

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 278/TT/2014

Coram:

**Shri A.S. Bakshi, Member
Dr. M.K. Iyer, Member**

**Date of Hearing : 13.01.2016
Date of Order : 15.02.2016**

In the matter of:

Truing up of transmission tariff of 2009-14 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 and determination of transmission tariff for 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for Combined Assets of Transmission System associated with Ranganadi HEP in North Eastern Region under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999.

And in the matter of:

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

.....**Petitioner**

Versus

1. Assam Electricity Grid Corporation Limited
(Formerly Assam State Electricity Board),
"Bijulee Bhawan", Paltan Bazar, Guwahati - 781 001
2. Meghalaya Energy Corporation Limited
(Formerly Meghalaya State Electricity Board)
Short Round Road, "Lumjingshai", Shillong -793 001
3. Government of Arunachal Pradesh,
Itanagar, Arunachal Pradesh



4. Power and Electricity Department
Government of Mizoram, Aizawl
5. Manipur State Electricity Distribution Company Limited (Formerly Electricity
Department, Government of Manipur)
Keishampat, Imphal
6. Department of Power, Government of Nagaland
Kohima, Nagaland
7. Tripura State Electricity Corporation Limited,
Vidhyut Bhawan, North Banamalipur,
Agartala, Tripura (W) – 799001

.....**Respondents**

The following were present:-

For Petitioner: Shri M.M. Mondal, PGCIL
 Shri Vivek Kumar Singh, PGCIL
 Shri S.S. Raju, PGCIL
 Shri D.K. Karma, PGCIL

For Respondent: None

ORDER

The present petition has been filed by Power Grid Corporation of India Ltd. (“the petitioner”) for truing up of capital expenditure 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 capital 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 of Combined



Assets of Transmission System associated with Ranganadi HEP in North Eastern Region (hereinafter referred as “transmission asset”).

2. The respondents are transmission licensees and distribution licensees who are procuring transmission service from the petitioner, mainly beneficiaries of the North Eastern Region.

3. The petitioner has served the petition to the respondents and notice of this application has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003 (“the Act”). No comments have been received from the public in response to the notices published by the petitioner under Section 64 of the Act. None of the respondents have filed reply to the petition. The hearing in this matter was held on 13.1.2016. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

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

(a) The Revised Cost Estimate (RCE) for the transmission system was approved by Ministry of Power vide its letter dated 27.8.2000 at an estimated cost of ₹17243 lakh, which included IDC of ₹3125 lakh. The petitioner has built the transmission asset in the North Eastern Region and put the same under commercial operation as stated below:-



S. No.	Particulars	COD	Actual line length in km
(i)	Asset-I: 132 kV S/C Nirjuli-Dikrong transmission line along with associated bays	1.10.2001	22.29
(ii)	Asset-II:400 kV D/C Ranganadi-Balipara transmission line along with associated bays	1.1.2003	332.67

(b) The tariff for the 2009-14 period was allowed vide order dated 1.8.2011 in Petition No. 303/2010 in accordance with the 2009 Tariff Regulations. The tariff allowed for the tariff period 2009-14 is as under:-

Particulars	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	794.93	805.27	815.60	815.60	815.60
Interest on Loan	229.79	161.31	93.21	26.54	0.00
Return on equity	1313.73	1323.99	1334.25	1334.25	1334.25
Interest on Working Capital	60.71	60.40	60.13	59.51	59.76
O & M Expenses	239.28	252.99	267.48	282.78	298.88
Total	2638.44	2603.95	2570.67	2518.68	2508.49

(c) The Commission, vide order dated 1.8.2011 in Petition No. 303/2010, has determined the tariff for the tariff period 2009-14 based on admitted capital cost of ₹15043.87 lakh (₹794.26 lakh for Asset-I and ₹14249.61 lakh for Asset-II) as on 31.3.2009 approved vide order dated 19.8.2009 in Petition No. 84/2006.

(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.



TRUING UP OF ANNUAL FIXED CHARGES FOR TARIFF PERIOD 2009-14

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

Capital Cost

6. The petitioner has claimed admitted capital cost of ₹15043.87 lakh for combined assets as on 31.3.2009 for the purpose of tariff.

7. Last proviso to Clause (2) of Regulation 7 of the 2009 Tariff Regulations provides that:-

“Provided also that in case of the existing projects, the capital cost admitted by the Commission prior to 1.4.2009 duly trued up by excluding un-discharged liability, if any, as on 1.4.2009 and the additional capital expenditure projected to be incurred for the respective year of the tariff period 2009-14, as may be admitted by the Commission, shall form the basis for determination of tariff.”

8. The capital cost admitted as on 31.3.2009 vide order dated 19.8.2009 in Petition No. 84/2006 has been considered as the opening capital cost as on 1.4.2009 for determination of tariff in accordance with Regulation 7 of the 2009 Tariff Regulations. The admitted capital cost of ₹15043.87 lakh as on 31.3.2009 has been considered to work out the trued up tariff for the tariff period 2009-14.

Additional Capital Expenditure

9. The Commission vide its order dated 1.8.2011 in Petition No. 303/2010 has approved the additional capitalization of ₹404.82 lakh and de-capitalization of ₹13.42 lakh during 2010-11 towards 2 nos. 400 kV circuit breakers, 2 nos. panels installed and pile foundation (2 Nos.) under Clause 2(v) of Regulation 9 of



the 2009 Tariff Regulations for the tariff period 2009-14. The petitioner had claimed the tariff based on estimated additional capital expenditure. In the instant petition, the petitioner has submitted that actual additional capital expenditure incurred for the same work as evidenced from the details submitted by the petitioner.

10. The petitioner has claimed the additional capitalization of ₹404.75 lakh, ₹28.16 lakh, ₹16.99 lakh, and ₹92.12 lakh in 2010-11, 2011-12, 2012-13, and 2013-14, respectively, and de-capitalization of ₹13.42 lakh and ₹4.48 lakh in 2010-11 and 2013-14, respectively, incurred towards balance work of colony building and boundary wall of Nirjuli Sub-station, commissioning of switchable line reactor scheme at Balipara Sub-station and execution of pile foundation work at location no. 42, 43 and 44 of Ranganadi-Balipara transmission line and balance payment of above executed work under Regulation 9(2)(v) of the 2009 Tariff Regulations.

11. Clause 2(v) of Regulation 9 of the 2009 Tariff Regulations provides as follows:-

“(2) The capital expenditure incurred on the following counts after the cut-off date may, in its discretion, be admitted by the Commission, subject to prudence check:

.....

(v) 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 of switchyard equipment due to increase of fault level, emergency restoration system, insulators cleaning infrastructure, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system:

Provided that the details of works included in the original scope of work along with estimates of expenditure, undischarged liabilities and the works deferred for execution shall be submitted along with the application for determination of tariff.”



12. The petitioner has submitted the Auditor's Certificate to verify the actual additional capital expenditure incurred in 2009-14. As the additional capitalization is on account of balance payment incurred after cut-off date for works necessary for successful and efficient operation of transmission system, the same is allowed under Clause (2)(v) of Regulation 9 of the 2009 Tariff Regulations. The summary of capital cost including additional capitalization is shown in table below:-

(₹ in lakh)

Particulars	Capital cost as on 31.3.2009	Additional Capital Expenditure (2009-14)								Capital Cost as on 31.3.2014
		09-10	10-11		11-12	12-13	13-14		Total Add Cap (Net of De-cap)	
			Add Cap	De-Cap	Add Cap	Add Cap	Add Cap	De-Cap		
Approved in order dated 1.8.2011 in Petition No. 303/2010	15043.87	0.00	404.82	(13.42)	0.00	0.00	0.00	0.00	391.40	15435.27
Actual incurred as per auditor certificate dated 16.7.2014	15043.87	0.00	404.75	(13.42)	28.16	16.99	92.12	(4.48)	524.12	15567.99

Debt: Equity

13. Clause 2 of Regulation 12 of the 2009 Tariff Regulations provides that:-

“In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered.”

14. The petitioner was directed, vide letter dated 14.1.2016, to provide an undertaking on affidavit that actual equity infused for the additional capitalisation during 2009-14 period is not less than 30% for the given transmission asset. The



petitioner vide its affidavit dated 19.1.2016 has submitted that as per Form-13, 70% loan has been deployed for additional capitalization for 2010-11 and ₹0.07 lakh for additional capitalization for 2011-12. No loan has been deployed for funding additional capitalization during 2012-13 and 2013-14. As per Clause 12(1) and 12(3) of the 2009 Tariff Regulations, equity in excess of 30% shall be treated as loan. The petitioner has claimed transmission charges as per normative debt:equity ratio of 70:30 and accordingly it is allowed.

15. The petitioner has claimed true up Annual Fixed Charge based on the admitted debt-equity ratio of 50.04:49.96 as on 31.3.2009 as opening debt:equity ratio as on 1.4.2009. The transmission assets covered in the instant petition are existing assets, as the COD is prior to 1.4.2009. The admitted debt:equity ratio of 50.04:49.96 as on 31.3.2009 has been considered as opening debt:equity ratio as on 1.4.2009 for the purpose of true up of tariff of 2009-14 tariff period, as given under:-

(₹ in lakh)		
Funding	Amount	(%)
Debt	7528.70	50.04
Equity	7515.17	49.96
Total	15043.87	100.00

16. For additional capitalisation, normative debt:equity ratio of 70:30 has been considered and the debt:equity ratio including additional capitalisation as on 31.30.2014 is as follows:-

Particulars	Amount (in ₹ lakh)	(%)
Debt	7895.58	50.72
Equity	7672.41	49.28
Total	15567.99	100.00



Interest on Loan (“IOL”)

17. Regulation 16 of the 2009 Tariff Regulations provides the methodology for working out weighted average rate of interest on loan. The Commission in its earlier order dated 8.6.2011 in Petition No. 238/2010 has held that:-

“...in case of floating rate of interest, any change in the rates of interest during the tariff period will be considered at the time of true up”.

18. The petitioner has submitted the weighted average rate of interest on loan based on its actual loan portfolio and rate of interest.

19. 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 placed at **Annexure – 1** and the IOL has been worked out and allowed as follows:-.

(₹in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 1.8.2011	229.79	161.31	93.21	26.54	0.00
As claimed by the petitioner	229.80	161.32	94.17	27.49	0.00
Allowed after trued up	229.79	161.38	94.25	27.52	0.00

20. The IOL has been worked out based on actual weighted average rate of interest.

Return on Equity (“ROE”)

21. Clause (3), (4) and (5) of 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 true up in accordance with Regulation 6 of these regulations.”

22. The petitioner has submitted that MAT rate of 11.330% applicable for 2008-09 was considered in the order dated 1.8.2011. However, for true up purpose, the computation of RoE for the tariff period 2009-14 has been done on the basis of actual MAT rate applicable during 2009-14. The petitioner has submitted the variation in the MAT rate during 2009-14 as per the Finance Act of the relevant year for the purpose of grossing up of ROE, as below:-

Particulars	MAT Rate (t) %	Grossed up ROE (Base rate/(1-t)) %
2009-10	16.995	18.674
2010-11	19.931	19.358
2011-12	20.008	19.377
2012-13	20.008	19.377
2013-14	20.961	19.610



23. Accordingly, the ROE as trued up is as shown in the table below:-

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 1.8.2011	1313.73	1323.99	1334.25	1334.25	1334.25
As claimed by petitioner	1403.38	1466.15	1479.78	1481.09	1501.98
Allowed after true up	1403.38	1466.15	1479.78	1481.09	1501.98

24. The return on equity allowed in the instant order is more than the return on equity allowed vide order dated 1.8.2011 due to increase in equity on account of additional capitalisation and increase in the applicable MAT rate for the purpose of grossing up of base rate of return on equity.

Depreciation

25. Clause (42) of Regulation 3 of the 2009 Tariff Regulations defines useful life as follows:-

“‘**useful life**’ in relation to a unit of a generating station and transmission system from the COD shall mean the following, namely:-

.....	
(c) AC and DC sub-station	25 years
(d) Hydro generating station	35 years
(e) Transmission line	35 years”

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

"17. Depreciation:

...
(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.”



27. As per clause 42 of Regulations 3 and clause 4 of Regulations 17 of the 2009 Tariff Regulations, useful life for transmission line and sub-station is 35 years and 25 years, respectively. In the present case, weighted average value of asset has been considered to work out the weighted average life of the transmission system as 34 years.

28. We have considered the submission made by the petitioner with reference to depreciation. It is observed that while computing depreciation, the petitioner has not adjusted accumulated depreciation of the de-capitalized asset and has claimed depreciation accordingly. We have adjusted the cumulative depreciation by taking into account the depreciation recovered in the tariff by the de-capitalized assets during useful service.

29. The depreciation for the tariff period 2009-14 has been worked out in accordance with Regulation 17 of the 2009 Tariff Regulations based on admitted capital expenditure and additional capitalisation as under:-

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 1.8.2011	794.93	805.27	815.60	815.60	815.60
As claimed by petitioner	794.93	805.01	815.79	816.94	819.71
Allowed after true up	794.93	805.00	815.79	816.94	819.70

30. The depreciation allowed in the instant order is more than the depreciation allowed vide order dated 1.8.2011 due to higher additional capitalization for 2009-14.



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

31. The petitioner has computed O&M Expenses for the assets mentioned in the petition, in accordance with the O&M norms specified in Regulation 19(g) of the 2009 Tariff Regulations for 400 kV D/C transmission line, 132 kV S/C transmission line, 400 kV bay and 132 kV and below bay. The Commission vide its order dated 1.8.2011 had approved the O&M Expenses for 400 kV D/C transmission line of 166.335 km line length, 132 kV S/C transmission lines of 22.29 km line length, 2 bays of 400 kV and 1 bay of 132 kV and below level. Against this, the petitioner has claimed O&M Expenses for 400 kV D/C transmission line of 166.335 km line length, 132 kV S/C transmission lines of 22.29 km line length, 4 bays of 400 kV bay and 1 bay of 132 kV and below level. The petitioner submitted a copy of letter no. NESH/Comml./N-38/522 dated 22.12.2011 which states that 400 kV circuit breakers for making the fixed line reactor of Ranganadi line-1 of 400 kV D/C BaliparaRanganadi line at Balipara Sub-station into switchable was put under commercial operation w.e.f 1.10.2011 and of Ranganadi line-2 of 400 kV D/C Balipara Ranganadi line at Balipara Sub-station was put into operation w.e.f. 1.11.2011. Further, with regard to Asset-II (400 kV D/C Ranganadi-Balipara transmission line along with associated bays), the Commission in its order dated 1.8.2011 in Petition No. 303/2010 had approved the additional capital expenditure for 2 nos. 400 kV circuit breakers, 2 nos. panels and pile foundation (2 nos.) leading to addition of 2 no. of 400 kV bays and accordingly there is increase in the O&M Expenses allowed with effect



from 2012-13. The O&M Expenses worked out for the instant assets is given below:-

		(₹ in lakh)				
Particulars		2009-10	2010-11	2011-12	2012-13	2013-14
Actual line length (km)	Single Circuit (Single Conductor)	22.29	22.29	22.29	22.29	22.29
	Double Circuit (Twin & Triple Conductor)	166.335	166.335	166.335	166.335	166.335
Actual (No. of bays)	400 kV Bays	2	2	4 (additional 2 no. of 400 kV bays commissioned on 1.10.2011 and 1.11.2011)	4	4
	132 kV and below Bays	1	1	1	1	1
Norms as per Regulation	Single Circuit (Single Conductor) (₹ lakh/km)	0.179	0.189	0.200	0.212	0.224
	Double Circuit (Twin & Triple Conductor) (₹lakh/km)	0.627	0.663	0.701	0.741	0.783
	400 kV Bays (₹lakh/bay)	52.40	55.40	58.57	61.92	65.46
	132 kV and below Bays (₹lakh/bay)	26.20	27.70	29.28	30.96	32.73
Total (₹ in lakh)		239.28	252.99	321.17	406.62	429.80

32. Accordingly, the O&M Expenses claimed by the petitioner, allowed and trued up are as follows:-



(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 1.8.2011	239.28	252.99	267.48	282.78	298.88
As claimed by the petitioner	239.28	252.99	321.17	406.62	429.80
Allowed after trued up	239.28	252.99	321.17	406.62	429.80

Interest on working capital("IWC")

33. 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.

34. The petitioner has submitted that the rate of interest on working capital has been considered as 12.25% as per clause (3) of Regulation 18 of the 2009 Tariff Regulations and the components of working capital are also considered in accordance with Sub-clause (c) of clause (1) of Regulation 18 of the 2009 Tariff Regulations.

35. The Commission, vide order dated 1.8.2011 in Petition No. 303/2010, has approved rate of interest on working capital as 12.25% as applicable for 2008-09. In accordance with clause (3) of Regulation 18 of the 2009 Tariff Regulations, as amended, rate of interest on working capital shall be on normative basis and in case of transmission assets declared under commercial operation prior to 1.4.2009, shall be equal to short-term Prime Lending Rate as applicable as on 1.4.2009. State Bank of India short-term Prime Lending Rate on 1.4.2009 was



12.25%. Therefore, interest rate of 12.25% has been considered to work out the interest on working capital in the instant case.

36. The IWC trued up is as under:-

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	35.89	37.95	48.18	60.99	64.47
O & M expenses	19.94	21.08	26.76	33.88	35.82
Receivables	454.99	458.15	462.81	466.83	470.23
Total	510.83	517.18	537.75	561.71	570.52
Rate of Interest (%)	12.25	12.25	12.25	12.25	12.25
Interest	62.58	63.35	65.87	68.81	69.89

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 1.8.2011	60.71	60.40	60.13	59.51	59.76
As claimed by petitioner	62.58	63.35	65.87	68.81	69.89
Allowed after true up	62.58	63.35	65.87	68.81	69.89

37. The variation in IWC is on account of increase in receivables due to variation in Depreciation, IOL and ROE on account of increase in additional capitalisation and increase in ROE due to applicable MAT rate during 2009-14 tariff period.

ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

38. The detailed computation of the various components of the trued up annual fixed charges for the transmission asset for the tariff period 2009-14 is summarised below:-

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Block					
Opening Gross Block	15043.87	15043.87	15435.20	15463.36	15480.35



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Additional Capitalization (Net of de-capitalisation)	0.00	391.33	28.16	16.99	87.64
Closing Gross block	15043.87	15435.20	15463.36	15480.35	15567.99
Average Gross block	15043.87	15239.54	15449.28	15471.86	15524.17
Depreciation					
Rate of Depreciation (%)	5.284	5.282	5.280	5.280	5.280
Depreciable Value	13539.48	13715.58	13904.35	13924.67	13971.75
Elapsed Life of the assets at beginning of the year	6	7	8	9	10
Weighted Balance Useful life of the assets	28	27	26	25	24
Remaining Depreciable Value	10642.04	10023.21	9410.93	8615.47	7845.61
Depreciation	794.93	805.00	815.79	816.94	819.70
Interest on Loan					
Gross Normative Loan	7528.70	7528.70	7802.63	7822.34	7834.24
Cumulative Repayment upto Previous Year	4833.29	5628.22	6433.23	7249.01	7834.24
Net Loan-Opening	2695.41	1900.48	1369.40	573.33	0.00
Additions	0.00	273.93	19.71	11.89	61.35
Repayment during the year	794.93	805.00	815.79	585.22	61.35
Net Loan-Closing	1900.48	1369.40	573.33	0.00	0.00
Average Loan	2297.94	1634.94	971.37	286.67	0.00
Weighted Average Rate of Interest on Loan (%)	10.0000	9.8710	9.7029	9.5985	9.3808
Interest	229.79	161.38	94.25	27.52	0.00
Return on Equity					
Opening Equity	7515.17	7515.17	7632.57	7641.02	7646.11
Additions	0.00	117.40	8.45	5.10	26.29
Closing Equity	7515.17	7632.57	7641.02	7646.11	7672.41
Average Equity	7515.17	7573.87	7636.79	7643.57	7659.26
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT rate for the respective year (%)	16.995	19.931	20.008	20.008	20.961



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Rate of Return on Equity (Pre Tax) (%)	18.674	19.358	19.377	19.377	19.610
Return on Equity (Pre Tax)	1403.38	1466.15	1479.78	1481.09	1501.98
Interest on Working Capital					
Maintenance Spares	35.89	37.95	48.18	60.99	64.47
O & M Expenses	19.94	21.08	26.76	33.88	35.82
Receivables	454.99	458.15	462.81	466.83	470.23
Total	510.83	517.18	537.75	561.71	570.52
Interest	62.58	63.35	65.87	68.81	69.89
Annual Transmission Charges					
Depreciation	794.93	805.00	815.79	816.94	819.70
Interest on Loan	229.79	161.38	94.25	27.52	0.00
Return on Equity	1403.38	1466.15	1479.78	1481.09	1501.98
Interest on Working Capital	62.58	63.35	65.87	68.81	69.89
O & M Expenses	239.28	252.99	321.17	406.62	429.80
Total	2729.97	2748.89	2776.86	2800.98	2821.38

DETERMINATION OF ANNUAL TRANSMISSION CHARGES FOR 2014-19

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	837.20	306.44	306.44	306.44	306.44
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on equity	1521.48	1538.39	1538.39	1538.39	1538.39
Interest on Working Capital	76.03	64.93	65.67	66.44	67.24
O & M Expenses	393.45	406.60	420.06	434.00	448.39
Total	2828.16	2316.36	2330.56	2345.27	2360.46

40. 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	59.02	60.99	63.01	65.10	67.26
O & M expenses	32.79	33.88	35.01	36.17	37.37
Receivables	471.36	386.06	388.43	390.88	393.41
Total	563.17	480.93	486.45	492.15	498.04
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	76.03	64.93	65.67	66.44	67.24

Capital Cost

41. Clause (1) & (3) of Regulation 9 of the 2014 Tariff Regulations specify 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.”

“(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.”

42. The petitioner has claimed capital expenditure of ₹15567.99 lakh as on 31.3.2014. Further, the petitioner has also projected net additional capital expenditure of ₹575.04 lakh during the tariff period 2014-19. The trued up capital cost of ₹15567.99 lakh as on 31.3.2014 is considered to workout tariff for tariff period 2014-19.



Additional Capital Expenditure

42. The petitioner has claimed the additional capital expenditure of ₹592.94 lakh and de-capitalization of ₹17.90 lakh incurred in 2014-15 towards balance/retention payment against commissioning of switchable line reactor scheme at Balipara Sub-station and execution of pile foundation work at location no. 45, 58 and 66 of Ranganadi-Balipara transmission line. The petitioner submitted that additional capitalisation is necessary due to naturally forced/calamity/outage minimization condition and was discussed and agreed during 98th OCC meeting dated 10.6.2014 and 14th NERPC meeting dated 16.1.2014. The additional capitalisation has been claimed under Regulation 14(1), 14(3)(vii) and (ix) of the 2014 Tariff Regulations.

43. Clause 1, 3(vii) and Clause 3(ix) of Regulation 14 of the 2014 Tariff Regulations provides as follows:-

“(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 recognized 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 of law; 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:

.....

(vii) Any additional capital expenditure which has become necessary for efficient operation of generating station other than coal/lignite based stations or transmission system as the case may be. The claim shall be substantiated with the technical justification duly supported by the documentary evidence like test results carried out by an independent agency in case of deterioration of assets, report of an independent agency in case of damage caused by natural calamities, obsolescence of technology, up-gradation of capacity for the technical reason such as increase in fault level”;

“(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 obsolescence 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”

44. The total capital cost of the transmission asset including additional capital expenditure of ₹575.04 lakh incurred during 2014-15 works out to ₹16143.03 lakh, which is within the overall approved cost of ₹17243.00 lakh given in the investment approval. As the total capital cost is within the overall approved cost and additional capital expenditure is partly on account of balance/retention payment and partly on execution of works, which has become necessary for successful and efficient operation of transmission system, the additional capital expenditure of ₹592.94 lakh and de-capitalization of ₹17.90 lakh during 2014-15 is provisionally allowed in accordance with Clause 14(1), 14(3)(vii) and (ix) of the 2014 Tariff Regulations. The additional capitalisation for tariff period 2014-19



shall be finally approved after the detailed scrutiny of additional capitalisation at the true up stage.

(₹ in lakh)

Particulars	Capital Cost as on 31.3.2014	Projected Additional Capitalisation and (De-capitalisation) (2014-19)						Capital Cost as on 31.3.2019
		14-15	15-16	16-17	17-18	18-19	Total	
Approved	15567.99	592.94	0.00	0.00	0.00	0.00	592.94	16143.03
		(17.90)	0.00	0.00	0.00	0.00	(17.90)	

Debt:Equity Ratio

45. Clause 3 of Regulation 19 of the 2014 Tariff Regulations specifies as under:-

“(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.”

46. The petitioner has considered debt:equity ratio as 50.72:49.28 as on 31.3.2014. The admitted debt:equity ratio of 50.72:49.28 after true-up for the tariff period ending 31.3.2014 has been considered as opening debt:equity ratio as on 1.4.2014. The details of the debt:equity as on 1.4.2014 considered for the purpose of tariff for the 2014-19 tariff period is as follows:-

Particulars	Amount (₹ in lakh)	(%)
Debt	7895.58	50.72
Equity	7672.41	49.28
Total	15567.99	100.00



47. Further, normative debt:equity ratio of 70:30 has been considered for additional capitalization for tariff period 2014-19. The details of the debt:equity including additional capitalization is as follows:-

Particulars	Amount (₹ in lakh)	(%)
Debt	8298.11	51.40
Equity	7844.92	48.60
Total	16143.03	100.00

Interest on Loan ("IOL")

48. Clause (5) & (6) of Regulation 26 of the 2014 Tariff Regulations are reproduced as under:-

“(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.”

49. The petitioner has not claimed any interest on loan for the tariff period 2014-19 as the complete loan has already been repaid before the 2014-19 tariff period. As regards additional capital expenditure projected during the tariff period 2014-19, the petitioner has submitted that the funding has been done through debt:equity ratio of 70:30 and it has claimed debt corresponding to 70% of the



additional capitalisation. It is observed that the petitioner has not claimed any interest on loan as the loan amount added corresponding to year-wise additional capitalisation is less than the depreciation allowed for the respective years and therefore, the same is getting repaid in the same year. The petitioner has therefore, not claimed any IOL during 2014-19. Accordingly, Interest on Loan has been considered as NIL for the purpose of tariff.

Return on Equity (“ROE”)

50. Clause (1)& (2) of Regulation 24 and Clause (2) of Regulation 25 of the 2014 Tariff Regulations specify as under:-

“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”

“25. Tax on Return on Equity:

(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.”

51. The petitioner has computed ROE at the rate of 19.610% after grossing up the ROE with MAT rate as per the above Regulation. The petitioner has further



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.

52. 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.

53. 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, which shall be trued up with actual tax rate in accordance with Regulation 25(3) of the 2014 Tariff Regulations. Accordingly, the ROE determined by the Commission is given below:-



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	7672.41	7844.92	7844.92	7844.92	7844.92
Addition due to Additional Capitalisation	172.51	0.00	0.00	0.00	0.00
Closing Equity	7844.92	7844.92	7844.92	7844.92	7844.92
Average Equity	7758.66	7844.92	7844.92	7844.92	7844.92
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT rate for the year (%)	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)	1521.47	1538.39	1538.39	1538.39	1538.39

Depreciation

54. Clause (2), (5) and (6) of Regulation 27 of the 2014 Tariff Regulations provide as follows:-

"27. Depreciation:

(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"

"(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."

55. The petitioner has computed depreciation considering capital expenditure of ₹15567.99 lakh as on 31.3.2014 and projected net additional capitalization of ₹575.04 lakh for the tariff period 2014-19.



56. We have considered the submission made by the petitioner with reference to depreciation. It is observed that while computing depreciation, the petitioner has not adjusted accumulated depreciation of the de-capitalized asset and has claimed depreciation accordingly. We have adjusted the cumulative depreciation by taking into account the depreciation recovered in the tariff by the de-capitalized assets during useful service. Accordingly, the depreciation is worked in accordance with the Regulation 27 of the 2014 Tariff Regulations. The details of the depreciation worked out is given hereunder:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	15567.99	16143.03	16143.03	16143.03	16143.03
Additional Capitalisation	575.04	0.00	0.00	0.00	0.00
Closing Gross Block	16143.03	16143.03	16143.03	16143.03	16143.03
Average Gross Block	15855.51	16143.03	16143.03	16143.03	16143.03
Freehold Land (Av. Cost)	0	-	-	-	-
Rate of Depreciation (%)	5.280%	1.902%	1.902%	1.902%	1.902%
Depreciable Value	14269.96	14528.73	14528.73	14528.73	14528.73
Balance useful life of the asset	23	22	21	20	19
Elapsed life	11	12	13	14	15
Remaining Depreciable Value	7333.20	6754.77	6447.73	6140.70	5833.66
Depreciation during the year	837.20	307.03	307.03	307.03	307.03
Depreciation upto previous year	6936.76	7,773.96	8,080.99	8,388.03	8,695.06
Cumulative depreciation (incl. of AAD)	7773.96	8080.99	8388.03	8695.06	9002.10



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

57. The petitioner has computed normative O&M Expenses as per sub-clause (a) of clause (3) of Regulation 29 of the 2014 Tariff Regulations. The petitioner has claimed O&M Expenses for 400 kV D/C double conductor transmission line of 332.67 km line length, 132 kV S/C single conductor transmission lines of 22.29 km line length, 4 bays of 400 kV bay and 1 bay of 132 kV and below level. As already discussed in true up for tariff period 2009-14, we have worked out O&M expenses considering 4 no. of 400 kV bays. Accordingly, the petitioner’s entitlement to O&M expenses have been worked out as given hereunder:-

Particulars		(₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19
Actual line length (km)	Single Circuit (Single Conductor)	22.29	22.29	22.29	22.29	22.29
	Double Circuit (Twin & Triple Conductor)	166.335	166.335	166.335	166.335	166.335
Actual (No. of bays)	400 kV Bays	4	4	4	4	4
	132 kV and below Bays	1	1	1	1	1
Norms as per Regulation	Single Circuit (Single Conductor) (₹ lakh/km)	0.202	0.209	0.216	0.223	0.230
	Double Circuit (Twin & Triple Conductor) (₹lakh/km)	0.707	0.731	0.755	0.78	0.806
	400 kV Bays (₹lakh/bay)	60.30	62.30	64.37	66.51	68.71



Particulars		2014-15	2015-16	2016-17	2017-18	2018-19
	132 kV and below Bays (₹lakh/bay)	30.15	31.15	32.18	33.25	34.36
Total (₹ in lakh)		393.45	406.60	420.06	434.00	448.39

58. The petitioner has submitted that norms for 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 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.

59. 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.

60. The details of O&M Expenses allowed are given hereunder:-

		(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19	
O&M Expenses Allowed	393.45	406.60	420.06	434.00	448.39	



Interest on Working Capital (“IWC”)

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

“28. Interest on Working Capital

- (c)(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”

“(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;”

62. The petitioner has submitted that it has computed Interest on working capital for the tariff period 2014-19 considering the SBI Base Rate as on 1.4.2014 plus 350 basis points. The rate of interest on working capital considered is 13.50%.

63. 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 by the Commission is shown in the table below:-

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	59.02	60.99	63.01	65.10	67.26
O & M expenses	32.79	33.88	35.00	36.17	37.37
Receivables	471.36	386.16	388.53	390.98	393.51
Total	563.16	481.03	486.54	492.25	498.14
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	76.03	64.94	65.68	66.45	67.25



Annual Transmission Charges

64. The detailed computation of the various components of the annual fixed charges for the transmission asset for the tariff period 2014-19 is summarised below:-

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Block					
Opening Gross Block	15567.99	16143.03	16143.03	16143.03	16143.03
Additional Capitalisation	575.04	0.00	0.00	0.00	0.00
Closing Gross Block	16143.03	16143.03	16143.03	16143.03	16143.03
Average Gross Block	15855.51	16143.03	16143.03	16143.03	16143.03
Depreciation					
Rate of Depreciation	5.280	1.902	1.902	1.902	1.902
Depreciable Value	14269.96	14528.73	14528.73	14528.73	14528.73
Elapsed Life of the assets at beginning of the year	11	12	13	14	15
Weighted Balance Useful life of the assets	23	22	21	20	19
Remaining Depreciable Value	7333.20	6754.77	6447.73	6140.70	5833.66
Depreciation	837.20	307.03	307.03	307.03	307.03
Interest on Loan					
Gross Normative Loan	7895.58	8298.11	8298.11	8298.11	8298.11
Cumulative Repayment upto Previous Year	7895.58	8298.11	8298.11	8298.11	8298.11
Net Loan-Opening	0.00	0.00	0.00	0.00	0.00
Additions	402.53	0.00	0.00	0.00	0.00
Repayment during the year	402.53	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	0.00	0.00	0.00	0.00
Average Loan	0.00	0.00	0.00	0.00	0.00
Weighted Average Rate of Interest on Loan (%)	9.0306	8.7870	8.6740	8.6401	8.6401
Interest	0.00	0.00	0.00	0.00	0.00



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Return on Equity					
Opening Equity	7672.41	7844.92	7844.92	7844.92	7844.92
Additions	172.51	0.00	0.00	0.00	0.00
Closing Equity	7844.92	7844.92	7844.92	7844.92	7844.92
Average Equity	7758.66	7844.92	7844.92	7844.92	7844.92
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT Rate for the year 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)	1521.47	1538.39	1538.39	1538.39	1538.39
Interest on Working Capital					
Maintenance Spares	59.02	60.99	63.01	65.10	67.26
O & M expenses	32.79	33.88	35.00	36.17	37.37
Receivables	471.36	386.16	388.53	390.98	393.51
Total	563.16	481.03	486.54	492.25	498.14
Interest	76.03	64.94	65.68	66.45	67.25
Annual Transmission Charges					
Depreciation	837.20	307.03	307.03	307.03	307.03
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	1521.47	1538.39	1538.39	1538.39	1538.39
Interest on Working Capital	76.03	64.94	65.68	66.45	67.25
O & M Expenses	393.45	406.60	420.06	434.00	448.39
Total	2828.15	2316.96	2331.16	2345.88	2361.06

Filing Fee and Publication Expenses

65. 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

66. 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

67. The petitioner has sought to recover Service Tax on Transmission Charges separately from the Respondents, if at any time service tax on transmission is withdrawn from negative list in future. We are of the view that the petitioner's prayer is premature.

Deferred Tax Liability

68. The petitioner has sought recovery of deferred tax liability before 1.4.2009 from the beneficiaries or long term consumers/DICs as and when materialized under Regulation 49 of the 2014 Tariff Regulations. The deferred tax liability shall be dealt as per Regulation 49 of the 2014 Tariff Regulations, as amended. Accordingly, the petitioner is entitled to recover the deferred tax liability upto 31.3.2009 whenever the same materializes, directly from the beneficiaries or long term transmission customers /DICs.



Sharing of Transmission Charges

69. The billing, collection and disbursement of the transmission charges approved 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.

70. This order disposes of Petition No. 278/TT/2014.

Sd/-
(Dr. M. K. Iyer)
Member

Sd/-
(A.S. Bakshi)
Member



DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO

(₹in lakh)

Particulars	2009-14			
	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
GOI loan @14.59% upto 12.9.2007 replaced with LIC-III @10% on 13.9.2007 - DOCO drawl on 1-Jan-2003	10.00	3101.00	0.00	3101.00
GOI loan @14.59% upto 12.9.2007 replaced with LIC-III @10% on 13.9.2007 - DOCO drawl on 1-Oct-2001	10.00	173.00	0.00	173.00
Bond XXXIII- Addcap for 2010-11 Addcap loan for 2010-11	8.64	0.00	273.93	273.93
Bond XXXIII- Addcap for 2011-12 Addcap loan for 2011-12	8.64	0.00	0.07	0.07
Total		3274.00	274.00	3548.00

WEIGHTED AVERAGE RATE OF INTEREST ON LOAN DURING 2009-14 TARIFF PERIOD

(₹in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	3274.00	3274.00	3547.93	3548.00	3548.00
Cumulative Repayments of Loans upto Previous Year	1478.01	1804.28	2130.55	2456.82	2783.09
Net Loans Opening	1795.99	1469.72	1417.38	1091.18	764.91
Add: Drawal(s) during the year	0.00	273.93	0.07	0.00	0.00
Less: Repayment(s) of Loan during the year	326.27	326.27	326.27	326.27	326.27
Net Closing Loan	1469.72	1417.38	1091.18	764.91	438.64
Average Net Loan	1632.86	1443.55	1254.28	928.05	601.78
Interest on Loan	163.29	142.49	121.70	89.08	56.45
Rate of Interest on Loan (%)	10.0000	9.8710	9.7029	9.5985	9.3808

