

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 558/TT/2014

Coram:

**Shri Gireesh B. Pradhan, Chairperson
Shri A.K. Singhal, Member
Shri A.S. Bakshi, Member
Dr. M.K. Iyer, Member**

Date of Order : 31.01.2017

In the matter of:

Truing up of transmission tariff for 2009-14 tariff period and determination of transmission tariff for 2014-19 tariff period, for 400 kV D/C Baharampur-Bheramara Transmission line, LILO of 400 kV S/C Farakka-Jeerat Transmission line at Baharampur and 1 no. 80 MVAR Bus Reactor and associated line bays and reactor bay at Baharampur (COD: 1.9.2013) under Interconnection between India and Bangladesh Electrical Grids for India portion in Eastern Region, under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

And in the matter of:

Power Grid Corporation of India Ltd
'Saudamini', Plot No-2,
Sector-29, Gurgaon -122 001 (Haryana)

.....**Petitioner**

Vs

Bangladesh Power Development Board (BPDB),
WAPDA Building, Motijheel Commercial Area,
Dhaka-1000, Bangladesh

.....**Respondent**

For Petitioner:

Shri Rakesh Prasad, PGCIL
Shri S.K. Venkatesan, PGCIL
Shri S.S. Raju, PGCIL
Shri M.M. Mondal, PGCIL



For Respondents: None

ORDER

The present petition has been filed by Power Grid Corporation of India Limited ('the petitioner'), for truing up of capital expenditure and tariff for 400 kV D/C Baharampur-Bheramara Transmission line, LILO of 400 kV S/C Farakka-Jeerat Transmission line at Baharampur and 1 no. 80 MVAR Bus Reactor and associated line bays and reactor bay at Baharampur (hereinafter referred as "transmission asset") under Interconnection between India and Bangladesh Electrical Grids for India portion in Eastern Region, under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations") based on actual expenditure for the period 1.4.2009 to 31.3.2014 and for determination of tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") for the period from 1.4.2014 to 31.3.2019.

2. This order has been issued after considering the petitioner's affidavit dated 18.10.2016.

3. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the Electricity Act, 2003 ("the Act"). The petitioner has served the petition to the respondent. The respondent has not filed any reply to the petition.



4. The hearing in the matter was held on 4.10.2016. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

5. The brief facts of the case are as follows:-

a. The investment approval for the transmission system was accorded by the Board of Directors of the petitioner vide Memorandum No. C/CP/Indo-Bangladesh dated 25.10.2010 at an estimated cost of ₹16032 lakh, including IDC of ₹697 lakh (based on 2nd quarter 2010 price level). The instant transmission asset was put under commercial operation w.e.f. 1.9.2013.

b. Final tariff for the period from COD to 31.3.2014 was allowed vide order dated 11.6.2014 in Petition No. 101/TT/2013 in accordance with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. The final tariff allowed vide order dated 11.6.2014 for the tariff period 2009-14 is as under:-

(₹ in lakh)	
Particulars	2013-14 (pro-rata)
Depreciation	398.26
Interest on Loan	471.64
Return on Equity	404.35
Interest on Working Capital	40.77
O & M Expenses	224.20
Total	1539.22

c. Final tariff determined vide order dated 11.6.2014 in Petition No. 101/TT/2013 was based on admitted capital cost of ₹12513.60 lakh, as against the claim of ₹12613.88 lakh, as on COD and consideration of additional capital



expenditure of ₹1407.97 lakh for 2013-14. The projected add-cap of ₹788.85 lakh and ₹456 lakh for 2014-15 and 2015-16 respectively was not considered, it being beyond tariff period of 2009-14. The details of claimed estimated completion cost of the instant transmission asset is ₹15266.70 lakh against the approved cost of ₹16031.91 lakh and is as under:-

(₹ in lakh)

Approved cost	Claimed cost as on COD	Projected additional capital expenditure			Total estimated completion cost
		2013-14	2014-15	2015-16	
16031.91	12613.88	1407.97	788.85	456.00	15266.70

d. The MAT rate applicable as on 2008-09 was considered to arrive at rate of return on equity for the tariff period 2009-14, which is required to be adjusted as per the actual MAT rate applicable for the respective year at the time of truing up of tariff for 2009-14 tariff period.

e. The instant petition was filed on 16.12.2014.

Truing-up of Annual Fixed Charges for Tariff Period 2009-14

6. The truing up of tariff for 2009-14 tariff period has been determined as discussed below.

Capital Cost and Additional Capital Expenditure

7. Clause (1) and Clause (3) of Regulation 6 of the 2009 Tariff Regulations provide that:-

“(1) The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014, as admitted by the Commission after prudence check at the time of truing up.-----”

“(3) The generating company or the transmission licensee, as the case may be, shall submit for the purpose of truing up, details of capital expenditure and additional capital expenditure incurred for the period from 1.4.2009 to 31.3.2014, duly audited and certified by the auditors;”



8. The petitioner has claimed revised capital cost of ₹12666.60 lakh, as on COD, for the purpose of tariff. In addition to this, the petitioner for trueing-up of tariff has submitted Auditors' Certificate dated 8.12.2014 for revised figures of add-cap during 2013-14 and has claimed as under:-

(₹ in lakh)

Approved cost	Cost as on COD	Additional capital expenditure			Total estimated completion cost
		2013-14*	2014-15	2015-16	
16031.91	12666.60	1066.46	1335.71	334.03	15402.81

*The capital expenditure has been verified from the audited figures of accounts by the Auditors upto 31.3.2014.

9. In view of above, the revised capital cost of ₹12666.60 lakh as on COD and add-cap of ₹1066.46 lakh during 2013-14 has been considered in the instant petition, as these are now allowed on actual basis, based on the Auditors' Certificate submitted by the petitioner and has been considered to work out the trued-up tariff for the tariff period 2009-14.

10. The total capital cost of the transmission asset including additional capital expenditure incurred during 2009-14 works out to ₹13733.06 lakh, which is within the approved cost of ₹16031.91 lakh given in the investment approval. As such, the additional capitalisation during 2009-14 is allowed in accordance with Clause 2(viii) of Regulation 9 of the 2009 Tariff Regulations. However, the capital cost allowed as on 31.3.2014 is as under:-

(₹ in lakh)

Particulars	As on COD as per Auditors' Certificate dated 3.12.2014	Cost as on COD considered after considering IDC on cash basis & IEDC as worked out and adjusted Initial spares	COD to 31.3.2014	Admitted cost as on 31.3.2014
Freehold Land	210.93	210.93	278.46	489.39
Leasehold Land	-	-	-	-
Building & Other Civil Works	183.52	183.25	-	183.25



Transmission Line	9608.97	9594.64	371.34	9965.98
Sub-Station Equipments	2613.87	2537.80	416.66	2954.46
PLCC	49.31	49.24	-	49.24
Total	12666.60	12575.85	1066.46	13642.31

11. Thus, the summary of capital cost as on 31.3.2014 allowed earlier vide order dated 11.6.2014 in Petition No. 101/TT/2013 and considered now for truing-up is as under:-

Approved	Capital cost as on COD	(₹ in lakh)	
		Net additional capital expenditure during 2013-14	Capital cost as on 31.3.2014
vide order dated 11.6.2014	12513.60	1407.97	13921.57
Allowed in the instant petition	12575.85	1066.46	13642.31

Cost over-run and Time over-run

12. The total estimated completion cost as on 31.3.2016 is within the approved cost. Hence, there is no cost over-run in the case of instant transmission asset.

13. The project was scheduled to be commissioned within 24 months from the date of IA i.e. 25.10.2010. Accordingly, the scheduled commissioning works out to 24.10.2012 i.e. 1.11.2012. The instant asset was actually commissioned on 1.9.2013 after a delay of ten months. However, time over-run of ten months has already been condoned vide order dated 11.6.2014 in Petition No. 101/TT/2013.

Treatment of IDC & IEDC

14. The petitioner vide affidavit dated 18.10.2016 has submitted the information related to IDC and has indicated that the total IDC claimed has been discharged upto COD. However, IDC on cash basis has been worked out based on the loan details in



Form-13 and the working sheet of IDC submitted by the petitioner vide affidavit dated 18.10.2016. Thus, based on the SBI loan (21.3.2012) at the rate of interest as 9.95%, IDC on cash basis amounting to ₹593.11 lakh has been worked out, against the claim of ₹611.69 lakh by the petitioner, and is being allowed to be capitalised in the truing-up calculations.

15. The petitioner has submitted “RCE abstract cost estimate” which indicates the limit of IEDC as 5.00% of the estimated hard cost. Therefore, in the instant petition too, IEDC limit of 5.00% on Hard Cost is considered. The IEDC of ₹558.02 lakh claimed by the petitioner on cash basis is within the allowable limit of 5.00% of Hard cost of the instant asset as on COD and accordingly it is allowed.

Capital Cost as on COD

16. Thus, the capital cost as on COD after allowing IDC and IEDC on cash basis is as under:-

(₹ in lakh)					
Capital cost claimed as on COD	Less: Claimed		Add: Allowable		Capital cost as on COD after allowable IDC & IEDC
	IDC	IEDC	IDC	IEDC	
12666.60	611.69	558.02	593.11	558.02	12648.02

Initial Spares

17. The petitioner has claimed initial spares of ₹76.18 lakh and ₹182.62 lakh pertaining to transmission line and sub-station respectively, upto cut-off date. The petitioner vide affidavit dated 18.10.2016 has submitted year wise payment made for the initial spares, which is as follows:-



(₹ in lakh)

Total initial spares claimed		Initial spares discharged as on COD		Estimated initial spares to be discharged in 2015-16	
T/L	S/S	T/L	S/S	T/L	S/S
76.18	182.52	68.56	164.27	7.62	18.25

18. Accordingly, the allowable initial spares have been worked out after considering capital cost as on COD and additional capital expenditure during 2013-14 for tariff period 2009-14. The initial spares to be discharged during 2015-16 shall be considered in the next tariff period of 2014-19. Thus, details of initial spares allowed is as under:-

(₹ in lakh)

Particulars	Claimed Capital Cost as on 31.3.2014	Initial spares claimed as on COD	Capital Cost after considering the allowable IDC & IEDC, as on 31.3.2014	Initial spares claimed as on COD on Pro-rata basis	Ceiling Limits as per Tariff the 2009 Tariff Regulations	Worked out/ Allowable Initial Spares	Excess Initial Spares
Substation (Inclusive of Land, Building & PLCC)	3752.75	164.27	3748.50	164.08	2.50%	91.91	72.18
Transmission Line	9980.31	68.56	9965.98	68.46	0.75%	74.79	-

19. Therefore, the claim of excess initial spares has been reduced from the capital cost as on COD considered after allowing IDC and IEDC as on cash basis. The details of the capital cost considered as on COD and as on 31.3.2014 for the purpose of the determination of transmission tariff is as under:-

(₹ in lakh)

Capital Cost as on COD after considering IDC & IEDC on cash basis	Less: Excess Initial Spares as on COD	Capital Cost as on COD after considering IDC & IEDC on cash basis and deducting Excess Initial Spares	Additional Capitalization during 2013-14	Capital Cost as on 31.3.2014
12648.02	72.18	12575.85	1066.46	13642.31



Additional Capitalisation

20. The additional capitalisation for 2013-14 is as considered at para-19 above.

Debt: Equity Ratio

21. Clause (1) of Regulation 12 of the 2009 Tariff Regulations provides that:-

“12. Debt-Equity Ratio. (1) For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff.”

22. The petitioner has claimed trued up Annual Fixed Charge based on debt: equity ratio of 70: 30 as admitted vide order dated 11.6.2014 in Petition No. 101/TT/2013. The admitted debt: equity ratio of 70: 30 as admitted vide order dated 11.6.2014 in Petition No. 101/TT/2013 has been considered for the purpose of truing up of the approved tariff for tariff period 2009-14. Debt: equity ratio of 70:30 in respect of the additional capitalisation has been considered in line with the 2009 Tariff Regulations.

23. The details of the debt: equity considered for the purpose of tariff for 2009-14 tariff period is as below:-

(₹ in lakh)

Particulars	Cost as on COD		Cost as on 31.3.2014	
	Amount	%	Amount	%
Debt	8803.09	70.00	9549.61	70.00
Equity	3772.75	30.00	4092.69	30.00
Total	12575.85	100.00	13642.31	100.00

Return on Equity (“RoE”)

24. Clause (3), (4) and (5) of the Regulation 15 of the 2009 Tariff Regulations provide that:-



“(3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be.

(4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

Where “t” is the applicable tax rate in accordance with clause (3) of this regulation.

(5) The generating company or the transmission licensee, as the case may be, shall recover the shortfall or refund the excess Annual Fixed Charge on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission:

Provided further that Annual Fixed Charge with respect to the tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations.”

25. The petitioner has submitted that MAT rate of 11.330% applicable for 2008-09 and the same was considered in the order dated 11.6.2014. However, for truing up purpose, the computation of RoE for the tariff period 2009-14 has been done on the basis of actual MAT rate applicable for 2013-14. The petitioner has submitted the actual MAT rate for 2013-14 as per the Finance Act for the purpose of grossing up of RoE as under:-

Particulars	MAT Rate	Grossed up RoE (Base rate/(1-t))
2013-14	20.961 %	19.610%

26. Accordingly, the RoE as trued up is as per details as under:-

Particulars	(₹ in lakh)
	2013-14 (pro-rata)
Approved vide order dated 11.6.2014	404.35
Allowed after trued up	449.87



27. The return on equity allowed in the instant order is higher than the return on equity allowed vide order dated 11.6.2014 due to increase in the applicable MAT rate for the purpose of grossing up of base rate of return on equity.

Interest on Loan (“IOL”)

28. Regulation 16 of the 2009 Tariff Regulations provides that:-

“16. (1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.

(3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year:

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed,.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered: Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

(7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.

(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations,



1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute:

Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan.”

29. In these calculations, interest on loan has been worked out as hereinafter:-
- (a) Gross amount of loan, repayment of instalments & rate of interest and weighted average rate of interest on actual average loan have been considered as per the petition;
 - (b) The repayment for the tariff period 2009-14 has been considered to be equal to the depreciation allowed for that period; and
 - (c) Weighted average rate of interest on actual average loan worked out as per (a) above is applied on the notional average loan during the year to arrive at the interest on loan.
30. The petitioner, vide affidavit dated 18.10.2016 has submitted the weighted average rate of interest for SBI loan (21.3.2012) for the period 2009-14 as 10.18% and the same rate has been used for working out the weighted average rate of interest for loan portfolio.
31. We have considered the submissions of the petitioner and accordingly calculated the IOL based on actual interest rate submitted by the petitioner, in accordance with Regulation 16 of the 2009 Tariff Regulations. The details of weighted average rate of interest are attached at Annexure-1 to this order and the IOL has been worked out and allowed as follows:-



Particulars	(₹ in lakh)
	2013-14 (pro-rata)
Approved vide order dated 11.6.2014	471.64
Allowed after trued up	487.15

32. The IOL allowed herein is marginally higher than IOL allowed vide order dated 11.6.2014 due to increase in actual weighted average interest rate.

Depreciation

33. Clause (4) of Regulation 17 of the 2009 Tariff Regulations provide as follows:-

“17. **Depreciation** (1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.

(2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset. Provided that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site;

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciable value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff.

(3) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III to these regulations for the assets of the generating station and transmission system:

Provided that, the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets.

(5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2009 from the gross depreciable value of the assets.

(6) Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.”



34. The Commission, in its order dated 11.6.2014, has worked out the depreciation in accordance with Regulation 17 of the 2009 Tariff Regulations. The depreciation for the tariff period 2009-14 has been trued-up in accordance with Regulation 17 of the 2009 Tariff Regulations based on admitted capital expenditure and additional capitalisation as under:-

Particulars	(₹ in lakh)
	2013-14 (pro-rata)
Approved vide order dated 11.6.2014	398.26
Allowed after trued up	391.20

35. The depreciation allowed in case of instant asset has decreased compared to the depreciation allowed vide order dated 11.6.2014, on account of lower depreciation rate worked out for truing-up of 2009-14 period and lower average gross block.

Operation & Maintenance Expenses (“O&M Expenses”)

36. The O&M Expenses claimed by the petitioner for 2013-14 were ₹224.62 lakh. However, amount of ₹224.205 lakh was approved vide order dated 11.6.2014 in Petition No. 101/TT/2013. Accordingly, the O&M Expenses allowed and trued up are the same as under:-

Particulars	(₹ in lakh)
	2013-14 (pro-rata)
Approved vide order dated 11.6.2014	224.205
Allowed after trued up	224.205

Interest on working capital (“IWC”)

37. Sub-clause (c) of clause (1) of Regulation 18 of the 2009 Tariff Regulations provides the components of the working capital for the transmission system and



clause (3) of Regulation 18 of the 2009 Tariff Regulations provides for the rate of interest of working capital.

38. The rate of interest on working capital of 13.20% applicable for 2013-14 was approved in order dated 11.6.2014 in Petition No. 101/TT/2013. In accordance with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2011, rate of interest on working capital shall be on normative basis and shall be equal to SBI Base Rate as applicable as on 1.4.2013 plus 350 Bps. State Bank of India Base Rate on 1.4.2013 was 9.70%. Therefore, interest rate of 13.20% (9.70% Plus 350 Bps) has been considered to work out the interest on working capital in the instant petition.

39. The IWC trued up is as under:-

(₹ in lakh)	
Particulars	2013-14 (pro-rata)
Maintenance Spares	57.65
O & M Expenses	32.03
Receivables	455.54
Total	545.22
Rate of Interest	13.20%
Interest	41.98

40. The summary of IWC allowed and trued up are as shown in the table below:-

(₹ in lakh)	
Particulars	2013-14 (pro-rata)
Approved vide order dated 11.6.2014	40.77
Allowed after true up	41.98

41. The IWC has increased on account of increase in 2 months' receivables.



Annual Fixed Charges for 2009-14 Tariff Period

42. The detailed computation of the various components of the trued up annual fixed charges for the transmission assets for the tariff period 2009-14 is as under:-

Particulars	(₹ in lakh)
	2013-14 (pro-rata)
Gross Block	
Opening Gross Block	12575.85
Additional Capitalisation	1066.46
Closing Gross Block	13642.31
Average Gross Block	13109.08
Depreciation	
Rate of Depreciation	5.1158%
Depreciable Value	11483.02
Remaining Depreciable Value	11483.02
Depreciation	391.20
Interest on Loan	
Gross Normative Loan	8803.09
Cumulative Repayment upto Previous Year	-
Net Loan-Opening	8803.09
Addition due to Additional Capitalisation	746.52
Repayment during the year	391.20
Net Loan-Closing	9158.41
Average Loan	8980.75
Weighted Average Rate of Interest on Loan	9.2990%
Interest	487.15
Return on Equity	
Opening Equity	3772.75
Addition due to Additional Capitalisation	319.94
Closing Equity	4092.69
Average Equity	3932.72
Return on Equity (Base Rate)	15.50%
Tax rate for the year (MAT)	20.96%
Rate of Return on Equity (Pre Tax)	19.610%
Return on Equity (Pre Tax)	449.87
Interest on Working Capital	
Maintenance Spares	57.65
O & M expenses	32.03
Receivables	455.54
Total	545.22
Rate of Interest	13.20%
Interest	41.98
Annual Transmission Charges	
Depreciation	391.20



Interest on Loan	487.15
Return on Equity	449.87
Interest on Working Capital	41.98
O & M Expenses	224.20
Total	1594.41

Determination of Annual Transmission Charges for 2014-19

43. The true-up tariff for the instant transmission system up to 2009-14 tariff period has been granted based on the actual COD of all elements and the project scope as a whole is covered in the instant asset.

44. The petitioner has claimed the transmission charges as under:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	725.70	763.96	767.92	767.92	767.92
Interest on Loan	862.12	847.52	786.75	714.28	641.91
Return on Equity	841.83	890.95	900.77	900.77	900.77
Interest on Working Capital	75.46	77.79	77.38	76.40	75.45
O&M Expenses	353.66	365.43	377.55	390.09	403.01
Total	2858.77	2945.65	2910.37	2849.46	2789.06

45. The details submitted by the petitioner in support of its claim for interest on working capital are given hereunder:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	53.05	54.81	56.63	58.51	60.45
O & M Expenses	29.47	30.45	31.46	32.51	33.58
Receivables	476.46	490.94	485.06	474.91	464.84
Total	558.98	576.20	573.15	565.93	558.87
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	75.46	77.79	77.38	76.40	75.45

Capital Cost

46. Clause (1) and (3) of Regulation 9 of the 2014 Tariff Regulations provides as follows:-



“(1) The Capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of determination of tariff for existing and new projects.”

(2) -----

(3) The Capital cost of an existing project shall include the following:

(a) the capital cost admitted by the Commission prior to 1.4.2014 duly trued up by excluding liability, if any, as on 1.4.2014;

(b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and

(c) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15.”

47. The element wise capital cost (Land, Building, Transmission line, Sub-station and PLCC) as admitted as on 31.3.2014 for instant asset has been considered as capital cost as on 1.4.2014. Thus, ₹13642.31 lakh has been considered as the admitted capital cost of the instant asset as on 1.4.2014 as per details as under:-

(₹ in lakh)	
Particulars	Capital cost as on 31.3.2014 as determined in true up of 2009-14
Freehold Land	489.39
Leasehold Land	-
Building & Other Civil Works	183.25
Transmission Line	9965.98
Sub-Station Equipments	2954.46
PLCC	49.24
Total	13642.31

Additional Capital Expenditure

48. The petitioner has projected additional capital expenditure during the tariff period 2014-19, vide Auditors' Certificate dated 8.12.2014. The details of add-cap claimed are as under:-

(₹ in lakh)				
Approved cost	Cost as on 31.3.2014	Projected additional capital expenditure		Estimated completion cost
		2014-15	2015-16	
16031.91	13642.31	1335.71	334.03	15312.05



Cost over-run

49. The total estimated completion cost as on 31.3.2016 i.e. cut-off date is within the approved cost. Hence, there is no cost over-run in the case of instant transmission asset.

Initial Spares

50. The petitioner has indicated the year wise payment made against the initial spares for the instant asset vide affidavit dated 18.10.2016. The total estimated completion cost up to cut-off date has been considered, while working out the initial spares for period 2014-19 and the ceiling limit has been considered as per the 2009 Tariff Regulations, as the instant asset was commissioned in tariff period 2009-14. Therefore, the allowable initial spares for period 2014-19 period, as per the claim and projected additional capitalization is as under:-

Particulars	Claimed up to Cut-off date i.e. 31.3.2016		Capital Cost after considering the allowable IDC & IEDC, up to Cut-off date	Initial spares deemed to be claimed up to Cut-off date on Pro-rata basis	Ceiling Limits as per the 2009 Tariff Regulations	Initial Spares		Remaining Entitled Initial Spares	In 2015-16	
	Capital Cost	Total Initial spares				worked out up to 31.3.2016	already allowed up to 31.3.2014		Estimated Initial Spares claimed	Excess Initial Spares
Sub-station (Inclusive of Land, Building & PLCC)	4793.48	182.52	4717.06	179.61	2.50%	116.34	91.91	24.44	18.25	0.00
Transmission Line	10609.33	76.18	10592.05	76.06	0.75%	79.47	74.79	4.67	7.62	2.95

51. The allowable initial spares have been calculated up to cut-off date on pro-rata basis amounting to ₹79.47 lakh and ₹116.34 lakh, for transmission line and sub-station respectively. However, initial spares amounting to ₹74.79 lakh and ₹91.91 lakh, up to 31.03.2014, for transmission line and sub-station respectively have already been allowed during 2009-14 tariff period. Thus, the remaining amount of



₹4.67 lakh and ₹24.44 lakh, up to cut-off date, in case of entitled initial spares, for transmission line and sub-station respectively shall be allowed to be capitalised only if it is within the maximum allowable initial spares for the instant asset. In the instant petition, ₹2.95 lakh of initial spares (in case of transmission line) are in excess, in the additional capital expenditure for 2015-16. However, no add-cap has been indicated during 2015-16, as per the Auditors' Certificate dated 8.12.2014, under the head of transmission line. Therefore, this excess initial spares of transmission line has been reduced from the add-cap for 2014-15 in our calculation. Therefore, the allowed or dis-allowed initial spares would be reviewed at the time of truing-up on submission of audited year-wise discharge details for initial spares for 2014-19. The petitioner is directed to submit the audited capital cost, for the instant asset, at the time of truing-up.

Capital Cost upto Cut-Off Date

52. In view of above, after determining allowable initial spares during tariff period 2014-19, details of allowable add-cap and completion cost upto cut-off date are as under:-

(₹ in lakh)					
Admitted Capital Cost as on 1.4.2014	Add-cap during 2014-15 (Claimed)	Less: Excess Initial Spares	Add-cap during 2014-15 (Allowed)	Add-cap during 2015-16 claimed and allowed	Total Completion Cost up to Cut-off date
13642.31	1335.71	2.95	1332.77	334.03	15309.11

Additional Capitalisation

53. The allowable add-cap for 2014-19 tariff period is as considered at para-52 above, which is subject to truing-up.



Debt: Equity Ratio

54. Clause 3 of Regulation 19 of the 2014 Tariff Regulations specifies as follows:-

“(3) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2014, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2014 shall be considered.”

55. The debt: equity ratio of 70: 30 was admitted after true-up for the tariff period ending 31.3.2014 for instant asset. The details of the debt: equity as on 1.4.2014 and as on 31.3.2019 considered for the purpose of tariff for the 2014-19 tariff period are as under:-

(₹ in lakh)

Particulars	As on 1.4.2014		As on 31.3.2019	
	Amount	%	Amount	%
Debt	9549.61	70.00	10716.38	70.00
Equity	4092.69	30.00	4592.73	30.00
Total	13642.31	100.00	15309.11	100.00

Interest on Loan (“IOL”)

56. Regulation 26 of the 2014 Tariff Regulations with regard to Interest on Loan specifies as under:-

“(1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalisation of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of decapitalisation of such asset.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.



5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.”

57. The IOL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. In these calculations, interest on loan has been worked out as hereinafter:-

(a) Gross amount of loan, repayment of instalments & rate of interest and weighted average rate of interest on actual average loan have been considered as per the petition;

(b) The repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that period; and

(c) Weighted average rate of interest on actual average loan worked out as per (a) above is applied on the notional average loan during the year to arrive at the interest on loan.

58. The petitioner, vide affidavit dated 18.10.2016 and in Form-9C has submitted the weighted average rate of interest for SBI loan (21.3.2012) for the period 2014-19 as 10.25% and the same rate has been used for working out the weighted average rate of interest for loan portfolio. The rate of interest is subject to truing-up on submission of actual rate of interest at the time of truing-up.



59. The details of weighted average rate of interest are placed at Annexure-2 and the IOL has been worked out and allowed as below:-

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Gross loan opening	9549.61	10482.56	10716.38	10716.38	10716.38
Cumulative Repayment upto previous year	391.20	1116.87	1880.72	2648.52	3416.33
Net Loan-Opening	9158.41	9365.69	8835.66	8067.86	7300.05
Additions during the year	932.94	233.82	-	-	-
Repayment during the year	725.67	763.85	767.80	767.80	767.80
Net Loan-Closing	9365.69	8835.66	8067.86	7300.05	6532.25
Average Loan	9262.05	9100.67	8451.76	7683.95	6916.15
Weighted Rate of Interest	9.3075%	9.3112%	9.3072%	9.2942%	9.2797%
Interest	862.07	847.38	786.62	714.16	641.80

Return on Equity (“ROE”)

60. Clause (1) and (2) of Regulation 24 and Clause (1) and (2) of Regulation 25 of the 2014 Tariff Regulations specify as follows:-

“ **24. Return on Equity:** (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:

Provided that:

(i) in case of projects commissioned on or after 1st April, 2014, an additional return of **0.50 %** shall be allowed, if such projects are completed within the timeline specified in **Appendix-I**:

(ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:

(iii) additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:

(iv) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO)/ Free Governor Mode Operation



(FGMO), data telemetry, communication system up to load dispatch centre or protection system:

(v) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:

(i) additional RoE shall not be admissible for transmission line having length of less than 50 kilometers.”

“25. Tax on Return on Equity:

(1) The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax income on other income stream (i.e., income of non generation or non transmission business, as the case may be) shall not be considered for the calculation of “effective tax rate”.

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

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

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

61. The petitioner has computed ROE at the rate of 19.610% after grossing up the ROE with MAT rate as per the above Regulations. The petitioner has submitted that the grossed up ROE is subject to truing up based on the actual tax paid along with any additional tax or interest, duly adjusted for any refund of tax including the interest received from IT authorities, pertaining to the tariff period 2014-19 on actual gross income of any financial year. Any under-recovery or over-recovery of grossed up ROE after truing up shall be recovered or refunded to the beneficiaries on year to year basis.



62. The petitioner has further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of the tax including interest received from IT authorities shall be recoverable/adjustable after completion of income tax assessment of the financial year.

63. We have considered the submissions made by the petitioner. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity for tariff period 2014-19, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations. Accordingly, the ROE determined and allowed is as under:-

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	4092.69	4492.52	4592.73	4592.73	4592.73
Addition due to Additional Capitalisation	399.83	100.21	-	-	-
Closing Equity	4492.52	4592.73	4592.73	4592.73	4592.73
Average Equity	4292.61	4542.63	4592.73	4592.73	4592.73
Return on Equity (Base Rate) (%)	15.50%	15.50%	15.50%	15.50%	15.50%
MAT rate for 2013-14 (%)	20.9605%	20.9605%	20.9605%	20.9605%	20.9605%
Rate of Return on Equity (Pre Tax) (%)	19.610%	19.610%	19.610%	19.610%	19.610%
Return on Equity (Pre Tax)	841.78	890.81	900.63	900.63	900.63



Depreciation

64. Regulation 27 of the 2014 Tariff Regulations with regard to depreciation specifies as follows:-

"27. Depreciation:

(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units or elements thereof.

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

Provided that in case of hydro generating station, the salvage value shall be as provided in the agreement signed by the developers with the State Government for development of the Plant:

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

Provided also that any depreciation disallowed on account of lower availability of the generating station or generating unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life and the extended life.

(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-II** to these regulations for the assets of the generating station and transmission system:



Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2014 from the gross depreciable value of the assets.”

65. We have considered the submission made by the petitioner with reference to depreciation. Depreciation is allowed as provided under Regulation 27 of the 2014 Tariff Regulations. The details of the depreciation allowed are given hereunder:-

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross block	13642.31	14975.08	15309.11	15309.11	15309.11
Additions during the year due to projected additional capitalization	1332.77	334.03	-	-	-
Closing Gross block	14975.08	15309.11	15309.11	15309.11	15309.11
Average gross block	14308.69	15142.09	15309.11	15309.11	15309.11
Rate of Depreciation (%)	5.0715%	5.0445%	5.0153%	5.0153%	5.0153%
Depreciable Value	12430.73	13124.64	13225.45	13225.45	13225.45
Remaining Depreciable Value	12039.52	12007.77	11344.74	10576.93	9809.13
Depreciation	725.67	763.85	767.80	767.80	767.80

Operation & Maintenance Expenses (“O&M Expenses”)

66. Regulation 29 (4) (a) of the 2014 Tariff Regulations specifies the norms for operation and maintenance expenses for the transmission system based on the type of sub-station and the transmission line. Norms specified in respect of the elements covered in the instant petition are as under:-

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
D/C twin and triple conductor (₹ lakh/km)	0.707	0.731	0.755	0.780	0.806
S/C twin conductor (₹ lakh/km)	0.404	0.418	0.432	0.446	0.461
400 kV bay (₹ lakh/km)	60.30	62.30	64.37	66.51	68.71



67. The petitioner has computed normative O&M Expenses as per sub-clause (a) of clause (3) of Regulation 29 of the 2014 Tariff Regulations. Accordingly, the petitioner's entitlement to O&M Expenses has been worked out for instant asset for the purpose of tariff. The details are as given hereunder:-

Particulars	COD: 1.9.2013				
	2014-15	2015-16	2016-17	2017-18	2018-19
71.51 km 400 kV D/C twin conductor Baharampur-Bheramara	50.55	52.27	53.99	55.77	57.63
2.37 km S/C twin conductor LILO of 400 kV Farakka-Jeerat	0.96	0.99	1.02	1.06	1.10
5 nos. 400 kV bays	301.50	311.50	321.85	332.55	343.55
Total	353.01	364.76	376.86	389.38	402.28

68. The petitioner has submitted that O&M Expenses for the tariff period 2014-19 have been arrived on the basis of normalized actual O&M Expenses during the period 2008-13. The petitioner has further submitted that the wage revision of the employees of the petitioner Company is due during 2014-19 and actual impact of wage hike, which will be effective at a future date, has not been factored in fixation of the normative O&M rate specified for the tariff period 2014-19. The petitioner has prayed to be allowed to approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase.

69. The O&M Expenses have been worked out as per the norms of O&M Expenses specified in the 2014 Tariff Regulations. As regards impact of wage revision, we would like to clarify that any application filed by the petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations.



Interest on Working Capital (“IWC”)

70. Clause 1 (c) and 3 of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specify as follows:-

“28. Interest on Working Capital: (1) The working capital shall cover:

(a)-----

(c) Hydro generating station including pumped storage hydro electric generating station and transmission system including communication system:

(i) Receivables equivalent to two months of fixed cost;

(ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and

(iii) Operation and maintenance expenses for one month”

“(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later”

“(5) ‘Bank Rate’ means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;”

71. The interest on working capital is worked out in accordance with Regulation 28 of the 2014 Tariff Regulations. The rate of interest on working capital considered is 13.50% (SBI Base Rate of 10% as on 1.4.2014 plus 350 basis points). The interest on working capital determined is as below:-

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	52.95	54.71	56.53	58.41	60.34
O & M expenses	29.42	30.40	31.41	32.45	33.52
Receivables	476.32	490.76	484.87	474.72	464.65
Total	558.69	575.87	572.81	565.58	558.52
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	75.42	77.74	77.33	76.35	75.40



Annual Transmission Charges

72. The Annual Transmission Charges allowed for the instant transmission asset are as under:-

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	725.67	763.85	767.80	767.80	767.80
Interest on Loan	862.07	847.38	786.62	714.16	641.80
Return on Equity	841.78	890.81	900.63	900.63	900.63
Interest on Working Capital	75.42	77.74	77.33	76.35	75.40
O&M Expenses	353.01	364.76	376.86	389.38	402.28
Total	2857.95	2944.54	2909.25	2848.33	2787.92

73. The petitioner has submitted that the claim for transmission charges and other charges is exclusive of incentive, late payment surcharge, FERV, any statutory taxes, levies, duties, cess filing fees, license fee RLDC fees and charges or any other kind of impositions etc. The same if imposed shall be borne and additionally paid by the respondents. We have considered the submissions of the petitioner. The petitioner is eligible to make the claims as provided in the prevailing regulations.

Filing Fee and Publication Expenses

74. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 52 of the 2014 Tariff Regulations. The petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with clause (1) of Regulation 52 of the 2014 Tariff Regulations.



Licence Fee and RLDC Fees and Charges

75. The petitioner has requested to allow the petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. The petitioner shall be entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Clause (2)(b) and (2)(a), respectively, of Regulation 52 of the 2014 Tariff Regulations.

Service Tax

76. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if notification regarding granting of exemption to transmission service is withdrawn at a later date and it is subjected to such service tax in future the beneficiaries shall have to share the service tax paid by the petitioner. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

Deferred Tax Liability

77. The petitioner has sought recovery of deferred tax liability accrued before 1.4.2014 from the beneficiaries or long term consumers/DICs as and when materialized under Regulation 49 of the 2014 Tariff Regulations. The instant asset was commissioned on 1.9.2013. As per Regulation 49 of the 2014 Tariff Regulations, no claim on account of deferred tax liability arising during 1.4.2009 and 31.3.2014 shall be made from the beneficiaries or long term transmission customers/DICs. Accordingly, the petitioners' prayer for recovery of deferred tax liability arising from 1.4.2009 to 31.3.2014 is not allowed.



Sharing of Transmission Charges

78. As provided under clause 3.0 of the Bulk Power Transmission Agreement (BPTA), dated 26.7.2010, signed between Bangladesh Power Development Board (BPDB) and the petitioner, the transmission charges allowed in this order shall be paid by BPDB.

79. This order disposes of Petition No. 558/TT/2014.

Sd/-	Sd/-	Sd/-	Sd/-
(M.K. Iyer) Member	(A.S. Bakshi) Member	(A.K. Singhal) Member	(Gireesh B. Pradhan) Chairperson



Annexure-1

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN		
	Details of Loan	2013-14
1	Bond XLII	
	Gross loan opening	2132.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	2132.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	2132.00
	Average Loan	2132.00
	Rate of Interest	8.80%
	Interest	187.62
	Rep Schedule	Final Payment on 13.03.2023
2	Bond XXXV	
	Gross loan opening	106.10
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	106.10
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	106.10
	Average Loan	106.10
	Rate of Interest	9.64%
	Interest	10.23
	Rep Schedule	12 annual instalments from 31.05.2015.
3	Bond XXXVII	
	Gross loan opening	2106.93
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	2106.93
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	2106.93
	Average Loan	2106.93
	Rate of Interest	9.25%
	Interest	194.89
	Rep Schedule	12 annual instalments from 26.12.2015
4	Bond XLII (Add-cap 2013-14)	
	Gross loan opening	0.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	29.00
	Repayment during the year	0.00
	Net Loan-Closing	29.00
	Average Loan	14.50
	Rate of Interest	8.80%
	Interest	1.28
	Rep Schedule	Final Payment on 13.03.2023



5	Bond XLIII (Add-cap 2013-14)	
	Gross loan opening	0.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	214.00
	Repayment during the year	0.00
	Net Loan-Closing	214.00
	Average Loan	107.00
	Rate of Interest	7.93%
	Interest	8.49
	Rep Schedule	12 annual instalments from 20.5.2017
6	Bond XXXVI	
	Gross loan opening	362.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	362.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	362.00
	Average Loan	362.00
	Rate of Interest	9.35%
	Interest	33.85
	Rep Schedule	15 annual instalments from 29.08.2016
7	Bond XXXIV	
	Gross loan opening	793.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	793.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	793.00
	Average Loan	793.00
	Rate of Interest	8.84%
	Interest	70.10
	Rep Schedule	12 annual instalments from 21.10.2014
8	SBI (21.03.2012)	
	Gross loan opening	1883.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1883.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1883.00
	Average Loan	1883.00
	Rate of Interest	10.18%
	Interest	191.69
	Rep Schedule	22 half yearly instalment from 31.08.2016
9	Bond XLI	
	Gross loan opening	264.00
	Cumulative Repayment upto DOCO/previous year	0.00



	Net Loan-Opening	264.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	264.00
	Average Loan	264.00
	Rate of Interest	8.85%
	Interest	23.36
	Rep Schedule	12 annual instalments from 19.10.2016
10	Bond XLV (Add-cap 2013-14)	
	Gross loan opening	0.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	503.00
	Repayment during the year	0.00
	Net Loan-Closing	503.00
	Average Loan	251.50
	Rate of Interest	9.65%
	Interest	24.27
	Rep Schedule	12 annual instalments from 28.02.2018
11	Bond XL	
	Gross loan opening	1155.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1155.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1155.00
	Average Loan	1155.00
	Rate of Interest	9.30%
	Interest	107.42
	Rep Schedule	12 annual instalments from 28.06.2016
	Total Loan	
	Gross loan opening	8802.03
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	8802.03
	Additions during the year	746.00
	Repayment during the year	0.00
	Net Loan-Closing	9548.03
	Average Loan	9175.03
	Rate of Interest	9.2990%
	Interest	853.18



Annexure-2

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN						
	Details of Loan	2014-15	2015-16	2016-17	2017-18	2018-19
1	Bond XLII					
	Gross loan opening	2132.00	2132.00	2132.00	2132.00	2132.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	2132.00	2132.00	2132.00	2132.00	2132.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	2132.00	2132.00	2132.00	2132.00	2132.00
	Average Loan	2132.00	2132.00	2132.00	2132.00	2132.00
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	187.62	187.62	187.62	187.62	187.62
	Rep Schedule	Final Payment on 13.03.2023				
2	Bond XXXV					
	Gross loan opening	106.10	106.10	106.10	106.10	106.10
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	8.84	17.68	26.53
	Net Loan-Opening	106.10	106.10	97.26	88.42	79.58
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	8.84	8.84	8.84	8.84
	Net Loan-Closing	106.10	97.26	88.42	79.58	70.73
	Average Loan	106.10	101.68	92.84	84.00	75.15
	Rate of Interest	9.64%	9.64%	9.64%	9.64%	9.64%
	Interest	10.23	9.80	8.95	8.10	7.24
	Rep Schedule	12 annual instalments from 31.05.2015.				
3	Bond XXXVII					
	Gross loan opening	2106.93	2106.93	2106.93	2106.93	2106.93
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	175.58	351.16	526.73
	Net Loan-Opening	2106.93	2106.93	1931.35	1755.78	1580.20
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	175.58	175.58	175.58	175.58
	Net Loan-Closing	2106.93	1931.35	1755.78	1580.20	1404.62
	Average Loan	2106.93	2019.14	1843.56	1667.99	1492.41
	Rate of Interest	9.25%	9.25%	9.25%	9.25%	9.25%
	Interest	194.89	186.77	170.53	154.29	138.05
	Rep Schedule	12 annual instalments from 26.12.2015				
4	Bond XLII (Add-cap 2013-14)					
	Gross loan opening	29.00	29.00	29.00	29.00	29.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	29.00	29.00	29.00	29.00	29.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00



	Repayment during the year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Closing	29.00	29.00	29.00	29.00	29.00
	Average Loan	29.00	29.00	29.00	29.00	29.00
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	2.55	2.55	2.55	2.55	2.55
	Rep Schedule	Final Payment on 13.03.2023				
5	Bond XLIII (Add-cap 2013-14)					
	Gross loan opening	214.00	214.00	214.00	214.00	214.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	17.83
	Net Loan-Opening	214.00	214.00	214.00	214.00	196.17
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	17.83	17.83
	Net Loan-Closing	214.00	214.00	214.00	196.17	178.33
	Average Loan	214.00	214.00	214.00	205.08	187.25
	Rate of Interest	7.93%	7.93%	7.93%	7.93%	7.93%
	Interest	16.97	16.97	16.97	16.26	14.85
	Rep Schedule	12 annual instalments from 20.5.2017				
6	Bond XXXVI					
	Gross loan opening	362.00	362.00	362.00	362.00	362.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	24.13	48.27
	Net Loan-Opening	362.00	362.00	362.00	337.87	313.73
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	24.13	24.13	24.13
	Net Loan-Closing	362.00	362.00	337.87	313.73	289.60
	Average Loan	362.00	362.00	349.93	325.80	301.67
	Rate of Interest	9.35%	9.35%	9.35%	9.35%	9.35%
	Interest	33.85	33.85	32.72	30.46	28.21
	Rep Schedule	15 annual instalments from 29.08.2016				
7	Bond XXXIV					
	Gross loan opening	793.00	793.00	793.00	793.00	793.00
	Cumulative Repayment upto DOCO/previous year	0.00	66.08	132.17	198.25	264.33
	Net Loan-Opening	793.00	726.92	660.83	594.75	528.67
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	66.08	66.08	66.08	66.08	66.08
	Net Loan-Closing	726.92	660.83	594.75	528.67	462.58
	Average Loan	759.96	693.88	627.79	561.71	495.63
	Rate of Interest	8.84%	8.84%	8.84%	8.84%	8.84%
	Interest	67.18	61.34	55.50	49.66	43.81
	Rep Schedule	12 annual instalments from 21.10.2014				
8	SBI (21.03.2012)					
	Gross loan opening	1883.00	1883.00	1883.00	1883.00	1883.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	171.18	342.36



	Net Loan-Opening	1883.00	1883.00	1883.00	1711.82	1540.64
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	171.18	171.18	171.18
	Net Loan-Closing	1883.00	1883.00	1711.82	1540.64	1369.45
	Average Loan	1883.00	1883.00	1797.41	1626.23	1455.05
	Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
	Interest	193.01	193.01	184.23	166.69	149.14
	Rep Schedule	22 half yearly instalment from 31.08.2016				
9	Bond XLI					
	Gross loan opening	264.00	264.00	264.00	264.00	264.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	22.00	44.00
	Net Loan-Opening	264.00	264.00	264.00	242.00	220.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	22.00	22.00	22.00
	Net Loan-Closing	264.00	264.00	242.00	220.00	198.00
	Average Loan	264.00	264.00	253.00	231.00	209.00
	Rate of Interest	8.85%	8.85%	8.85%	8.85%	8.85%
	Interest	23.36	23.36	22.39	20.44	18.50
	Rep Schedule	12 annual instalments from 19.10.2016				
10	Bond XLV (Add-cap 2013-14)					
	Gross loan opening	503.00	503.00	503.00	503.00	503.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	41.92
	Net Loan-Opening	503.00	503.00	503.00	503.00	461.08
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	41.92	41.92
	Net Loan-Closing	503.00	503.00	503.00	461.08	419.17
	Average Loan	503.00	503.00	503.00	482.04	440.13
	Rate of Interest	9.65%	9.65%	9.65%	9.65%	9.65%
	Interest	48.54	48.54	48.54	46.52	42.47
	Rep Schedule	12 annual instalments from 28.02.2018				
11	Bond XL					
	Gross loan opening	1155.00	1155.00	1155.00	1155.00	1155.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	96.25	192.50
	Net Loan-Opening	1155.00	1155.00	1155.00	1058.75	962.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	96.25	96.25	96.25
	Net Loan-Closing	1155.00	1155.00	1058.75	962.50	866.25
	Average Loan	1155.00	1155.00	1106.88	1010.63	914.38
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	107.42	107.42	102.94	93.99	85.04
	Rep Schedule	12 annual instalments from 28.06.2016				



	Total Loan					
	Gross loan opening	9548.03	9548.03	9548.03	9548.03	9548.03
	Cumulative Repayment upto DOCO/previous year	0.00	66.08	316.59	880.65	1504.47
	Net Loan-Opening	9548.03	9481.95	9231.44	8667.38	8043.56
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	66.08	250.50	564.07	623.82	623.82
	Net Loan-Closing	9481.95	9231.44	8667.38	8043.56	7419.74
	Average Loan	9514.99	9356.70	8949.41	8355.47	7731.65
	Rate of Interest	9.31%	9.31%	9.31%	9.29%	9.28%
	Interest	885.61	871.22	832.94	776.57	717.48

