider R&M expenses as a % of Gross Fixed Assets as the licensee needs to eventually maintain assets and generally the inflation over previous year expenditure is insufficient as it ignores R&M cost towards addition of new assets.

The Petitioner has also submitted that certain State Regulations provide for R&M as a percentage of GFA and the draft BERC (Multi Year Transmission Tariff) Regulations 2016 provided for R&M computation as a % of GFA as stated below:

Repairs and Maintenance expense shall be calculated as percentage (as per the norm determined) of Opening Gross Fixed Assets for the year governed by following formula:

$$R\&M_n = K_b * GFAn$$

Where:

R&M_n : Repairs & Maintenance expense for nth year

GFAn : Opening Gross Fixed Assets for nth year

K_b : Percentage point as per the norm

BSPTCL has reiterated its request for considering R&M expenses as a % of GFA.

Commission's analysis

The Commission has examined the R&M expenses projected by BSPTCL. The Commission finds that the Petitioner has considered Rs.1.05 crore towards R&M expenses of SLDC also and has deducted the same from projected R&M expenses of BSPTCL. The Commission has already approved R&M expenses of Rs.0.44 crore of SLDC

separately in review of FY 2017-18 of SLDC in Case no.38 of 2017. Accordingly, the Commission has deduced Rs.0.44 crore towards R&M expenses related to SLDC business from the total R&M expenses of BSPTCL for FY 2017-18 (RE).

The BERG (Terms and Conditions for Determination of Tariff) Regulations, 2007 does not provide for allowing R&M expenses as a % on the Gross Fixed Assets.

The Commission has considered Rs.47.24 Crore towards R&M expenses in truing up for FY 2016-17. The Commission has computed the weighted average inflationary indices at 3.51% in Table 5.19. The Commission has considered the R&M expenses for FY 2017-18 (RE) based on audited annual accounts of BSPTCL for FY 2016-17 with escalation at 3.51% for inflation indexation.

The Commission, accordingly, considered R&M expenses for FY 2017-18 in review with inflationary escalation of 3.51% as detailed in the Table below:

Table 5.23: Approved R&M expenses for FY 2017-18
(Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)	Approved for FY 2017-18 (RE)
1	Base R&M expenses	39.98	37.11	47.24	47.24
2	Inflationary index	4.65%	2.59%	3.99%	3.51%
3	Inflationary increase	1.86	0.96	1.88	1.66
4	Gross R&M expenses (1+3)	41.84	38.07	49.12	48.90
5	Less: R&M cost relating to SLDC business	--	1.05	1.05	0.44
6	Net R&M expenses (4-5)	41.84	37.02	48.07	48.46

The Commission, accordingly, approves R&M expenses at Rs.48.46 Crore in review for FY 2017-18.

5.10.4. Administration and General (A&G) Expenses

Petitioner's Submission

BSPTCL has submitted that the Administration and General expenses mainly comprise of rents, telephone and other communication expenses, professional charges, conveyance and traveling expenses etc.

The BSPTCL has projected the A&G expenses for FY 2017-18 (RE) with escalation of 3.99% over the actual expenses for FY 2016-17 as detailed in the Table below:

Table 5.24: Proposed Administration and General Expenses for FY 2017-18 (Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)
1	A&G Expenses	9.28	16.56	28.04
2	Indexation	4.65%	2.59%	3.99%
3	Add: Inflationary increase	0.43	0.43	1.12
4	Gross A&G expenses (1+3)	9.71	16.99	29.16
5	Add: Inflationary increase		0.43	0.57
6	A&G expenses (4+5)	9.71	16.56	28.59

Commission's analysis:

The Commission has examined the A&G expenses projected by BPSTCL. The Commission finds that the Petitioner has considered Rs.0.57 crore towards A&G expenses of SLDC also and has deducted the same from projected A&G expenses of BSPTCL. The Commission has already approved A&G expenses of Rs.0.44 crore of SLDC separately in review of FY 2017-18 of SLDC in Case no.38 of 2017. Accordingly, the Commission has deducted Rs.0.44 crore towards A&G expenses related to SLDC business from the total A&G expenses of BSPTCL for FY 2017-18 (RE).

The Commission has approved A&G expenses at Rs.18.25 crore in true up for FY 2016-17 (RE) (excluding prior period electricity charges of Rs.9.07 crore which has been considered under prior period charges) as deliberated at paragraph 4.7 (c) and accordingly, the same is considered as base A&G expenses for FY 2017-18.

The Commission has computed the weighted average inflationary indices at 3.51% in Table 5.19. The Commission has considered the A&G expenses for FY 2017-18 (RE) as deliberated above based on audited annual accounts of BSPTCL for FY 2016-17 with escalation at 3.51% for inflation indexation.

The Commission, accordingly, considered the A&G expenses for FY 2017-18 in review as detailed in the Table below:

Table 5.25: Administration & General Expenses approved for FY 2017-18
(Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)	Approved for FY 2017-18 (RE)
1	A&G Expenses	9.28	16.56	28.04	18.25
2	Indexation	4.65%	2.59%	3.99%	3.51%
3	Add: Inflationary increase	0.43	0.43	1.12	0.64
4	Gross A&G expenses (1+3)	9.71	16.99	29.16	18.89
5	Less: A&G cost relating to SLDC		0.43	0.57	0.44
6	A&G expenses (4+5)	9.71	16.56	28.59	18.45

The Commission, accordingly, approves Administration and General Expenses at Rs.18.45 Crore in review for FY 2017-18.

5.10.5. Allocation of Holding Company Expenses

Petitioner's submission

BSPTCL has submitted that the Schedule 'D' Part-III of the Bihar State Electricity Reforms Transfer Scheme, 2012 defines the Functions and Duties of Bihar State Power (Holding) Company Limited. As per Clause (i) of the schedule 'D', the Holding Company shall handle all issues relating to the subsidiary companies in respect of;

"Business of purchasing, importing, exporting and trading of power subject to the provision of Electricity Act, 2003 and to supply electric power generated by other plants

to transmission companies, distribution companies, trading companies, other generation companies and other persons, and in this regard execute agreements with Central and State Generating authorities, departments or companies, independent Power Producers and other persons”.

BSPTCL has further submitted that BSPHCL provides common services to all the segregated entities and as per the Transfer Scheme “operating expenses incurred by the Holding Company like administration and general expenses, Legal and consulting fees, etc. would be shared by the BSPGCL, BSPTCL, NBPDC and SBPDCL in the ratio of their respective equity”.

BSPTCL has also stated that as per Schedule ‘F’, the Holding Company shall handle all issues relating to the subsidiary companies in respect of the testing divisions, training department at Headquarter and all the departments of the Corporate head office viz. General Administration, Accounts and Finance, IT, Stores & Purchase, Transmission/ Distribution/Generation, Personnel, Publicity, Legal, Vigilance & Security, Commercial, Planning, Civil Engineering, Transmission (O&M), Rural Electrification, shall constitute “Common Services” which shall continue to provide services to all successor entities during the interregnum period, until issue of further transfer notifications allocating the employees to respective companies.

The BSPTCL has estimated the Holding Company expenses for FY 2017-18 (RE) at the same level of FY 2016-17 actuals as furnished in table below:

Table 5.26: Expenses of Holding Company projected for FY 2017-18
(Rs. Crore)

Particulars	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)
Holding Company Expenses	5.00	7.29	5.15

BSPTCL has requested the Commission to approve the expenditure as part of overall O&M expenditure for FY 2017-18 (RE).

Commission's analysis:

The Commission provisionally considers the Holding Company expenses as projected by the Petitioner for FY 2017-18 (RE) subject to true up as detailed in the Table below:

Table 5.27: Allocation of Expenses of Holding Company approved for FY 2017-18 (RE)
(Rs. Crore)

Particulars	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)	Approved for FY 2017-18 (RE)
Holding Company expenses	5.00	7.29	5.15	5.15

5.10.6. Summary of Operations and Maintenance (O&M) Expenses

Table 5.28: Total O&M cost approved for FY 2017-18 (RE)
(Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)	Approved for FY 2017-18 (RE)
1	Employee cost	106.99	104.18	105.97	105.48
2	R&M expenses	41.84	38.07	49.12	48.90
3	A&G Expenses	9.71	16.99	29.16	18.89
4	Holding company expenses allocated	5.00	7.29	5.15	5.15
5	Total O & M cost	163.53	166.53	189.40	178.42
6	Less: SLDC expenses	0.00	5.25	8.46	4.00
7	Net O&M expenses	163.53	161.28	180.94	174.42

The Commission approves O&M cost at Rs.174.42 Crore for FY 2017-18 in review.

5.11. Interest on working capital**Petitioner's submission:**

BSPTCL has submitted that it has arrived at the working capital requirement according to applicable norms for transmission function provided in the BERC (Terms and Conditions of Tariff) Regulations, 2007 which are reproduced in the following Table:

Norms for working capital requirement

Sl. No.	Particulars	Norm
1	O&M expenses	One month
2	Maintenance spares	@1% of historical cost of GFA escalated @ 6%

		per annum
3	Receivables	Two months of transmission charges
4	Rate of interest on working capital	Base Rate of State Bank of India plus 350 basis points

The rate of interest applied on the proposed working capital is @12.80% as per the SBI Base Rate plus 350 basis points.

BSPTCL has claimed interest on working for FY 2017-18 (RE) computed on the above norms as detailed in the Table below:

Table 5.29: Projected Interest on working capital for FY 2017-18
(Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)
1	O&M expenses (1 month)	13.63	13.44	15.08
2	Maintenance spares @1% of opening GFA with 6% escalation	56.24	42.79	39.98
3	Receivables - 2 months	91.33	98.25	116.73
4	Total working capital	161.20	154.48	171.79
5	Rate of interest	13.50%	12.80%	12.80%
6	Interest on working capital	21.76	19.77	21.99

Commission's analysis

The Commission has examined the computation of interest on working capital submitted by the Petitioner.

The Commission has considered opening GFA at Rs.3771.64 Crore (Opening GFA Rs.5026.70 Crore as approved in Table 5.12 less asset revaluation Rs.1255.06 Crore) to consider maintenance spares for the purpose of computing working capital requirement and interest on working capital. The Commission, accordingly considered maintenance spares at 1% of the historical cost of GFA (Rs.3771.64 crore) with escalation @6% at Rs.39.98 crore for FY 2017-18.

The Regulation 73(4)(ii) of BERC Tariff Regulations, 2007 specify the rate of interest on working capital shall be equal to Short terms PLR of SBI on 1st April of the year. The BERC has issued amendment to the Regulation 73(4)(ii) (amendment notified in the Bihar

Gazette dated 27.03.2014) that the rate of interest on working capital will be computed at 350 basis points over and above the base rate. The Regulation (amendment) shall come into force from the date of publication in the Bihar Gazette i.e. with effect from 27.03.2014.

The SBI Base Rate as on 1st April 2017 is at 9.10%. The rate of interest to be considered on working capital works out to 12.60% [SBI Base Rate of 9.10% + 3.50% (350 basis points)] for FY 2017-18 (RE).

The Commission, accordingly, has computed the working capital and interest on working capital at interest rate of 12.60% as given in the Table below:

Table 5.30: Approved interest on working capital for FY 2017-18

(Rs. Crore)					
Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)	Approved for FY 2017-18 (RE)
1	O&M expenses (1 month)	13.63	13.44	15.08	14.53
2	Maintenance spares @1% of opening GFA with 6% escalation	56.24	42.79	39.98	39.98
3	Receivables - 2 months	91.33	98.25	116.73	109.52
4	Total working capital	161.20	154.48	171.79	164.03
5	Rate of interest	13.50%	12.80%	12.80%	12.60%
6	Interest on working capital	21.76	19.77	21.99	20.67

The Commission approves interest on working capital at Rs.20.67 Crore in review for FY 2017-18.

5.12. Return on Equity

Petitioner's submission:

BSPTCL has submitted that computation of equity is considered based on the closing equity as per true-up of FY 2016-17 has been considered as opening equity for FY 2017-18 and further additions to the equity balance has been considered at 30% of the capitalisation proposed for FY 2017-18. The RoE has been considered at 14% for assets capitalised before 1st April 2015 and at 15.5% for assets capitalised on or after 1st April

2015 in accordance with the Regulations. The computation of equity is considering the closing equity balance as approved in MYT order dated 21.03.2016.

BSPTCL has computed the Return on Equity for FY 2017-18 as detailed in the Table below:

Table 5.31: Projected Return on Equity for FY 2017-18
(Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)
1	Equity as on 31.03.2015	375.41	375.41	375.41
2	Rate of return on Equity	14.00%	14.00%	14.00%
3	Return on equity (1*2)	52.56	52.56	52.56
	Equity of projects commissioned with effect from 1.04.2015			
4	Opening equity	407.08	400.67	321.22
5	Addition in FY 2017-18	685.11	490.15	910.29
6	Closing Equity (4+5)	1092.19	890.81	1231.51
7	Average equity (4+6)/2	546.10	645.74	776.37
8	Rate of Return on equity	15.50%	15.50%	15.50%
9	Return on equity (7*8)	84.64	100.09	120.34
10	Total Return on equity (3+9)	137.20	152.65	172.89

BSPTCL has requested the Commission to consider the RoE as per the computations furnished in the Table above for FY 2017-18 (RE).

Commission's analysis

The Commission has examined the computation of Return on Equity (RoE) claimed by the Petitioner.

The Regulation 73 (2) (c) of the BERC Terms and Conditions for Determination of Tariff Regulations, 2007 specify;

- (i) *Return on Equity shall be computed on the equity base determined in accordance with Regulation 71 and shall be @ 14% per annum.*

(ii) *Equity invested in foreign currency shall be allowed a return up to a prescribed limit in the same currency and the payment on this account shall be made in Indian Rupee based on the exchange rate prevailing on the due date of billing.*

Explanation:

*The premium raised by the transmission licensee while issuing share capital and investment of internal resources created out of free reserve of the existing transmission licensee, if any, for funding the project, shall also be reckoned as paid up capital for the purpose of computing return on equity provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the project and forms part of the approved financial package. The definition of equity thus would involve all net worth deployed in the capital of the unit. **This shall not include any revaluation of reserves and subsidies**".*

*The BERC in Gazette Notification dated 26th March 2014 has issued amendment to Regulation 73 (2) (i) of BERC (Terms and Conditions for Determination of Tariff) (2nd Amendment) Regulations, 2014 which specify that **"Return on equity shall be computed on the equity base determined in accordance with Regulation 71 and shall be @15.50% for the projects which are commissioned on and after 01.04.2015"**.*

The Regulation 71 of BERC Terms and Conditions for Determination of Tariff Regulations, 2007 specify;

"(1) in case of all projects, the debt - equity ratio as on the date of commercial operation shall be 70:30 for determination of Tariff, provided that the Commission may in deserving case consider equity higher than 30% for purpose of determination of tariff, where the transmission licensee is able to establish to the satisfaction of the Commission that the deployment of equity more than 30% was in the interest of general public.

Provided that;

(i) in case a project, if the actual equity employed is less than 30%. The actual debt and equity employed shall be taken for determination of tariff.

(ii) in case of existing projects the actual debt : equity ratio shall be used for tariff determination. However, any expansion shall be governed by clause (1) above.”

(2) the debt and equity amount arrived at in accordance with clause (1) shall be used for calculation of interest on loan, Return on Equity, Advance Against Depreciation and Foreign Exchange Rate Variation”.

A conjoint reading of Regulations 73 and 71 explicitly specify that Return on Equity shall be provided on the actual Equity in respect of existing projects and on 30% of the project cost in respect of new projects.

The Commission, in view of the above Regulations, for the purpose of computation of RoE, has considered the capitalisation, grants and funding of capitalisation for FY 2017-18 (RE) as shown hereunder:

Capitalisation

Sl. No.	Particulars	Amount (Rs. Crore)
1	Capitalisation during the year	3044.30
2	IDC Capitalised	32.94
3	Less: Grants	17.16
4	Net capitalisation (1+2-3)	3060.08
5	Equity considered (@30% of 3)	918.02
6	Debt considered (@70% of 3)	2142.05

The Commission has considered the closing equity of Rs.375.41 crore as on 31st March 2015 based on the true up for FY 2014-15. Further, the Commission has also approved Rs.321.22 crore as closing equity in true up for FY 2016-17 and the same is considered as opening equity for FY 2017-18 (RE) and further updated based on funding of capitalisation approved in review and arrived at the equity for FY 2017-18 (RE).

The Commission, in view of the 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 to the end of 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 dated 26.03.2014.

The Commission, accordingly, has considered Return on Equity for FY 2017-18 in review as detailed in the Table below:

Table 5.32: Approved Return on Equity for FY 2017-18

(Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)	Approved for FY 2017-18 (RE)
1	Equity as on 31.03.2015	375.41	375.41	375.41	375.41
2	Rate of return on Equity	14.00%	14.00%	14.00%	14.00%
3	Return on equity (1*2)	52.56	52.56	52.56	52.56
	Equity of projects commissioned w.e.f. 1.04.2015				
4	Opening equity	407.08	400.67	321.22	321.22
5	Addition in FY 2016-17	685.11	490.15	910.29	918.02
6	Closing Equity (4+5)	1092.19	890.81	1231.51	1239.24
7	Average equity (4+6)/2	546.10	645.74	776.37	780.23
8	Rate of Return on equity	15.50%	15.50%	15.50%	15.50%
9	Return on equity (7*8)	84.64	100.09	120.34	120.94
10	Total Return on equity (3+9)	137.20	152.65	172.89	173.50

The Commission approves Return on Equity at Rs.173.50 Crore for FY 2017-18 (RE).

5.13. Non-Tariff Income**Petitioner's submission:**

BSPTCL has submitted that non-tariff income is projected for FY 2017-18 (RE) with an escalation of 5% year on year based on the actual non-tariff income of FY 2016-17 as detailed in the Table below:

Table 5.33: Projected non-tariff income for FY 2017-18 (RE)
(Rs. Crore)

Particulars	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)
Non-tariff income	37.26	26.63	41.05

Commission's analysis:

BSPTCL has submitted that non-tariff income has been projected for FY 2017-18 (RE) with an escalation of 5% on the actual non-tariff income of FY 2016-17. The Commission has approved non-tariff income Rs.39.13 crore in true up for FY 2016-17. The Commission has also considered 5% escalation on the trued up non-tariff income of FY 2016-17 as proposed by the Petitioner subject to true up based on audited accounts for FY 2017-18 as detailed in the Table below.

Table 5.34: Non-tariff income approved for FY 2017-18

Particulars	(Rs. Crore)			
	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)	Approved for FY 2017-18 (RE)
Actual Non-tariff income for FY 2016-17	--	--	--	39.13
Escalation at 5%	--	--	--	1.96
Non-tariff income	37.26	26.63	41.05	41.09

The Commission, accordingly, approves Non-tariff income at Rs.41.09 Crore for FY 2017-18 (RE).

5.14. Annual Transmission charges for FY 2017-18**Petitioner's submission**

BSPTCL has submitted the annual fixed charges or Transmission charges arrived at by aggregating all the expenses viz. Depreciation, Interest on Loans, Interest on working capital, O&M expenses, Return on Equity. The total expenses less non-tariff income are the net annual fixed charges or transmission charges.

The summary of Annual Fixed Charges / ARR projected for FY 2017-18 (RE) are given in the Table below:

Table 5.35: Projected Annual Fixed Charges/ (ARR) for FY 2017-18 (RE)
(Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)
1	O&M expenses (2+3+4+5)	163.54	166.53	189.40
2	Employee cost	106.98	104.18	105.97
3	R&M expenses	41.84	38.07	49.12
4	A&G Expenses	9.71	16.99	29.16
5	Holding company expenses	5.00	7.29	5.15
6	Interest and finance charges	146.75	125.52	183.37
7	Interest on working capital	21.76	19.77	21.99
8	Depreciation	116.01	158.48	182.22
9	Return on Equity	137.20	152.65	172.89
10	Less: Expenses capitalised	--	5.25	8.46
11	Less: IDC	--	1.56	--
12	Total Requirement (2 to 11)	585.25	616.15	741.41
13	Less: Non-tariff income	37.26	26.63	41.05
14	Net Revenue Requirement (12-13)	547.99	589.52	700.36

BSPTCL has submitted that the transmission charges for the year are estimated based on the applicable rules and regulations and the methods adopted by the Commission in its MYT Order dated 21.03.2016 and Tariff order dated 09.03.2017. The various costs are estimated in accordance with the regulatory norms, assumptions and detailed justifications provided in the petition. The Petitioner has requested the Commission to approve the revised ARR for FY 2017-18 (RE).

Commission's analysis:

Based on the Commission's detailed analysis, the Aggregate Revenue Requirement/ annual fixed charges/Transmission charges considered by the Commission for FY 2017-18 (RE) are as detailed in the Table below:

Table 5.36: Approved Annual Fixed Charges / ARR for FY 2017-18 (RE)

(Rs. Crore)					
Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)	Approved for FY 2017-18 (RE)
1	O&M expenses (2+3+4+5)	163.54	166.53	189.40	174.42
2	Employee cost	106.98	104.18	105.97	102.36
3	R&M expenses	41.84	38.07	49.12	48.46
4	A&G Expenses	9.71	16.99	29.16	18.45
5	Holding company expenses	5.00	7.29	5.15	5.15
6	Interest and finance charges	146.75	125.52	183.37	178.24
7	Interest on working capital	21.76	19.77	21.99	20.67
8	Depreciation	116.01	158.48	182.22	180.31
9	Return on Equity	137.20	152.65	172.89	173.50
10	Less: Expenses capitalised	--	5.25	8.46	--
11	Less: IDC	--	1.56	--	32.94
12	Total Requirement (2 to 11)	585.25	616.15	741.41	694.19
13	Less: Non-tariff income	37.26	26.63	41.05	41.09
14	Net Revenue Requirement (12-13)	547.99	589.52	700.36	653.10

5.15. Revenue Gap / (Surplus) for FY 2017-18 (RE)**Commission's Analysis:**

The Commission, based on the approved Aggregate Revenue Requirement, has arrived at the Revenue Gap / (Surplus) for FY 2017-18(RE) as detailed in the Table below:

Table 5.37: Approved revenue gap / (surplus) for FY 2017-18

(Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Approved for FY 2017-18 in Tariff Order 09.03.2017	Projected by BSPTCL for FY 2017-18 (RE)	Approved for FY 2017-18 (RE)
1	Aggregate Revenue Requirement for FY 2017-18	547.99	589.52	700.36	653.10
2	Add: Trued up revenue gap of FY 2015-16 including carrying cost		34.06	34.06	34.06
3	Annual Transmission charges (1+2)	547.99	623.58	734.42	687.16
4	Less: Approved Annual Transmission Charges	547.99	623.58	623.58	623.58
5	Revenue Gap / (Surplus) for FY 2017-18 (3-4)	0.00	0.00	110.84	63.58

The **net Gap of Rs.63.58 Crore** worked out in the review for FY 2017-18 (RE) is not considered in the ARR for FY 2018-19 as it is only indicative and worked out on the revised estimates projected by BSPTCL.

However, the deficit / (surplus) ARR of FY 2017-18 will be considered in the ARR of FY 2019-20, after truing-up of FY 2017-18 when the audited annual accounts will be made available by BSPTCL.

6. Aggregate Revenue Requirement (ARR) and Determination of Transmission charges for FY 2018-19

6.1. Background

BSPTCL has submitted the present petition on 27th November, 2017 for approval of Revised Aggregate Revenue Requirement (ARR) and determination of Transmission charges for FY 2018-19.

The Commission has undertaken determination of Aggregate Revenue Requirement (ARR) for FY 2018-19 on the basis of audited accounts for FY 2016-17, revised estimates submitted by the Petitioner for FY 2017-18 and projections for FY 2018-19 and BERC (Terms and Conditions for Determination of Tariff) Regulations, 2007.

6.2. Existing Transmission System

BSPTCL own and operates the transmission system above 33 KV i.e. 132 KV, 220 KV and 400 KV system in the State of Bihar. BSPTCL has submitted in the petition the existing transmission system as on 27th November 2017 as given in the Table below:

Table 6.1: Power Transformer capacity (MVA)

Sub-stations	FY 2016-17 (as on 15.11.2016)	FY 2017-18 (as on 15.11.2017)
220/132 kV	5750	6590
132/33 kV	8920	10890
132/25 kV	109.90	109.90

Transmission lines length (in Ckm)

Transmission lines voltage-wise	FY 2016-17 (as on 15.11.2016)	FY 2017-18 (as on 15.11.2017)
400 kV	--	--
220 kV	2125.64	3080.30
132 kV Double Ckt line	7448.26	9081.59

6.3. Performance of Transmission System

Petitioner's submission

(A) Transmission System Availability

BPTCL has submitted the month-wise transmission system availability from April 2017 to August 2017 as given in the Table below:

Table 6.2: Transmission system availability

Sl. No.	Month	Transmission system availability factor (%)
1	April 2017	99.13
2	May 2017	99.34
3	June 2017	99.32
4	July 2017	98.40
5	August 2017	98.35

(B) Transmission Loss

BSPTCL has submitted that transmission loss trajectory approved by the Commission in the MYT order dated March 26, 2016 and tariff order dated March 9, 2017 is provided in the table below:

Table 6.3: Transmission Loss Trajectory Projected by the Petitioner

Particulars	FY 2017-18	FY 2018-19
Approved Transmission Loss	3.92%	3.92%

Commission's analysis

The Commission has noted the transmission system availability during first 5 months of FY 2017-18. The Transmission system availability, month-wise from April 2018 to September 2018 may be submitted along with in next tariff petition.

The Commission has considered the transmission loss trajectory at 3.92% for the control period of FY 2016-17 to FY 2018-19 in the MYT order dated 21.03.2016. The Petitioner has now requested the Commission to approve the transmission loss trajectory at 3.92% for FY 2018-19. Accordingly, the Commission approves the transmission loss trajectory for FY 2018-19 at 3.92%.

The Commission in the Tariff order dated 21.03.2016 has also stated that:

"The Commission has decided to incentivise the utility for achieving the reduced transmission loss than the transmission loss target set by the Commission and has

also decided to dis-incentivise the utility for not achieving transmission loss target set by the Commission.

.....

The incentive/disincentive for achieving/not achieving the transmission loss target set by the Commission shall be implemented from FY 2016-17 onwards in truing up process."

BSPTCL shall submit the month-wise, transmission loss from April 2018 to September 2018 with full details of energy input and energy outflow in the next tariff petition.

6.4. Capital Investment Plan

Petitioner's submission:

BSPTCL has submitted scheme-wise revised capital investment plan and capitalisation for FY 2016-17 to FY 2018-19 as detailed in the following Table:

**Table 6.4: Revised capital investment plan proposed by the Petitioner
(Rs. Crore)**

Sl. No.	Planned Scheme	Capital expenditure			Capitalisation		
		2016-17	2017-18	2018-19	2016-17	2017-18	2018-19
1	BRGF	790.86	489.25	48.04	760.41	1828.94	366.56
2	ADB	9.60	446.37	50.80	56.04	466.21	88.12
3	Old schemes	28.68	34.38	42.46	20.31	11.97	257.42
4	New schemes (State Plan)	965.90	1001.78	559.45	149.97	726.75	1877.13
5	Internal Resources (IRF)	8.66	3.18	0.00	6.36	10.44	46.38
6	PSDF	21.21	50.14	0.00	0.00	0.00	71.35
	Total	1824.91	2025.10	700.75	993.09	3044.30	2706.96

Commission's analysis:

The Commission, in view of need to develop the transmission system to transmit the additional power from upcoming generating stations and to meet the load demand in the State, provisionally approves the revised capital investment for FY 2018-19 is as given in the Table below:

Table 6.5: Scheme-wise details of capital expenditure and Capitalisation approved for FY 2018-19

(Rs. Crore)

Sl. No.	Planned scheme	Source of funding	Capital expenditure	Capitalisation
1	BRGF	Equity	48.04	366.56
2	ADB	Loan	50.80	88.12
3	State Plan – Existing	Equity 43% Loan 35% Grant 22%	42.46	257.42
4	State Plan-New schemes	Equity 93% Loan 5% Grant 2%	559.45	1877.13
5	Internal Resources	Equity	--	46.38
6	PSDF	Grant 90% Loan 10%	--	71.35
7	Total		700.75	2706.96

Source of funding the capitalisation for FY 2018-19

Sl. No.	Planned Scheme	Capitalisation	Equity	Grant	Loan
1	BRGF	366.56	366.56	--	--
2	ADB	88.12	--	--	88.12
3	State Plan – Existing	257.42	110.69	56.63	90.10
4	State Plan-New schemes	1877.13	1745.74	37.54	93.86
5	Internal Resources	46.38	46.38	--	--
6	PSDF	71.35	0	64.22	7.13
7	Total	2706.96	2269.37	158.39	279.20

6.5. Capitalisation**Petitioner's submission:**

BSPTCL has proposed the year-wise capitalisation as detailed in the following Table:

Table 6.6: Year-wise Capitalisation proposed by the Petitioner
(Rs. Crore)

Sl. No.	Particulars	FY 2018-19
1	Opening CWIP	2095.62
2	New Investment	700.75
3	Less: Capitalisation	2706.96
4	Closing CWIP	89.42

BSPTCL has submitted that variation in actual capitalisation will be adjusted at the time of truing up.

Commission's analysis:

The Commission has considered the revised capital investment for FY 2018-19, shown in table 6.5 above. The Commission has considered the opening CWIP for FY 2018-19 based on the closing CWIP (Rs.2109.18 crore) approved in review for FY 2017-18.

The Petitioner has provided scheme-wise capex and capitalisation details for FY 2018-19 in the petition. The Commission opines that the Petitioner shall be in a better position to project the capitalisation based on physical progress of the schemes. Accordingly, the Commission considers the revised capitalisation for FY 2018-19 as projected by the Petitioner subject to true up based on audited accounts for FY 2018-19.

The Commission has considered capital investment and capitalisation of capital expenditure/transferred to fixed assets i.e. GFA based on the capital investment approved by the Commission for FY 2018-19 as given in the Table below:

Table 6.7: Capitalisation considered by the Commission for FY 2018-19
(Rs. Crore)

Particulars	Approved in MYT order dated 21.3.2016	Projected by BSPTCL for FY 2018-19	Now approved for FY 2018-19
Opening CWIP (A)	1600.94	2095.62	2109.18
New Investment (B)	396.07	700.75	700.75
Less: Capitalisation (C)	1366.34	2706.96	2706.96
Closing CWIP (A+B-C)	630.67	89.42	102.97

6.6. Funding of Capitalisation**Petitioner's submission:**

BSPTCL has not furnished details of funding of capitalisation for FY 2018-19 in the petition.

Commission's analysis

The Commission has observed that the Petitioner has not furnished the details of funding of capitalisation for FY 2018-19. As discussed in paragraph 6.4 above, the

Commission has considered capex for FY 2018-19 based on the revised details furnished by the Petitioner.

The Commission has considered same ratio of funding as it has approved scheme wise capital expenditure against new investment in Table 6.5 above for FY 2018-19.

The Commission, accordingly, considers the funding of capitalization based on the scheme-wise funding of capex vis-à-vis capitalisation as given hereunder:-

Table 6.8: Funding of capitalisation

Sl. No.	Particulars	2018-19
1	Capitalisation	2706.96
2	Funding of capitalisation (a+b+c)	
3	a. Equity	2269.37
4	b. Grant	158.39
5	c. Loan	279.20

The Commission provisionally considers funding of capitalisation for FY 2018-19 as shown in the table above. The opening CWIP for FY 2017-18 is considered based on the closing CWIP approved in the review for FY 2017-18. The details are given in the Table below:

Accordingly, the Commission considers capex and funding of capitalisation for FY 2018-19 as given in the Table below:

**Table 6.8: Capex and funding of capitalisation considered for FY 2018-19
(Rs. Crore)**

Sl. No.	Particulars	Approved in MYT order dated 21.3.2016	Projected by BSPTCL for FY 2018-19	Now approved for FY 2018-19
1	Opening CWIP	1600.94	2095.62	2109.18
2	Add: New Investment	396.07	700.75	700.75
3	Total	1997.01	2796.37	2809.93
4	Less: Capitalised (5+6)	1366.34	2706.96	2706.96
5	CWIP capitalization	1247.52	2706.96	2706.96
6	New Investment capitalization	118.82	--	--

Sl. No.	Particulars	Approved in MYT order dated 21.3.2016	Projected by BSPTCL for FY 2018-19	Now approved for FY 2018-19
7	Closing CWIP (1+2-4)	630.67	89.42	102.97
8	Funding of capitalization			
9	CWIP capitalisation (a+b+c)	1244.92	--	2706.96
	a. Grant			158.39
	b. Equity	1127.96	--	2269.37
	c. Loans	116.96	--	279.20
10	New Investment capitalisation (a to c)	118.57	--	--
	a. Grant			--
	b. Equity	107.43	--	--
	c. Loans	11.14	--	--
11	Total Grants (9a+10a)	--	--	158.39
12	Total Equity (9b+10b)	1235.39	--	2269.37
13	Total Loans (9c+10c)	128.10	--	279.20

6.7. Interest During Construction (IDC)

Petitioner's submission:

BSPTCL has projected IDC at Rs.82.06 crore for FY 2018-19 however has not furnished the details of the computation.

Commission's analysis

The Commission has considered IDC for FY 2018-19 based on the funding of capital expenditure as given in the Table below:

Table 6.9: IDC considered for FY 2018-19

(Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2018-19	Approved for FY 2018-19
1	Loan drawn during FY 2018-19	128.10		279.20
2	Average loan	64.05	0.00	139.60
3	Interest rate %	13.00%	13.00%	13.00%
4	IDC (on average loan)	8.33	82.06	18.15

The Commission, accordingly, approves IDC at Rs.18.15 crore for FY 2018-19.

6.8. Gross Fixed Assets

Petitioner's submission:

BSPTCL has projected the Gross Fixed Assets for FY 2018-19, based on the capitalisation of CWIP and IDC as tabulated in the Table below:

Table 6.10: Gross Fixed Assets projected for FY 2018-19

(Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2018-19
1	Opening GFA	8844.36	7975.71
2	Additions during the year	1366.34	2706.96
3	Interest During Construction	8.33	82.06
4	Closing GFA (1+2+3)	10219.03	10600.62

Commission's analysis

The Commission has examined the computation of GFA submitted by the Petitioner for FY 2018-19. The Commission has considered opening GFA based on the closing GFA approved for FY 2017-18 in review. The Commission has arrived at the opening and closing GFA considering the capitalisation approved for FY 2018-19 in as given in the Table below:

Table 6.11: Gross Fixed Assets approved for FY 2018-19

(Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2017-18	Now approved for FY 2018-19
1	Opening GFA	8844.36	8166.31	8103.94
2	Additions during the year	1366.34	2706.96	2706.96
3	Interest During Construction	8.33	82.06	18.15
4	Closing GFA (1+2+3)	10219.03	10955.33	10829.05

6.9. Depreciation

Petitioner's Submission

BSPTCL has projected the depreciation for FY 2018-19 as detailed in the Table below:

Table 6.12: Projected Depreciation for FY 2018-19

(Rs. Crore)

Sf. No.	Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2018-19
1	Opening GFA	7478.24	6774.15
2	Additions during the year	1366.34	2706.96
3	Add: IDC	8.33	82.06
4	Closing GFA (1+2+3)	8852.90	9563.17
5	Average GFA $\{(1+4)/2\}$	8165.57	8168.66
6	Weighted average rate of depreciation	3.36%	5.11%
7	Depreciation (5*6)	274.36	417.74
8	Opening Grants	2883.80	1646.04
9	Grants during the year	--	94.22
10	Less: Grants amortized	--	--
11	Total Grants (8+9-10)	2883.80	1740.26
12	Average Grants $\{(8+11)/2\}$	2883.80	1693.25
13	Weighted average rate of depreciation	3.36%	5.11%
14	Depreciation on assets created out of grants (12*13)	96.90	86.59
15	Net Depreciation for GFA on Loans (7-14)	177.47	331.15

Commission's Analysis

BERC (Terms and Conditions for Determination of Tariff) Regulations 2007, Regulation 73 (2) (a) 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.*

The Commission has approved closing depreciable GFA at Rs.6711.78 crore (Sl.No.4 of Table 5.14) for FY 2017-18 in review and the same is adopted as opening depreciable GFA for FY 2018-19 and further updated with additions during the year and closing depreciable GFA arrived at for FY 2018-19.

The Commission considers the rate of depreciation at 5.11% provisionally as projected by the Petitioner for computing depreciation for FY 2018-19. The opening Grants Rs.1653.20 crore (Sl. No.11 of Table 5.14) are considered based on closing Grants of FY 2017-18 (RE) and addition to Grants are considered at Rs.158.39 crore during FY 2018-19 based on the funding of capitalisation approved in Table 6.8.

The opening value of GFA, additions to GFA and closing GFA vis-à-vis the Grants considered by the Commission and depreciation on assets created out of Grants and depreciation on GFA to be considered as pass through in ARR for FY 2018-19 is given in the Table below:

Table 6.13: Depreciation approved for FY 2018-19

(Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2018-19	Approved for FY 2018-19
1	Opening GFA (depreciable GFA)	7478.24	6774.15	6711.78
2	Additions during the year	1366.34	2706.96	2706.96
3	Interest During Construction (IDC)	8.33	82.06	18.15
4	Closing GFA (1+2+3)	8852.90	9563.17	9436.89
5	Average GFA {(1+4)/2}	8165.57	8168.66	8074.33
6	Weighted average rate of depreciation	3.36%	5.11%	5.11%
7	Depreciation (5*6)	274.36	417.74	412.60
8	Opening Grants	2883.80	1646.04	1653.20
9	Grants during the year	--	94.22	158.39
10	Total Grants (8+9)	2883.80	1740.26	1811.59
11	Average Grants {(8+10)/2}	2883.80	1693.25	1732.40
12	Weighted average rate of depreciation	3.36%	5.11%	5.11%

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2018-19	Approved for FY 2018-19
13	Depreciation on assets created out of grants (11*12)	96.90	86.59	88.53
14	Net Depreciation for GFA on Loans (7-13)	177.47	331.15	324.07

The Commission accordingly, approves depreciation at Rs.324.07 crore for FY 2018-19.

6.10. Interest on Loans

Petitioner's Submission

The Petitioner has projected interest on loans for FY 2018-19 as detailed in the Table below:

Table 6.14: Projected Interest & finance charges for FY 2018-19

(Rs. Crore)			
Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2018-19
1	Opening loan	2793.58	3014.30
2	Additions during the year	962.27	1828.92
3	Repayment	177.47	331.15
4	Closing Loan (1+2-3)	3578.38	4512.08
5	Average Loan $\{(1+4)/2\}$	3185.98	3763.19
6	Rate of Interest	7.15%	8.97%
7	Interest Charges (5 * 6)	227.80	337.68
8	Finance charges	0.01	0.01
9	Interest and Finance Charges	227.81	337.69

Commission's analysis

The Commission has examined the computation of interest on loan projected by the Petitioner for FY 2018-19.

The Regulation 73 (1) of the BERC Terms and Conditions for Determination of Tariff Regulations, 2007 specify;

(a) *interest on loan capital shall be computed loan-wise, on the loans arrived at in the manner indicated in Regulation 71.*

- (b) *In the case of existing projects, the actual debt-equity shall be used for tariff determination and any expansion thereto shall be governed as per Regulation 71.*
- (c)
- (d)
- (e)
- (f) *In case any moratorium period is availed by the transmission licensee, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly.*

The Regulation 71 of BERC Terms and Conditions for Determination of Tariff Regulations, 2007 specify;

“(1) in case of all projects, the debt - equity ratio as on the date of commercial operation shall be 70:30 for determination of Tariff, provided that the Commission may in deserving case consider equity higher than 30% for purpose of determination of tariff, where the transmission licensee is able to establish to the satisfaction of the Commission that the deployment of equity more than 30% was in the interest of general public.

Provided that;

- i. in case a project, if the actual equity employed is less than 30%. The actual debt and equity employed shall be taken for determination of tariff.*
 - ii. in case of existing projects the actual debt : equity ratio shall be used for tariff determination. However, any expansion shall be governed by clause (1) above.”*
- (2) the debt and equity amount arrived at in accordance with clause (1) shall be used for calculation of interest on loan, Return on Equity, Advance Against Depreciation and Foreign Exchange Rate Variation”.***

A conjoint reading of the above Regulations explicitly specify that interest shall be provided on the actual debt in respect of existing projects and thereafter on 70% of the project cost.

The Commission, in view of the above Regulations, for the purpose of computation of interest, has considered the closing loan of FY 2017-18 (RE) as opening loan for FY 2018-19 and further updated based on the funding of capitalisation during for FY 2018-19 as shown hereunder.

Sl. No.	Particulars	FY 2018-19 (Rs. Crore)
1	Capitalisation during the year (incl. IDC)	2725.11
2	Less: Grants	159.39
3	Net capitalisation	2566.75
4	Equity considered (@30% of 3)	770.02
5	Debt considered (@70% of 3)	1796.70

The Commission has considered the weighted average effective rate of interest at 8.68% for FY 2018-19 based on the weighted average effective rate of interest considered in true up for FY 2016-17 as per audited accounts of the Petitioner for FY 2016-17.

The Commission, in terms of Regulation 73(1)(f) of BERC Tariff Regulations 2007, has considered the repayment of loan equivalent to depreciation allowed during the year for computation of interest on loan for FY 2018-19.

The Commission, accordingly, has considered interest and finance charges for FY 2018-19 as detailed in the Table below:

Table 6.15: Interest & Finance charges approved for FY 2018-19

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2018-19	Approved for FY 2018-19
1	Opening loan balance	2793.58	3014.30	3034.32
2	Additions during the year	962.27	1828.92	1796.70

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2018-19	Approved for FY 2018-19
3	Normative Repayment	177.47	331.15	324.07
4	Closing Loan (1+2-3)	3578.38	4512.08	4506.95
5	Average Loan $\{(1+4)/2\}$	3185.98	3763.19	3770.63
6	Interest rate	7.15%	8.97%	8.68%
7	Interest on Loan (5 * 6)	227.80	337.68	327.29
8	Other Finance charges	0.01	0.01	--
9	Interest and Finance charges	227.81	337.69	327.29

The Commission accordingly, approves the interest and finance charges at Rs.327.29 crore for FY 2018-19 as detailed in the table above.

6.11. Operation and Maintenance (O&M) Expenses

6.11.1 Inflation indexation

Petitioner's submission:

BSPTCL has considered inflationary index of 3.99% for projecting employee cost, Repairs & Maintenance and Administration and General Expenses.

Commission's analysis:

Regulation 73(3) of BERC Tariff Regulations, 2007 specify;

"Norms for operation and maintenance expenses per ckt km and per bay shall be as under

(c) The Commission shall, for the purpose of fixing normative rates for operation and maintenance expenses, study the O&M expenses incurred over the last 4 to 5 years and fix appropriate rates per ckt-km of transmission line and per bay. The norms so fixed for 2008-09 shall be escalated at 4% per annum.

(d) The total allowable O&M expenses for a transmission licensee shall be calculated by multiplying the numbers of bays and ckt-km of line length with the applicable norms for O&M expenses per bay and per ckt-km respectively".

The Commission has elaborately discussed the issue of inflationary indices to be adopted for projecting O&M expenses for FY 2017-18 in Paragraph 5.10.1. The Commission opines that the same is squarely applicable for FY 2018-19 also. Accordingly, the Commission has adopted rate of escalation at 3.51% for Employee expenses, R&M and A&G expenses for FY 2018-19.

6.11.2 Employee Costs

Petitioner's submission:

BSPTCL has submitted that the employee cost comprises of salaries, dearness allowance, bonus, staff welfare, medical benefits, leave travel and earned leave encashment and the terminal benefits in the form of pension, gratuity, etc.

BSPTCL has submitted that they have considered rate of escalation at 3.99% year on year for projecting employees' expenses for FY 2018-19 over the actual expenses of FY 2016-17.

The Petitioner has projected the employee expenses for FY 2018-19 as detailed in the Table below:

Table 6.16: Projected Employee Cost for FY 2018-19

(Rs. Crore)			
Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2018-19
1	Employee cost	106.99	105.97
2	Indexation	4.65%	3.99%
3	Add: Inflationary increase (1*2)	4.97	4.23
4	Total employee cost (1+3)	111.96	110.20
5	Less: Employee cost relating to SLDC business	--	7.11
6	Net Employee cost	111.93	103.09

Commission's analysis:

The Commission has examined the Employee cost projected by the Petitioner for FY 2018-19 and finds that the Petitioner has projected employee cost including employee cost for SLDC business also.

As the Commission has already considered employee cost for BSPTCL in FY 2017-18 (RE) excluding that of SLDC business, therefore, the Commission has considered the employee cost for FY 2018-19 based on the employee cost of Rs.102.36 crore considered by the Commission for FY 2017-18 (RE) and further escalated @ 3.51% for inflationary increase.

BSPTCL has filed tariff petition for SLDC business separately for FY 2018-19. The employee cost assigned to SLDC business as per the petition is at Rs.3.23 crore.

The Commission has approved the employee cost of Rs.3.23 crore relating to SLDC business in the Case No.38 of 2017 separately. The base employee cost considered for BSPTCL is excluding SLDC business and accordingly has considered the employee cost of BSPTCL for FY 2018-19 as detailed in the Table:

Table 6.17: Employee Cost approved for FY 2018-19

(Rs. Crore)				
Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2018-19	Approved for FY 2018-19
1	Base Employee cost	106.99	105.97	102.36
2	Indexation	4.65%	3.99%	3.51%
3	Add: Inflationary increase (1*2)	4.97	4.23	3.59
4	Total employee cost (1+3)	111.96	110.20	105.95
5	Less: Employee cost relating to SLDC business		7.11	--
6	Employee cost considered for Transmission business (4-5)	111.96	103.09	105.95

The Commission, accordingly, approves net employee cost at Rs.105.95 crore (excluding employee cost relating to SLDC) for FY 2018-19.

6.11.3 Repairs and Maintenance (R&M) Expenses

Petitioner's submission:

The Petitioner has estimated R&M expenses for FY 2018-19 considering an increase of 3.99% year on year over actual expenses of FY 2016-17.

BSPTCL has projected R&M expenses for FY 2018-19 as given in the Table below:

Table 6.18: Projected R&M expenses for FY 2018-19
(Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2018-19
1	Base R&M expenses	41.84	49.12
2	Inflationary index	4.65%	3.99%
3	Inflationary increase (1*2)	1.95	1.96
4	Total R&M cost (1+3)	43.79	51.08
5	Less: R&M cost relating to SLDC business	--	1.09
6	R&M expenses (1+3)	43.79	49.99

BSPTCL has requested the Commission that R&M expenses shall be considered as a % of GFA as the licensee is eventually maintain assets and the inflation over previous year expenditure is insufficient as it ignores expenses on additions of new assets. The draft MYT transmission regulations have provided for R&M expenses as a % of GFA.

Commission's analysis

The Commission has examined the R&M expenses projected by BPSTCL and finds that the Petitioner has projected R&M expenses including R&M expenses of SLDC also. The Petitioner has claimed R&M expenses with escalation at 3.99% year on year over the actual expenses for FY 2016-17.

As the Commission has already considered R&M expenses for BSPTCL in FY 2017-18 (RE) excluding that of SLDC business, therefore, the Commission has considered R&M expenses of Rs.48.46 crore in review for FY 2017-18 and the same is considered as base

R&M expenses for FY 2018-19 and further escalated at 3.51% for inflationary increase as discussed in paragraph 5.10.1.

BSPTCL has filed tariff petition for SLDC business separately for FY 2018-19. The R&M cost assigned to SLDC business as per the petition is at Rs.0.46 crore for FY 2018-19.

The Commission has approved the R&M expenses of Rs.0.46 crore relating to SLDC business in the Case No.38 of 2017. The base R&M expenses considered for BSPTCL for FY 2018-19 is excluding SLDC business

Accordingly, the Commission has considered the R&M expenses for FY 2018-19 as detailed in the Table below:

**Table 6.19: R&M expenses approved for FY 2018-19
(Rs. Crore)**

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2018-19	Approved for FY 2018-19
1	Base R&M expenses	41.84	49.12	48.46
2	Inflationary index	4.65%	3.99%	3.51%
3	Inflationary increase (1*2)	1.95	1.96	1.70
4	R&M expenses (1+3)	43.79	51.08	50.16
5	Less; R&M cost relating to SLDC business		1.09	--
6	R&M cost considered for Transmission business (4-5)	43.79	49.99	50.16

The Commission, accordingly, considered R&M expenses at Rs.50.16 crore (excluding R&M cost relating to SLDC) for FY 2018-19.

6.11.4 Administration and General (A&G) Expenses

Petitioner's submission

The Petitioner has submitted that Administration and General expenses mainly comprise of rents, telephone and other communication expenses, professional charges, conveyance and traveling expenses etc.

BSPTCL has estimated the A&G expenses for FY 2018-19 considering an increase of 3.99% year on year over actual expenses of FY 2016-17 as given in the Table below:

Table 6.20: Projected Administration and General Expenses for FY 2018-19
(Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2018-19
1	A & G Expenses	9.71	29.16
2	Inflationary index %	4.65%	3.99%
3	Add: Inflationary increase	0.45	1.16
4	Total A&G expenses (1+3)	10.16	30.32
5	Less: A&G expenses relating to SLDC business		0.59
6	Net A&G expenses	10.16	29.73

Commission's analysis:

The Commission has examined the A&G expenses projected by BPSTCL and finds that the Petitioner has projected A&G expenses including A&G expenses of SLDC business also.

As the Commission has already considered A&G expenses for BSPTCL in FY 2017-18 (RE) excluding that of SLDC business, therefore, the Commission has considered A&G expenses of Rs.18.45 crore for FY 2017-18 in review and the same is considered as base A&G expenses for FY 2018-19 and further escalated at 3.51% for inflationary increase as discussed in paragraph 5.10.1.

The Commission has approved the A&G expenses of Rs.0.46 crore relating to SLDC business in the Case No.38 of 2017. The A&G expenses considered for BSPTCL for FY 2018-19 is excluding SLDC business.

Accordingly, the Commission has considered the A&G expenses for FY 2018-19 as detailed in the Table below:

Table 6.21: Administration & General Expenses approved for FY 2018-19

(Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2018-19	Approved for FY 2018-19
1	Base A & G Expenses	9.71	29.16	18.45
2	Inflationary index %	4.65%	3.99%	3.51%
3	Add: Inflationary increase	0.45	1.16	0.65
4	Total A&G expenses	10.16	30.32	19.10
5	Less: A&G expenses relating to SLDC business		0.59	--
6	A&G expenses considered for Transmission business (4-5)	10.16	29.73	19.10

The Commission, accordingly, approves Administration and General Expenses at Rs.19.10 Crore (excluding A&G cost relating to SLDC) for FY 2018-19.

6.11.5 Allocation of Holding Company Expenses

Petitioner's submission

BSPTCL has submitted that the Schedule 'D' Part-III of the Bihar State Electricity Reforms Transfer Scheme, 2012 defines the Functions and Duties of Bihar State Power (Holding) Company Limited. As per Clause (i) of the schedule 'D', the Holding Company shall handle all issues relating to the subsidiary companies in respect of;

"Business of purchasing, importing, exporting and trading of power subject to the provision of Electricity Act, 2003 and to supply electric power generated by other plants to transmission companies, distribution companies, trading companies, other generation companies and other persons, and in this regard execute agreements with Central and State Generating authorities, departments or companies, independent Power Producers and other persons".

BSPTCL further submitted that BSPHCL provides common services to all the segregated entities and as per the Transfer Scheme *"operating expenses incurred by the Holding Company like administration and general expenses, legal and consulting fees, etc. would*

be shared by the BSPGCL, BSPTCL, NBPDC and SBPDCL in the ratio of their respective equity”.

BSPTCL has also stated that as per Schedule ‘F’, the Holding Company shall handle all issues relating to the subsidiary companies in respect of the testing divisions, training department at Headquarter and all the departments of the Corporate head office viz. General Administration, Accounts and Finance, IT, Stores & Purchase, Transmission/Distribution/Generation, Personnel, Publicity, Legal, Vigilance & Security, Commercial, Planning, Civil Engineers, Transmission (O&M), Rural Electrification, shall constitute “Common Services” which shall continue to provide services to all successor entities during the interregnum period, until issue of further transfer notifications allocating the employees to respective companies.

BSPTCL has projected the Holding Company expenses for FY 2018-19 as furnished in Table below:

Table 6.22: Holding Company Expenses projected for FY 2018-19

(Rs. Crore)

Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2018-19
Holding Company Expenses	5.00	5.35

Commission’s analysis:

The Commission provisionally considers the Holding Company expenses as projected by the Petitioner for FY 2018-19 as detailed in the Table below:

Table 6.23: Allocation of Holding Company Expenses approved for FY 2018-19

(Rs. Crore)

Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2018-19	Now approved for FY 2018-19
Holding Company expenses	5.00	5.35	5.35

The Commission, accordingly, approves Holding Company Expenses at Rs.5.35 Crore for FY 2018-19.

6.11.6 Summary of Operations and Maintenance (O&M) Expenses

Petitioner's submission:

BSPTCL has projected the total O&M expenses for FY 2018-19 as given in the table below:

Table 6.24: Total O&M expenses projected for FY 2018-19

(Rs. Crore)			
Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2018-19
1	Employee cost	111.96	110.20
2	R&M expenses	43.79	51.08
3	A&G Expenses	10.16	30.32
4	Holding company expenses	5.00	5.35
5	Total O & M cost	170.91	196.96
6	Less: SLDC expenses	--	8.79
7	O&M expenses	170.91	188.17

Commission's Analysis:

Based on the analysis, the Commission has considered the O&M expenses for FY 2018-19 as detailed in the table below:

Table 6.25: Total O&M Cost approved for FY 2018-19

(Rs. Crore)				
Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2018-19	Approved for FY 2018-19
1	Employee cost	111.96	110.20	105.95
2	R&M expenses	43.79	51.08	50.16
3	A&G Expenses	10.16	30.32	19.10
4	Holding company expenses	5.00	5.35	5.35
5	Total O & M cost	170.91	196.96	180.56
6	Less: SLDC expenses	--	8.79	--
7	O&M expenses	170.91	188.17	180.56

6.12. Return on Equity**Petitioner's submission:**

BSPTCL has submitted that computation of equity is considered based on the closing equity as per true-up of FY 2017-18 considered as opening equity for FY 2018-19 and further additions to the equity balance has been considered at 30% of the capitalisation proposed for FY 2018-19. The RoE has been considered at 14% for assets capitalised before 1st April 2015 and at 15.5% for assets capitalised on or after 1st April 2015 in accordance with the Regulations. BSPTCL has computed the return on equity for FY 2018-19 as detailed in the Table below:

Table 6.26: Projected Return on Equity for FY 2018-19

(Rs. Crore)			
Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2018-19
1	Equity as on 31.03.2015	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 of projects commissioned w.e.f. 1.04.2015		
4	Opening equity	1092.19	1231.51
5	Addition during the year	412.40	783.82
6	Closing Equity (4+5)	1504.59	2015.33
7	Average equity (4+6)/2	752.30	1623.42
8	Rate of Return on equity	15.50%	15.50%
9	Return on equity (7*8)	116.61	251.63
10	Total Return on equity (3+9)	169.16	304.19

Commission's analysis

The Commission has examined the computation of RoE claim of BSPTCL.

The Regulation 73 (2) (c) of the BERC Terms and Conditions for Determination of Tariff Regulations, 2007 specify;

- (i) ***Return on Equity shall be computed on the equity base determined in accordance with Regulation 71 and shall be @ 14% per annum.***

- (ii) *Equity invested in foreign currency shall be allowed a return upto a prescribed limit in the same currency and the payment on this account shall be made in Indian Rupee based on the exchange rate prevailing on the due date of billing.*

Explanation:

*The premium raised by the transmission licensee while issuing share capital and investment of internal resources created out of free reserve of the existing transmission licensee, if any, for funding the project, shall also be reckoned as paid up capital for the purpose of computing return on equity provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the project and forms part of the approved financial package. The definition of equity thus would involve all net worth deployed in the capital of the unit. **This shall not include any revaluation of reserves and subsidies**".*

The BERG in Gazette Notification dated 26th March 2014 has issued amendment to Regulation 73 (2) (i) of BERG (Terms and Conditions for Determination of Tariff) (2nd Amendment) Regulations, 2014 which specify that **"Return on equity shall be computed on the equity base determined in accordance with Regulation 71 and shall be @ 15.5% for the projects which are commissioned on and after 01.04.2015"**.

The Regulation 71 of BERG Terms and Conditions for Determination of Tariff Regulations, 2007 specify;

- "(1) in case of all projects, the debt - equity ratio as on the date of commercial operation shall be 70:30 for determination of Tariff, provided that the Commission may in deserving case consider equity higher than 30% for purpose of determination of tariff, where the transmission licensee is able to establish to the satisfaction of the Commission that the deployment of equity more than 30% was in the interest of general public.**

Provided that;

- (i) *in case a project, if the actual equity employed is less than 30%. The actual debt and equity employed shall be taken for determination of tariff.*
- (ii) *in case of existing projects the actual debt : equity ratio shall be used for tariff determination. However, any expansion shall be governed by clause (1) above."*
- (2) ***the debt and equity amount arrived at in accordance with clause (1) shall be used for calculation of interest on loan, Return on Equity, Advance Against Depreciation and Foreign Exchange Rate Variation".***

A conjoint reading of Regulations 73 and 71 explicitly specify that Return on Equity shall be provided on the capital cost of the projects commissioned prior to 31st March 2015 at 14% and on the capital cost of the projects commissioned on or after 1st April 2015 at 15.50%.

The closing equity as on 31.03.2015 is considered at Rs.375.41 crore. The opening equity with effect from 1st April 2015 is considered based on the closing equity considered for FY 2017-18 in review. The addition to equity during FY 2018-19 is considered based on the capitalisation approved for FY 2018-19 as given below:

Funding of Capitalisation for FY 2018-19

Sl. No.	Particulars	FY 2018-19 (Rs. Crore)
1	Capitalisation during the year (incl. IDC)	2725.11
2	Less: Grants	158.39
3	Net capitalisation	2566.72
4	Equity considered (@30% of 3)	770.02
5	Debt considered (@70% of 3)	1796.70

The Commission, in view of the Regulations 73 and 71 of the BERC Tariff Regulations, 2007, for the purpose of computation of Return on Equity, has considered the RoE @14% on the equity approved to end of 31.3.2015. Further RoE @15.5% is considered on the equity additions with effect from 1.4.2015 based on the capitalisation approved by the Commission year on year.

The Commission, accordingly, has considered Return on Equity for FY 2018-19 as detailed in the Table below:

Table 6.27: Approved Return on Equity for FY 2018-19

(Rs. Crore)				
Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2018-19	Approved for FY 2018-19
1	Equity as on 31.03.2015	375.41	375.41	375.41
2	Rate of return on Equity	14.00%	14.00%	14.00%
3	Return on equity (1*2)	52.56	52.56	52.56
	Equity of projects commissioned w.e.f. 1.04.2015			
4	Opening equity	1092.19	1231.51	1239.24
5	Addition during the year	412.40	783.82	770.02
6	Closing Equity (4+5)	1504.59	2015.33	2009.26
7	Average equity (4+6)/2	752.30	1623.42	1624.25
8	Rate of Return on equity	15.50%	15.50%	15.50%
9	Return on equity (7*8)	116.61	251.63	251.76
10	Total Return on equity (3+9)	169.16	304.19	304.32

The Commission approves the Return on Equity at Rs.304.32 crore for FY 2018-19 as detailed in the Table above.

6.13. Interest on working capital

Petitioner's submission:

BSPTCL has submitted that it has arrived at the working capital requirement according to applicable norms for transmission function provided in the BERC (Terms and Conditions of Tariff) Regulations, 2007 which are reproduced in the following:

Table 6.28: Norms for working capital requirement

Sl. No.	Particulars	Norm
1	O&M expenses	One month
2	Maintenance spares	@1% of historical cost of GFA escalated @6% per annum
3	Receivables	Two months of transmission charges
4	Rate of interest on working capital	Base Rate of State Bank of India plus 350 basis points

The rate of interest applied on the proposed working capital is @12.45% as per the SBI Base Rate. BSPTCL has projected interest on working for FY 2018-19 as detailed in the Table below:

Table 6.29: Projected Interest on working capital for FY 2018-19
(Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2018-19
1	O&M expenses (1 month)	14.24	15.68
2	Maintenance spares @1% of opening GFA with 6% escalation	80.45	73.26
3	Receivables - 2 months	122.59	192.18
4	Total working capital	217.28	281.12
5	Rate of interest	13.50%	12.45%
6	Interest on working capital	29.33	35.00

Commission's Analysis

The Commission has examined the computation of interest on working capital submitted by the Petitioner. The Petitioner has considered the working capital as per Regulations and rate of interest @12.45%.

The Commission has considered opening GFA at Rs.6848.88 Crore (Opening GFA Rs.8103.94 Crore as approved in Table 6.11 less asset revaluation Rs.1255.06 Crore) to consider maintenance spares for the purpose of computing working capital requirement and interest on working capital. The Commission, accordingly considered maintenance spares at 1% of the historical cost of GFA (Rs.6848.88 crore) with escalation @6% at Rs.72.60 crore for FY 2018-19.

The Regulation 73(4)(ii) of BERC Tariff Regulations, 2007 specify the rate of interest on working capital shall be equal to Short term PLR of SBI on 1st April of the year. The Commission has issued amendment to the Regulation 73(4)(ii) (amendment notified in the Bihar Gazette dated 27.03.2014) that the rate of interest on working capital will be computed at 350 basis point over and above the SBI Base Rate.

The SBI Base Rate as on 1st April 2017 is at 9.10%. The rate of interest on working capital to be considered shall work out to 12.60% [SBI Base Rate of 9.10% + 3.50% (350 basis points)] for FY 2018-19.

The Commission has computed the working capital and interest on working capital as per expenses approved at an interest rate of 12.60% for FY 2018-19 as given in the Table below:

Table 6.30: Approved Interest on working capital for FY 2018-19

(Rs. Crore)

Sl. No.	Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2018-19	Approved for FY 2018-19
1	O&M expenses (1 month)	14.24	15.68	15.05
2	Maintenance spares @1% of opening GFA with 6% escalation	80.45	73.26	72.60
3	Receivables - 2 months	122.59	192.18	184.88
4	Total working capital	217.28	281.12	272.53
5	Rate of interest	13.50%	12.45%	12.60%
6	Interest on working capital	29.33	35.00	34.34

The Commission approves the interest on working capital at Rs.34.34 Crore for FY 2018-19 as given in the above Table.

6.14. Non-Tariff Income

Petitioner's submission:

BSPTCL has submitted that it has considered an escalation of 5% year on year on the non-tariff income considered in review for FY 2017-18 (RE) and projected the non-tariff income for FY 2018-19 as detailed in the Table below:

Table 6.31: Projected non-tariff income for FY 2018-19

(Rs. Crore)

Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2018-19
Non-tariff income	39.13	43.11

Commission's analysis:

BSPTCL has submitted that non-tariff income has been projected for FY 2018-19 with an escalation of 5% on the non-tariff income of FY 2017-18 (RE). The Commission has approved non-tariff income of Rs.41.09 crore in review for FY 2017-18 (RE). The Commission has also considered 5% escalation on the non-tariff income considered in review for FY 2017-18 as proposed by the Petitioner subject to true up based on audited accounts for FY 2018-19 as detailed in the Table below.

Table 6.32: Non-tariff income approved for FY 2018-19

(Rs. Crore)			
Particulars	Approved in MYT order dated 21.03.2016	Projected by BSPTCL for FY 2018-19	Approved for FY 2018-19
Non-tariff income considered for FY 2017-18 (RE)	--	--	41.09
Escalation @5%	--	--	2.05
Non tariff income	39.13	43.11	43.14

The Commission approves the Non-tariff income at Rs.43.14 Crore for FY 2018-19 as given in the above Table.

6.15. Revenue Gap / (Surplus) approved in truing up for FY 2016-17

The Regulation 22(3) of the BERC Tariff Regulations, 2007, specifies "*the revenue gap of next year shall be adjusted as a result of Review and Truing up exercises*". Accordingly, the revenue gap/(surplus) arising out of the truing up for FY 2016-17 is to be adjusted in the ARR for FY 2018-19 along with carrying cost.

The Commission has approved **revenue gap of Rs.67.90 crore for FY 2016-17 in truing up.**

The Commission has considered carrying cost @12.80% (SBI Base rate 9.30% plus 350 basis points as notified in Bihar Gazette dated 27.03.2014) as on 1st April 2016 for half year of FY 2016-17, @12.60% (SBI Base Rate 9.10% plus 350 basis points) as on 1st April 2017 for entire year of FY 2017-18 and for half year of FY 2018-19 on the trued up revenue surplus of FY 2016-17 assuming that the surplus would have been created over