CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 515/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 : 31.03.2017

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 Muzaffarpur-Gorakhpur Transmission line in Eastern-Northern Inter-region associated with Tala Hydro Electric Project, East-North Inter-Connector and Northern Region Transmission System in Northern Region (COD: 1.9.2006), 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:

Powerlinks Transmission Ltd 10th Floor, DLF Tower A, District Centre, Jasola, New Delhi-110 025

.....Petitioner

Vs

- Power Grid Corporation of India Ltd 'Saudamini', Plot No-2, Sector-29, Gurgaon -122 001 (Haryana)
- Rajasthan Rajya Vidyut Prasaran Nigam Limited, Vidyut Bhawan, Vidyut Marg, Jaipur-302 005
- Ajmer Vidyut Vitran Nigam Limited,
 400 kV GSS Building (Ground Floor),
 Ajmer Road, Heerapura, Jaipur



- Jaipur Vidyut Vitran Nigam Limited,
 400 kV GSS Building (Ground Floor)
 Ajmer Road, Heerapura, Jaipur
- 5. Jodhpur Vidyut Vitran Nigam Limited, 400 kV GSS Building (Ground Floor), Ajmer Road, Heerapura, Jaipur
- 6. Punjab State Electricity Board, The Mall, Patiala-147 001
- 7. Haryana Power Purchase Centre, Shakti Bhawan, Sector-6, Il Floor, Panchkula (Haryana)-134 109
- Uttar Pradesh Power Corporation Limited, (Formerly Uttar Pradesh State Electricity Board), 10th Floor, Shakti Bhawan Extn-14, Ashok Marg, Lucknow-226 001
- Power Development Department, Government of Jammu and Kashmir, Mini Secretariat, Jammu
- Delhi Transco Limited,
 Shakti Sadan, Kotla Road (Near ITO),
 New Delhi-110 002
- Himachal Pradesh State Electricity Board,
 Vidyut Bhawan, Kumar House Complex Building II,
 Shimla-171 004 (HP)
- 12. Chandigarh Administration, Sector-9, Chandigarh
- 13. Uttarakhand Power Corporation Limited, Urja Bhawan, Kanwali Road, Dehradun
- Northern Central Railway, Allahabad
- BSES Yamuna Power Limited,
 BSES Bhawan, Building No.-20,
 Nehru Place, New Delhi
- BSES Rajdhani Power Limited,
 BSES Bhawan, Building No.-20,
 Nehru Place, New Delhi



- North Delhi Power Limited, Grid Substation Building, Hudson Line, Near Kingsway Camp, New Delhi-110 088
- New Delhi Municipal Council, Palika Kendra, Sansad Marg, New Delhi-110 002

.....Respondents

For Petitioner: Shri Amit Kapur, Advocate for PTL

Shri Janmau. M, Advocate for PTL Ms Nita Jha, Advocate for PTL

Shri Gajender Bhandari, Advocate for PTL

Shri Dilip Kumar, PTL

For Respondents: Shri R.B. Sharma, Advocate for BRPL

ORDER

The present petition has been filed by Powerlinks Transmission Limited ('the petitioner'), for truing up of capital expenditure and tariff for 400 kV D/C Muzaffarpur-Gorakhpur Transmission line (hereinafter referred as "transmission asset") in Eastern-Northern Inter-region associated with Tala Hydro Electric Project, East-North Inter-Connector and Northern Region Transmission System in Northern 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 affidavits dated 10.10.2016 and 20.10.2016.
- 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 on the respondents. U.P. Power Corporation Limited (UPPCL), Respondent No. 8 and BSES Rajdhani Power Limited (BRPL), Respondent No. 16 have filed replies vide affidavits dated 9.12.2014 and 21.3.2016 respectively. UPPCL and BRPL have submitted that the Transmission Majoration Factor should not be allowed for 2009-14 and 2014-19 tariff blocks. It has been also submitted that as there is no provision in the 2009 Tariff Regulations to allow additional O&M expenditure on account of rise of salaries during 2009-14 tariff period and as such, the same should not be allowed. UPPCL and BRPL have submitted that the claim of the petitioner for sales tax during 2009-14 period is in the nature of a penalty due to default in payment of Sales Tax and as the matter is subjudice, it should not be allowed. BRPL has submitted that additional capital expenditure on account of consultancy fee paid during 2009-14 should not be allowed as it is not admissible under the 2009 Tariff Regulations. UPPCL and BRPL have objected to the petitioner's claim for incentive on the basis of projected availability, cost of SAP under additional capitalisation during 2014-19, etc. The petitioner has submitted rejoinder to BRPL's reply vide affidavit dated 13.10.2016.
- 4. The hearing in the matter was held on 20.9.2016. Having heard the representatives of the petitioner, respondents 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 petitioner was granted license vide order dated 13.11.2003 to transmit electricity as a transmission licensee and for that purpose to construct, maintain and operate Inter-state transmission system associated with the Tala Hydro Electric Project (HEP) East-north Inter Connector and Northern Region Transmission System;
 - b. The COD of the instant asset was 1.9.2006. The Commission vide order dated 28.4.2008 in Petition No. 147/2007, had approved the capital cost of ₹38834.37 lakh as on COD and additional capitalisation of ₹1321.58 lakh for the period from COD to 31.3.2007 and the ATC for the period 2006-09;
 - c. Subsequently, vide order dated 29.7.2009 in Petition No.66/2009, additional capital expenditure for 2007-08 and 2008-09 were approved for the instant asset;
 - d. In order dated 18.8.2010 in Petition No.286/2009, the ATC for the control period 2009-14 was approved for the instant asset. The petitioner did not claim any additional capital expenditure for the 2009-14 period;
 - e. In order dated 6.5.2016 in Petition No.18/TT/2014, after reconciling the capital cost for 2006-09 tariff period, the trued-up ATC for the period 2009-13 and revised ATC for 2013-14 was approved for the instant asset;
 - f. The final tariff allowed vide order dated 6.5.2016 for 2013-14 is as under:-

(₹ in lakh)

Particulars	2013-14
Depreciation	2193.17
Interest on Loan	1328.72
Return on Equity	2463.27
Interest on Working Capital	140.01
O & M Expenses	305.24



Sub-Total	
Transmission Majoration Factor	643.04
Total	7073.44

- g. Final tariff determined vide order dated 6.5.2016 in Petition No. 18/TT/2014 was based on admitted capital cost of ₹41820.14 lakh as on 1.4.2009 and ₹41870.97 lakh, as on 31.3.2013 after consideration of additional capital expenditure of ₹50.83 lakh for 2010-11.
- h. 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.

Truing-up of Annual Fixed Charges for Period 2013-14

6. The truing up of tariff for 2013-14 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 as follows:-
 - "(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 not claimed any additional capital expenditure during 2013-14, therefore, capital cost of ₹41870.97 lakh has been considered as on 1.4.2013 to work out the trued-up tariff for 2013-14 as per details overleaf:-



(₹ in lakh)

Particulars	As on 1.4.2009	Additional capital expenditure allowed during 2010-11 (vide order dated 6.5.2016)	Admitted cost as on 1.4.2013
Freehold Land	68.57	-	68.57
Leasehold Land	ı	-	-
Building & Other Civil Works	721.63	-	721.63
Transmission Line	41029.94	50.83	41080.77
Sub-Station Equipments	-	-	-
PLCC	-	-	-
Total	41820.14	50.83	41870.97

Debt: Equity Ratio

- 9. 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:"

- 10. The petitioner has claimed trued up Annual Fixed Charge based on debt: equity ratio of 70: 30 as admitted vide order dated 6.5.2016 in Petition No. 18/TT/2014. The admitted debt: equity ratio of 70: 30 as admitted vide order dated 6.5.2016 in Petition No. 18/TT/2014 has been considered for the purpose of truing up of the approved tariff for 2013-14.
- 11. The details of the debt: equity considered for the purpose of tariff for 2013-14 in the tariff period 2009-14 is as below:-

(₹ in lakh)

Particulars	Cost as on 1.4.2013		Cost a 31.3.2	
	Amount %		Amount	%
Debt	29309.68	70.00	29309.68	70.00
Equity	12561.29	30.00	12561.29	30.00
Total	41870.97	100.00	41870.97	100.00



Return on Equity ("RoE")

- 12. 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:

Rate of pre-tax return on equity = 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."

13. The petitioner had submitted, applicable MAT rate of 20.961% and grossed up RoE of 19.610% for 2013-14 and the same was considered in the order dated 6.5.2016. As such, for truing up purpose, the computation of RoE for 2013-14 in the tariff period 2009-14 remains the same. Accordingly, the RoE as trued up is as under:-

(₹ in lakh)Particulars2013-14Approved vide order dated 6.5.20162463.27Allowed after trued up2463.27

Interest on Loan ("IOL")

14. 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."

- 15. In these calculations, interest on loan has been worked out as hereinafter:-
 - (a) The normative loan outstanding as on 1.4.2013 has been worked out by deducting the cumulative repayment as admitted vide order dated 6.5.2016

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from the gross normative loan. The rate of interest is taken as weighted average rate of interest calculated on the basis of actual average loan portfolio for 2013-14;

- (b) The repayment during 2013-14 has been considered to be equal to the depreciation allowed. Tariff for 2013-14 is worked out considering normative loan and normative repayments;
- (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.
- 16. The petitioner has considered actual repayment of loan for calculation of interest on loan instead of considering depreciation as repayment. However, as per the 2009 Tariff Regulations, repayment for 2013-14 shall be deemed to be equal to the depreciation allowed for that period and accordingly same has been considered for tariff calculations. Further, the rates of interest, as submitted by the petitioner in the petition have been considered to work out interest on loan.
- 17. 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. However, there is a minor difference in interest on loan allowed vide order dated 6.5.2016 in Petition No. 18/TT/2014 and worked out now as the repayment figure of IDFC loan, drawn for additional capital expenditure during 2010-11, was wrongly considered and therefore the same has been corrected now. The details of weighted average rate of interest



are given in Annexure-1 to this order and the IOL has been worked out and allowed as follows:-

(₹ in lakh)

Particulars	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 6.5.2016	1874.05	1665.81	1467.79	1328.72
Allowed after correction and truing-up	1874.08	1665.85	1467.83	1328.87

18. The IOL allowed herein is marginally higher than IOL allowed vide order dated 6.5.2016 due to increase in actual weighted average interest rate.

Depreciation

- 19. 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."



20. In order dated 6.5.2016, depreciation was worked out in accordance with Regulation 17 of the 2009 Tariff Regulations. The depreciation for 2013-14 has been worked out in accordance with Regulation 17 of the 2009 Tariff Regulations based on admitted capital expenditure as on 1.4.2013 and are same as under:-

	(₹ in lakh)
Particulars	2013-14
Approved vide order dated 6.5.2016	2193.17
Allowed after trued up	2193.17

Operation & Maintenance Expenses ("O&M Expenses")

21. The petitioner has claimed O&M Expenses of ₹305.24 lakh during 2013-14, which was approved vide order dated 6.5.2016 in Petition No. 18/TT/2014. Accordingly, the O&M Expenses allowed and trued up are same as under:-

	(₹ in lakh)
Particulars	2013-14
Approved vide order dated 6.5.2016	305.24
Allowed after trued up	305.24

- 22. The petitioner has submitted that salaries of the employees have been revised during 2010-11 and requested to allow the actual effect of salary revision as part of the tariff as observed by the Commission in order dated 30.4.2008 in Petition No. 148 of 2007.
- 23. BRPL has further submitted that the increase in employee cost on account of pay revision of the employees has already been covered by rationalizing the O&M Expenses by 50% increase. UPPCL and BRPL have submitted that the additional O&M Expenses on account of wage revision are not permissible. We have considered the submissions of the petitioner and the respondents. The norms for O & M Expenses for 2009-14 tariff period were arrived at on the basis of normalized



actual O & M Expenses during the period 2003-04 to 2007-08 and the Commission has in the 2009 Tariff Regulations, given effect to impact of pay revision by factoring 50% on account of pay revision of the employees of PSUs after extensive consultations with the stakeholders, as one time compensation for employee cost. We do not see any reason why the admissible amount is inadequate to meet the requirement of the employee cost. Accordingly, we have allowed O&M Expenses as per the existing norms in this order.

Interest on working capital ("IWC")

- 24. Sub-clause (c) of clause (1) of Regulation 18 of the 2009 Tariff Regulations provides for 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.
- 25. The rate of interest on working capital of 12.25% applicable as on 1.4.2009 for 2013-14 was approved in order dated 6.5.2016 in Petition No. 18/TT/2014. Therefore, applicable interest rate of 12.25% has been considered to work out the interest on working capital for 2013-14 in the instant petition. The IWC trued up is as under:-

 (₹ in lakh)

 Particulars
 2013-14

 Maintenance Spares
 45.79

 O & M Expenses
 25.44

 Receivables
 1071.76

 Total
 1142.98

 Rate of Interest
 12.25%

 Interest
 140.02

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



Particulars 2013-14

Approved vide order dated 11.6.2014 140.01

Allowed after true up 140.02

Transmission Majoration Factor (TMF)

- 27. The petitioner has submitted that TMF was allowed vide orders dated 1.7.2004 and 6.5.2016 in Petition No. 51 of 2004 and Petition No. 18/TT/2014 respectively and has claimed TMF for 2013-14 period.
- 28. UPPCL has submitted that 2004 Tariff Regulations and the 2009 Tariff Regulations are silent about TMF and accordingly it should not be allowed to the petitioner. UPPCL has also submitted that TMF was prescribed in 2001 when adequate provision was not made in the corresponding regulations in respect of insurance charges and O&M Expenses. UPPCL has further submitted that the rate of TMF at 10% is high compared to the margin of traders at 1% and the petitioner is getting ATC on the entire investment with adequate RoE alongwith O&M Expenses. As such the Commission has to maintain a balance between the need of private investment in the power sector and the consumer and allowing TMF to the petitioner would not be rational.
- 29. We have considered the submissions of the petitioner. TMF @ 10% mark up (pre-tax) on the Transmission Charges was approved as provided under Regulation 4.10A Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2001 vide orders dated 30.7.2009 in Petition No.65/2009, 17.3.2011 in Petition No.288/2009 and 16.5.2016 in Petition No. 19/TT/2014. As per the above said Regulation, TMF should be allowed for the entire life of the transmission project. Accordingly, TMF is allowed @ of 10% mark up (pre-tax) on the Transmission



Charges for 2013-14. The Commission in its order dated 6.5.2016 in Petition No. 18/TT/2014 has directed the staff to examine the impact of TMF and submit a report to the Commission. On the basis of the report, the Commission will take a view whether to continue with the TMF or not.

Incentive

- 30. The petitioner has claimed the 'Incentive' (pre-tax) based on the actual availability during 2013-14 on Annual Fixed Charges (including Majoration Charges).
- 31. Regulation 23 of the 2009 Tariff Regulations provides as under:-
 - "23. Computation and Payment of Transmission Charge for Inter-State Transmission System
 - (1) The fixed cost of the transmission system shall be computed on annual basis, in accordance with norms contained in these regulations, aggregated as appropriate, and recovered on monthly basis as transmission charge from the users, who shall share these charges in the manner specified in Regulation 33.
 - (2) The transmission charge (inclusive of incentive) payable for a calendar month for a transmission system or part thereof shall be xxxx xxxx
 - (3) The transmission charges shall be calculated separately for part of the transmission system having differing NATAF, and aggregated thereafter, according to their sharing by the beneficiaries.
 - (4) The transmission licensee shall raise the bill for the transmission charge (inclusive of incentive) for a month based on its estimate of TAFM. Adjustments, if any, shall be made on the basis of the TAFM to be certified by the Member-Secretary of the Regional Power Committee of the concerned region within 30 days from the last day of the relevant month."
- 32. Accordingly, the petitioner is allowed to calculate and bill incentive as provided under Regulation 23 of the 2009 Tariff Regulations.



APPROVED ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

33. The detailed computation of the various components of the trued up annual fixed charges for 2009-14 tariff period for the instant assets are as under:-

(₹ in lakh)

	0040 44	004444	0040 45	(* III lakii)
Particulars	2010-11	2011-12	2012-13	2013-14
Gross Block	41820.14	41870.97	41870.97	41870.97
Opening Gross Block	50.83	-		-
Additional Capitalisation	41870.97	41870.97		
Closing Gross Block	41845.55	41870.97	41870.97	41870.97
Average Gross Block	41820.14	41870.97	41870.97	41870.97
Depreciation			<u> </u>	
Rate of Depreciation	5.2379%	5.2379%	5.2379%	5.2379%
Depreciable Value	37599.28	37622.16	37622.16	37622.16
Remaining Depreciable Value	30028.72	27859.77	25666.60	23473.43
Depreciation	2191.83	2193.17	2193.17	2193.17
Interest on Loan				
Gross Normative Loan	29274.10	29309.68	29309.68	29309.68
Cumulative Repayment upto			 	
Previous Year	7570.57	9762.39	11955.56	14148.73
Net Loan-Opening	21703.53	19547.28	17354.12	15160.95
Addition due to Additional				
Capitalisation	35.58	_	_ 	_
Repayment during the year	2191.83	2193.17	2193.17	2193.17
Net Loan-Closing	19547.28	17354.12	15160.95	12967.78
Average Loan	20625.41	18450.70	16257.53	14064.37
Weighted Average Rate of Interest]	
on Loan	9.0863%	9.0286%	9.0286%	9.4485%
Interest	1874.08	1665.85	1467.83	1328.87
Return on Equity				
Opening Equity	12546.04	12561.29	12561.29	12561.29
Addition due to Additional		_	_	_
Capitalisation	15.25		<u> </u>	
Closing Equity	12561.29	12561.29	12561.29	12561.29
Average Equity	12553.67	12561.29	12561.29	12561.29
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%
Tax rate for the year (MAT)	19.931%	20.008%	20.008%	20.961%
Rate of Return on Equity (Pre Tax)	19.358%	19.377%	19.377%	19.610%
Return on Equity (Pre Tax)	2430.14	2434.00	2434.00	2463.27
Interest on Working Capital				
Maintenance Spares	38.77	40.99	43.33	45.79
O & M expenses	21.54	22.77	24.07	25.44
Receivables	1150.47	1118.52	1087.56	1071.76
Total	1210.77	1182.28	1154.96	1142.98



Interest	148.32	144.83	141.48	140.02
Annual Transmission Charges				
Depreciation	2191.83	2193.17	2193.17	2193.17
Interest on Loan	1874.08	1665.85	1467.83	1328.87
Return on Equity	2430.14	2434.00	2434.00	2463.27
Interest on Working Capital	148.32	144.83	141.48	140.02
O & M Expenses	258.44	273.26	288.86	305.24
Sub-Total	6902.80	6711.10	6525.34	6430.56
Transmission Majoration Factor	690.28	671.11	652.53	643.06
Total	7593.09	7382.21	7177.88	7073.61

Sharing of Transmission Charges

34. In view of Transmission Service Agreement entered into between the petitioner and Respondent No. 1 and BPTAs entered into between Respondent No. 1 and the Respondents No. 2 to 18, Respondent No. 1 shall raise bills for the transmission charges, including the TMF approved in this order. The transmission charges allowed shall be recovered on monthly basis in accordance with Regulation 23 and shall be shared by the respondents in accordance with Regulation 33 of the 2009 Tariff Regulations up to 30.6.2011. With effect from 1.7.2011, the billing, collection and disbursement of the transmission charges shall be governed by the provision of Central Electricity Regulatory Commission (Sharing of Inter-state Transmission Charges and Losses) Regulations, 2010 as amended from time to time.

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIDO

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	2194.09	2194.73	2194.73	2194.73	2194.73
Interest on Loan	1128.86	920.97	712.18	503.24	293.23
Return on Equity	2464.35	2465.07	2465.07	2465.07	2465.07
Interest on Working Capital	148.47	144.21	139.93	135.66	131.39
O&M Expenses	276.12	285.22	294.58	304.46	314.60
Sub-Total	6211.89	6010.19	5806.49	5603.16	5399.01



Transmission Majoration Factor					
Total	6833.08	6611.21	6387.14	6163.48	5938.91

36. 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	41.42	42.78	44.19	45.67	47.19
O & M Expenses	23.01	23.77	24.55	25.37	26.22
Receivables	1035.31	1001.70	967.75	933.86	899.84
Total	1099.74	1068.25	1036.49	1004.90	973.25
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	148.46	144.21	139.93	135.66	131.39

Capital Cost

- 37. 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."
- 38. The element wise capital cost, admitted as on 31.3.2014 for instant asset has been considered as capital cost as on 1.4.2014. Thus, ₹41870.97 lakh has been considered as the admitted capital cost of the instant asset as on 1.4.2014 as per details as follows:-



(₹ in lakh)

Particulars	Capital cost as on 31.3.2014 as determine in true up for 2013-14 and revised AFC for 2010-13 in tariff period 2009-14					
Freehold Land	68.57					
Leasehold Land	-					
Building & Other Civil Works	721.63					
Transmission Line	41080.77					
Sub-Station Equipments	-					
PLCC	-					
Total	41870.97					

Additional Capital Expenditure

- 39. Clause (1) and (3) of Regulation 14 of the 2014 Tariff Regulations provides as under:-
 - "(1) The capital expenditure in respect of the new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:
 - (i) Undischarged liabilities recognised to be payable at a future date;
 - (ii) Works deferred for execution;
 - (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;
 - (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
 - (v) Change in Law or compliance of any existing law:"

Provided that the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff.

- "(3) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:"
- "(ix) In case of transmission system, any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement due to obsolesce of technology, replacement of switchyard equipment due to increase of fault level, tower strengthening, communication equipment, emergency restoration system, insulators cleaning infrastructure, replacement of porcelain insulator with polymer insulators, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system; and"



- 40. The petitioner has claimed additional capital expenditure of ₹24.56 lakh for 2014-15 on account of implementation of SAP for A-3 line. The total cost of SAP for all the lines is ₹110.13 lakh and the cost has been apportioned on the basis of the line length of the asset. The length of the instant asset is 520 Ckt. km out of total length of 2332 Ckt. km i.e. 22.30% of the line covered in the project. Accordingly, the proportionate cost of the A-3 is ₹24.56 lakh. The petitioner has submitted that implementation of SAP would lead to robust ERP system as the existing ERP system is technically outdated and not capable for fulfilling the present requirement of business like capturing the maintenance data and billing and collection recording after the implementation of PoC mechanism. Implementation of SAP has various benefits and systematic functionality, such as inventory management, financials, controlling, sales & distribution, plant maintenance, human capital management, and Governance Risk & Compliances etc. Accordingly, additional capital expenditure of ₹24.56 lakh towards the cost of implementation cost of SAP has been claimed under Regulation 14(3) (ix) of the 2014 Tariff Regulations.
- 41. UPPCL and BRPL have submitted that the petitioner has not clarified as to how it intends to share to benefits of SAP implementation with the beneficiaries and hence it may not be allowed.
- 42. We have considered the submissions of petitioner and the respondents. The existing ERP system is outdated and it does not meet the present day requirements. In our opinion, the implementation of SAP system is necessary for successful and efficient operation of transmission system. Accordingly, additional capital expenditure of ₹24.56 lakh is allowed under Regulation 14(3)(ix) which, provides expenditure for



'replacement due to obsolescence of technology' which has become necessary for successful and efficient operation of transmission system.

- 43. The petitioner initially submitted that it has utilized 1.644 Hectare of forest land in the Kushinagar District of Uttar Pradesh for construction of the instant asset. Inprinciple approval for the same was granted to the petitioner by the Forest Department vide letter dated 3.3.2010. Thereafter, the Forest Department raised a demand for transfer of 1.644 Hectare of land in lieu of the forest land acquired for the project on 17.1.2011. Therefore, the cost related to purchase of equivalent land being a condition precedent for obtaining the valid acknowledgement of the legal transfer of the forest land by the Government of India for the construction of the instant asset is part of the original project cost. The liability of such cost was deferred on account of delay in identification and purchase of land but has not been waived off. The estimated cost of land was ₹80 lakh, but the actual liability may vary depending on the location and the market rates of the land identified for the transaction. Therefore, the petitioner seeks approval for capitalization of the cost of the land as soon as such liability is incurred and the land is transferred to the Forest Department.
- 44. The petitioner, subsequently vide affidavit dated 10.10.2016, has submitted that on 23.2.2016 it purchased 1.644 Hectare of land at a cost of ₹5039208/- (including stamp duty) for transfer to the Forest Department and the said land was registered and transferred to the Forest Department on 15.7.2016. As such, it may be allowed capitalization of ₹5039208/- incurred towards cost of land to be transferred to the Forest Department.



- 45. In this regard, it is noted that the petitioner had earlier claimed an amount of ₹39.27 lakh for 2010-11, pertaining to land as additional O&M expenditure in Petition No. 18/TT/2014, on account of payment against plantation and maintenance of trees under Regulation 44 "Power to Relax" of the 2009 Tariff Regulations. However, this claim was not allowed by the Commission in its order dated 6.5.2016 due to non-submission of proof of such payment and had observed as under:-
 - "40......The petitioner has considered these expenses as a part of O&M Expenses. In our considered view, there is no separate provision of allowing any compensation for cutting, plantation and maintenance of trees over and above normative O&M Expenses. We also find that the instant asset was declared under commercial operation in 2006 but no provision of this liability was created and claimed by the petitioner, although the petitioner was well aware of such conditions imposed by the Forest Department. The petitioner has claimed the expenditure during 2010-11, even though the issue is yet to reach finality as no land has been indentified to be handed over to the Forest Department. Therefore, on attaining finality, the petitioner may approach the Commission in this regard."
- 46. As regards the petitioner's claim of ₹5039208/- incurred towards purchase of land to compensate the Forest Department, the Commission in its order dated 6.5.2016 in Petition No. 18/TT/2014 had directed the petitioner to approach the Commission after actually purchasing the land and transferring it to the Forest Department. The petitioner has submitted that it has now purchased the land for an amount of ₹5039208/- and registered/transferred to the Forest Department. Therefore, the petitioner is allowed capitalization of ₹5039208/- spent towards the purchase of land. Though this expenditure does not directly form part of project, it increases the cost of the instant asset, being in the nature of compensation towards the forest land and hence allowed for the purpose of capitalisation.
- 47. The details of add-cap claimed, allowed and estimated completion cost as on 31.3.2019 are as under:-



(₹ in lakh)

Cost as on	•	d additional spenditure	Estimated completion cost
1.4.2014	2014-15	2015-16	as on 31.3.2019
41870.97	24.56	50.392	41945.92

Debt: Equity Ratio

- 48. 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."
- 49. The debt: equity ratio of 70:30 was admitted after true-up for the tariff period ending 31.3.2014 for instant asset. The debt: equity ratio of 70:30 has been considered for additional capitalisation during 2014-15 and 2015-16. 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)

			(l III Iakii)
Particulars	As on 1.	4.2014	As on 31	.3.2019
	Amount	%	Amount	%
Debt	29309.68	70.00	29362.14	70.00
Equity	12561.29	30.00	12583.78	30.00
Total	41870.97	100.00	41945.92	100.00

Interest on Loan ("IOL")

- 50. 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."
- 51. The petitioner has submitted that the loan from IFC and ADB are on fixed rate basis but loan from SBI and IDFC are on floating rate basis to be reset every three years. Therefore, the petitioner has prayed to pass/recover on the benefit/loss, in case of any decrease/increase in the interest rate directly to the respondents. The interest on loan has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations by considering latest available rates of interest for 2013-14 for arriving at the weighted average rate of interest. Any change in rate of interest subsequently is subject to truing-up on submission of actual rate of interest at the time of truing-up.
- 52. The details of weighted average rate of interest are at Annexure-2 and the IOL has been worked out and allowed as under:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross loan opening	29309.68	29326.87	29362.14	29362.14	29362.14
Cumulative Repayment					
upto previous year	16341.89	18535.71	20730.17	22924.64	25119.10



Net Loan-Opening	12967.78	10791.16	8631.97	6437.51	4243.04
Additions during the year	17.19	35.27	0.00	0.00	0.00
Repayment during the year	2193.82	2194.46	2194.46	2194.46	2194.46
Net Loan-Closing	10791.16	8631.97	6437.51	4243.04	2048.58
Average Loan	11879.47	9711.57	7534.74	5340.28	3145.81
Weighted Rate of Interest	9.4457%	9.4431%	9.4383%	9.4269%	9.4087%
Interest	1122.10	917.07	711.15	503.42	295.98

Return on Equity ("ROE")

- 53. 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:
- (vi) 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."

54. The petitioner has computed ROE at the rate of 19.610% after grossing up the ROF with MAT 20.961% rate οf the above Regulations. as per 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. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity, 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:-

(₹ in lakh)

				•	,
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	12561.29	12568.66	12583.78	12583.78	12583.78



Addition due to Additional					
Capitalisation	7.37	15.12	_	-	-
Closing Equity	12568.66	12583.78	12583.78	12583.78	12583.78
Average Equity	12564.97	12576.22	12583.78	12583.78	12583.78
Return on Equity (Base Rate) (%)	15.50%	15.50%	15.50%	15.50%	15.50%
MAT rate for 2013-14 (%)	20.961%	20.961%	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre					
Tax) (%)	19.610%	19.610%	19.610%	19.610%	19.610%
Return on Equity (Pre Tax)	2463.99	2466.20	2467.68	2467.68	2467.68

Depreciation

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

"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."
- 56. We have considered the submission made by the petitioner with reference to depreciation. The instant asset shall complete its 12 years life in 2018-19. Therefore, remaining depreciable value of the instant asset has been spread over in the balance useful life after 2018-19 as provided under Regulation 27 of the 2014 Tariff Regulations. The details of the depreciation allowed are given hereunder:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross block	41870.97	41895.53	41945.92	41945.92	41945.92
Additions during the year due to			_	_	_
projected additional capitalization	24.56	50.39	_	_	_
Closing Gross block	41895.53	41945.92	41945.92	41945.92	41945.92
Average gross block	41883.25	41920.72	41945.92	41945.92	41945.92
Rate of Depreciation (%)	5.2379%	5.2348%	5.2317%	5.2317%	5.2317%
Depreciable Value	37633.21	37644.26	37644.26	37644.26	37644.26
Remaining Depreciable Value	21291.32	19108.55	16914.09	14719.63	12525.16
Depreciation	2193.82	2194.46	2194.46	2194.46	2194.46

Operation & Maintenance Expenses ("O&M Expenses")

57. 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 bundled conductor					
with four or more sub-					
conductors T/L (₹ lakh/km)	1.062	1.097	1.133	1.171	1.210

58. The petitioner has submitted that it has filed a civil appeal before the Hon'ble Supreme Court on the issue of O&M Expenses allowed earlier and the present claim is without prejudice to its rights in the said appeal. As such, it has claimed normative O&M Expenses. The O&M Expenses claimed by the petitioner for the period 2014-19 are as follows:-

(₹ in lakh)

					(
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
260 km D/C bundled conductor with four or					
more sub- conductors	276.12	285.22	294.58	304.46	314.60

59. The O&M Expenses claimed by the petitioner are as specified in Regulation 29(4)(a) of the 2014 Tariff Regulations. Accordingly, it is allowed, subject to the outcome of the Civil Appeal filed by the petitioner before the Hon'ble Supreme Court.

Interest on Working Capital ("IWC")

- 60. 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;"
- 61. 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% plus 350 basis points). The interest on working capital as determined is as below:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	41.42	42.78	44.19	45.67	47.19
O & M expenses	23.01	23.77	24.55	25.37	26.22
Receivables	1034.05	1001.18	967.97	934.29	900.70
Total	1,098.48	1,067.73	1,036.71	1,005.33	974.11
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	148.30	144.14	139.96	135.72	131.51

Transmission Majoration Factor (TMF)

62. The petitioner has claimed TMF of 2014-19 tariff period as well. As stated in para 29 above, TMF is allowed for 2014-19 tariff period as provided under Regulation 4.10A Central Electricity Regulatory Commission (Terms and Conditions) Regulations. As stated earlier, the same will be reviewed by the Commission after the submissions of the report on TMF by the staff of the Commission.

Incentive

63. The petitioner has claimed the 'Incentive' (pre-tax) based on the estimated/projected availability during 2014-19 on Annual Fixed Charges (including



Majoration Charges) under Regulation 33 of the 2014 Tariff Regulations. Accordingly, the petitioner is allowed to calculate and bill incentive as provided under Regulation 35(1) read with Regulation 38 of the 2014 Tariff Regulations.

Annual Transmission Charges

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	2193.82	2194.46	2194.46	2194.46	2194.46
Interest on Loan	1122.10	917.07	711.15	503.42	295.98
Return on Equity	2463.99	2466.20	2467.68	2467.68	2467.68
Interest on Working Capital	148.30	144.14	139.96	135.72	131.51
O&M Expenses	276.12	285.22	294.58	304.46	314.60
Sub-Total	6204.32	6007.10	5807.83	5605.75	5404.23
Transmission Majoration Factor	620.43	600.71	580.78	560.57	540.42
Total	6824.76	6607.80	6388.61	6166.32	5944.65

Sales Tax Liability

The petitioner has submitted that it applied for registration under U.P. Sales Tax Act in the State of Uttar Pradesh and it had mentioned its business as "Transmission of Electricity and Power" in the Application form under the heading "Business of the Company". Accordingly, the petitioner was granted Certificate of Registration on 3.3.2004. The U.P. Sales Tax Department issued a show-cause notice dated 14.9.2011, under Section 7(4) of the Central Sales Tax Act, 1956, for canceling of registration alleging that registration can be issued only for the business of generation or distribution of electricity whereas the company is into transmission of electricity. The department issued a show-cause notice under Section 10(A) of the Central Sales Tax Act, 1956 on 2.5.2012 and 3.2.2014 as to why Differential Tax in form of penalty should not be levied for purchase of goods against the issue of Form



- C. The department contended that the petitioner is not entitled to issue Form C as it is into the business of transmission of electricity. Accordingly, the department raised a demand equivalent to the Differential Tax i.e. 12% to be paid less 4% Concessional Tax paid. The petitioner has submitted that a total demand of ₹26.44 crore has been raised for the years 2004-05 to 2008-09 out of which a demand of ₹1.49 crore pertains to 2008-09. The petitioner has not yet paid the amount and has preferred an appeal before the Hon'ble High Court of Allahabad. The petitioner has sought liberty to seek approval of the Commission for capitalization of such penal sales tax amount and recovery of the transmission charges pertaining to corresponding capitalisation once the above liability is actually incurred by the petitioner.
- 66. UPPCL and BRPL have submitted that the petitioner's claim is penal in nature and hence the same may not be allowed.
- 67. We have considered the submissions of the petitioner. We are not expressing view as to whether the claim for reimbursement of Differentiate Tax shall be admissible in tariff or not. If the petitioner approaches the Commission after the disposal of the appeal by the Hon'ble High Court of Allahabad, its request will be considered in accordance with law.

Filing Fee and Publication Expenses

68. The petitioner has sought reimbursement of fee paid by it for filing the true-up petition for 2013-14 in tariff period 2009-14 as well as for filing the petition and publication expenses for tariff period 2014-19. The petitioner shall be entitled for reimbursement of the filing fees for true-up petition for tariff period 2009-14 as well as filing fees and publication expenses in connection with the tariff period 2014-19,



directly from the beneficiaries on pro-rata basis in accordance with respective Tariff Regulations.

Licence Fee and RLDC Fees and Charges

69. The petitioner has requested to allow license fee/RLDC fees and charges both for tariff period 2009-14 and 2014-19. The petitioner shall be entitled for reimbursement of license fee in accordance with respective Tariff Regulations.

Sharing of Transmission Charges

- 70. The billing, collection and disbursement of the transmission charges approved for 2014-19 tariff period shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time, as provided in Regulation 43 of the 2014 Tariff Regulations.
- 71. This order disposes of Petition No. 515/TT/2014.

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



Annexure-1

(₹ in lakh)

	(₹ in lakh) CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN						
-							
	Details of Loan	2009-10	2010-11	2011-12	2012-13	2013-14	
1	IFC		22.12.25				
	Gross loan opening	8849.25	8849.25	8860.08	8860.08	8860.08	
	Cumulative Repayment						
	upto DOCO/previous year	1471.46	2208.90	2946.79	3685.13	4423.47	
	Net Loan-Opening	7377.79	6640.35	5913.29	5174.95	4436.61	
	Additions during the year	0.00	10.83	0.00	0.00	0.00	
	Repayment during the year	737.44	737.89	738.34	738.34	738.34	
	Net Loan-Closing	6640.35	5913.29	5174.95	4436.61	3698.27	
	Average Loan	7009.07	6276.82	5544.12	4805.78	4067.44	
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%	
	Interest	616.80	552.36	487.88	422.91	357.94	
	Rep Schedule	24 sem	i annual equ	ual instalme	nts from 15.0	07.2007	
2	ADB						
	Gross loan opening	7868.47	7868.47	7878.10	7878.10	7878.10	
	Cumulative Repayment						
	upto DOCO/previous year	1308.38	1964.09	2620.19	3276.70	3933.21	
	Net Loan-Opening	6560.09	5904.38	5257.91	4601.40	3944.89	
	Additions during the year	0.00	9.63	0.00	0.00	0.00	
	Repayment during the year	655.71	656.11	656.51	656.51	656.51	
	Net Loan-Closing	5904.38	5257.91	4601.40	3944.89	3288.38	
	Average Loan	6232.24	5581.15	4929.65	4273.14	3616.64	
	Rate of Interest	9.14%	9.14%	9.14%	9.14%	9.14%	
	Interest	569.63	510.12	450.57	390.57	330.56	
	Rep Schedule	24 sem	i annual equ	ual instalmei	nts from 15.0	07.2007	
3	IDFC						
	Gross loan opening	6648.49	6648.49	6656.51	6656.51	6656.51	
	Cumulative Repayment						
	upto DOCO/previous year	1105.51	1659.55	2213.92	2768.63	3323.34	
	Net Loan-Opening	5542.98	4988.94	4442.59	3887.88	3333.17	
	Additions during the year	0.00	8.02	0.00	0.00	0.00	
	Repayment during the year	554.04	554.37	554.71	554.71	554.71	
	Net Loan-Closing	4988.94	4442.59	3887.88	3333.17	2778.46	
	Average Loan	5265.96	4715.76	4165.23	3610.52	3055.82	
	Rate of Interest	10.48%	9.34%	9.20%	9.20%	10.08%	
	Interest	551.87	440.45	383.20	332.17	308.03	
	Rep Schedule	48	quarterly in	stalments fr	om 15.04.20	007	
4	SBI						
	Gross loan opening	5920.33	5920.33	5927.44	5927.44	5927.44	
	Cumulative Repayment						
	upto DOCO/previous year	1106.39	1599.75	2093.41	2587.36	3081.31	
	Net Loan-Opening	4813.94	4320.58	3834.03	3340.08	2846.13	
	Additions during the year	0.00	7.11	0.00	0.00	0.00	
	Repayment during the year	493.36	493.66	493.95	493.95	493.95	
	Net Loan-Closing	4320.58	3834.03	3340.08	2846.13	2352.18	
	Average Loan	4567.26	4077.31	3587.06	3093.11	2599.15	
	Rate of Interest	10.19%	9.16%	9.03%	9.03%	10.15%	



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Interest	465.40	373.48	323.91	279.31	263.81
Rep Schedule	48 quarterly instalments from 31.03.2007				
Total Loan					
Gross loan opening	29286.54	29286.54	29322.13	29322.13	29322.13
Cumulative Repayment					
upto DOCO/previous year	4991.74	7432.28	9874.31	12317.82	14761.33
Net Loan-Opening	24294.80	21854.26	19447.82	17004.31	14560.80
Additions during the year	0.00	35.59	0.00	0.00	0.00
Repayment during the year	2440.54	2442.03	2443.51	2443.51	2443.51
Net Loan-Closing	21854.26	19447.82	17004.31	14560.80	12117.29
Average Loan	23074.53	20651.04	18226.07	15782.56	13339.05
Rate of Interest	9.5504%	9.0863%	9.0286%	9.0286%	9.4485%
Interest	2203.70	1876.41	1645.57	1424.95	1260.34



Annexure-2

(₹ in lakh)

	(₹ 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	IFC					
-	Gross loan opening	8860.08	8865.35	8865.35	8865.35	8865.35
	Cumulative Repayment	3333.33				
	upto DOCO/previous year	5161.81	5900.37	6639.15	7377.93	8116.71
	Net Loan-Opening	3698.27	2964.98	2226.20	1487.42	748.64
	Additions during the year	5.27	0.00	0.00	0.00	0.00
	Repayment during the year	738.56	738.78	738.78	738.78	738.78
	Net Loan-Closing	2964.98	2226.20	1487.42	748.64	9.86
	Average Loan	3331.63	2595.59	1856.81	1118.03	379.25
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	293.18	228.41	163.40	98.39	33.37
	Rep Schedule		i annual equ	ıal instalme	nts from 15.0	07.2007
2	ADB		'			
	Gross loan opening	7878.10	7882.78	7882.78	7882.78	7882.78
	Cumulative Repayment					
	upto DOCO/previous year	4589.72	5246.42	5903.32	6560.22	7217.12
	Net Loan-Opening	3288.38	2636.36	1979.46	1322.56	665.66
	Additions during the year	4.68	0.00	0.00	0.00	0.00
	Repayment during the year	656.70	656.90	656.90	656.90	656.90
	Net Loan-Closing	2636.36	1979.46	1322.56	665.66	8.76
	Average Loan	2962.37	2307.91	1651.01	994.11	337.21
	Rate of Interest	9.14%	9.14%	9.14%	9.14%	9.14%
	Interest	270.76	210.94	150.90	90.86	30.82
	Rep Schedule	24 sem	i annual equ	ıal instalmei	nts from 15.0	07.2007
3	IDFC					
	Gross loan opening	6656.51	6660.36	6660.36	6660.36	6660.36
	Cumulative Repayment					
	upto DOCO/previous year	3900.80	4455.67	5010.70	5565.73	6120.76
	Net Loan-Opening	2755.71	2204.69	1649.66	1094.63	539.60
	Additions during the year	3.85	0.00	0.00	0.00	0.00
	Repayment during the year	554.87	555.03	555.03	555.03	539.60
	Net Loan-Closing	2204.69	1649.66	1094.63	539.60	0.00
	Average Loan	2480.20	1927.18	1372.15	817.12	269.80
	Rate of Interest	10.08%	10.08%	10.08%	10.08%	10.08%
	Interest	250.00	194.26	138.31	82.37	27.20
	Rep Schedule	48	quarterly in	stalments fr	om 15.04.20	007
4	SBI					
	Gross loan opening	5927.44	5930.83	5930.83	5930.83	5930.83
	Cumulative Repayment					
	upto DOCO/previous year	3575.26	4069.35	4563.59	5057.83	5552.06
	Net Loan-Opening	2352.18	1861.48	1367.24	873.00	378.77
	Additions during the year	3.39	0.00	0.00	0.00	0.00
	Repayment during the year	494.09	494.24	494.24	494.24	378.77
	Net Loan-Closing	1861.48	1367.24	873.00	378.77	0.00
	Average Loan	2106.83	1614.36	1120.12	625.89	189.38
	Rate of Interest	10.15%	10.15%	10.15%	10.15%	10.15%



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Interest	213.84	163.86	113.69	63.53	19.22	
Rep Schedule	48 quarterly instalments from 31.03.2007					
Total Loan						
Gross loan opening	29322.13	29339.32	29339.32	29339.32	29339.32	
Cumulative Repayment						
upto DOCO/previous year	17227.59	19671.82	22116.76	24561.70	27006.65	
Net Loan-Opening	12094.54	9667.50	7222.56	4777.62	2332.67	
Additions during the year	17.19	0.00	0.00	0.00	0.00	
Repayment during the year	2444.23	2444.94	2444.94	2444.94	2314.04	
Net Loan-Closing	9667.50	7222.56	4777.62	2332.67	18.63	
Average Loan	10881.02	8445.03	6000.09	3555.14	1175.65	
Rate of Interest	9.4457%	9.4431%	9.4383%	9.4269%	9.4087%	
Interest	1027.79	797.47	566.31	335.14	110.61	

