

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 527/TT/2014

Coram:

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

**Date of Hearing : 03.02.2016
Date of Order : 17.02.2016**

In the matter of:

Truing up of transmission tariff for 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 **Asset-I:-**LILO of Patiala-Hissar line at Kaithal Sub-station along with associated bays, **Asset-II:-** 400 kV D/C Patiala-Ludhiana line along with associated bays at Patiala and Ludhiana Sub-station for transmission system associated with Rampur HEP 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. Rajasthan Rajya Vidyut Prasaran Nigam Limited.
Vidyut Bhawan, Vidyut Marg,
Jaipur-302 005
2. Ajmer Vidyut Vitran Nigam Limited.
400 kV GSS Building (Ground Floor), Ajmer Road
Heerapura, Jaipur
3. Jaipur Vidyut Vitran Nigam Limited.



400 kV GSS Building (Ground Floor), Ajmer Road
Heerapura, Jaipur

4. Jodhpur Vidyut Vitran Nigam Limited.
400 kV GSS Building (Ground Floor), Ajmer Road
Heerapura, Jaipur
5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan,
Kumar House Complex Building II
Shimla-171004
6. Punjab State Power Corporation Limited.
Thermal Shed T1 A, Near 22 Phatak
Patiala-147001
7. Haryana Power Purchase Centre
Shakti Bhawan, Sector-6
Panchkula (Haryana) 134 109
8. Power Development Deptt.
Govt. of Jammu & Kashmir
Mini Secretariat, Jammu
9. Uttar Pradesh Power Corporation Limited.
Shakti Bhawan, 14, Ashok Marg
Lucknow- 226001
10. Delhi Transco Limited.
Shakti Sadan, Kotla Road
New Delhi- 110002
11. BSES Yamuna Power Limited.
BSES Bhawan, Nehru Place
New Delhi
12. BSES Rajdhani Power Limited.
BSES Bhawan, Nehru Place
New Delhi
13. North Delhi Power Limited.
Power Trading & Load Dispatch Group
Cennet Building
Pitampura, New Delhi-110034



14. Chandigarh Administration
Sector-9, Chandigarh
15. Uttarakhand Power Corporation Limited.
Urja Bhawan, Kanwali Road
Dehradun
16. North Central Railway
Allahabad
17. New Delhi Municipal Council
Palika Kendra, Sansad Marg
New Delhi-110002

.....Respondents

The following were present:-

For Petitioner: Shri M. M. Mondal, PGCIL
Smt. Sangeeta Edwards, PGCIL
Shri S. C. Taneja, PGCIL
Shri Rakesh Prasad, PGCIL
Shri S. S. Raju, PGCIL

For Respondent: Shri B.L. Sharma, Rajasthan Discoms
Shri S.K. Aggarwal Advocate, Rajasthan Discoms
Shri S.R. Das, Advocate, Rajasthan Discoms

ORDER

The present petition has been filed by Power Grid Corporation of India Limited (“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 from 1.9.2011 to 31.3.2014 for Asset-I and for the period from 1.10.2011 to 31.3.2014 for Asset-II 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. The actual date of commercial operation of part of the asset i.e. "LILO of Patiala Hissar Line at Kaithal Sub-station (hereinafter referred as to "Asset-1") is 1.9.2011 and the remaining part of asset i.e. "400 kV Patiala Ludhiana Transmission Line along with associated bays at Patiala and Ludhiana Sub-station for transmission system associated with Rampur HEP (hereinafter referred to as "Asset 2") is 1.10.2011. Accordingly, the petitioner in the Petition No. 84/TT/2011 had sought the separate annual transmission charges as per actual date of commercial operations for Asset-I and Asset-II (hereinafter collectively referred as “the transmission asset”).

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

3. The petitioner has served the petition on the respondents and notice of this application has been published in the newspapers in accordance with Section 64 of Electricity Act, 2003 (“the Act”). No comments/objections have been received from the public in response to the notice in newspaper published by the petitioner under Section 64 of the Act. Rajasthan Discoms (Respondent No. 10,11,12) have filed the reply to the petitioner vide affidavit dated 23.12.2014. The petitioner has submitted the information sought vide letter dated



30.1.2016 through affidavit dated 12.2.2016. The petitioner also submitted the rejoinder to the reply of Rajasthan Discoms vide affidavit dated 16.2.2016.

4. The hearing in this matter was held on 3.2.2016. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

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

(a) The investment approval for the project was accorded by Board of Directors of the petitioner company vide C/CP/Rampur-HEP T.S dated 20.2.2009 at an estimated cost of ₹18419 lakh, which included IDC of ₹1416 lakh. The date of the commercial operation of Asset-I and Asset-II is 1.9.2011 and 1.10.2011 respectively. The approved apportioned cost for Asset-I is ₹6080.29 lakh and for Asset-II is ₹11159.86 lakh.

(b) The tariff from 1.9.2011 to 31.3.2014 for Asset-I and tariff from 1.10.2011 to 31.3.2014 for Asset-II was allowed vide order dated 25.4.2012 in Petition No. 84/TT/2011 in accordance with the 2009 Tariff Regulations. The tariff allowed for the instant assets for the tariff period 2009-14 is as under:-

Particulars	Asset-I			Asset-II		
	2011-12 (Pro-rata)	2012-13	2013-14	2011-12	2012-13	2013-14
Depreciation	156.73	288.30	289.62	224.27	464.05	468.48
Interest on Loan	180.18	312.03	287.93	255.94	499.58	463.69
Return on	155.44	285.79	287.10	222.25	459.80	464.20



Particulars	Asset-I			Asset-II		
	2011-12 (Pro-rata)	2012-13	2013-14	2011-12	2012-13	2013-14
equity						
Interest on Working Capital	13.77	24.83	24.80	20.38	41.85	42.08
O & M Expenses	82.03	148.67	157.15	132.38	279.92	295.91
Total	588.15	1059.61	1046.60	855.22	1745.20	1734.35

(c) The Commission, vide order dated 25.4.2012 in Petition No. 84/TT/2011, has determined the tariff for Asset-I and Asset-II for the tariff period 2009-14 considering the capital cost of ₹4737.72 lakh and ₹8267.88 lakh (excluding excess initial spares) respectively as on COD. The capital cost was considered after examination of the cost variation of the individual items and prudence check.

(d) The Commission, vide order dated 25.4.2012 in Petition No. 84/TT/2011, has disallowed the excess initial spares of ₹38.74 lakh and ₹60.44 lakh for Asset-I and Asset-II from the capital cost as on COD. Further, the petitioner's claim for additional ROE of 0.5% was disallowed as the transmission lines covered in the petition were commissioned beyond the specified timeline of 30 months.

(e) 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

6. The tariff for 2009-14 tariff period has been trued up based on actual capital cost and additional capital expenditure during 2009-14 tariff period. Rajasthan Discoms submitted that the petitioner has claimed higher tariff vis-à-vis that approved tariff and has requested to thoroughly scrutinise the various components of tariff such as O&M Expenses, Interest on Working Capital, etc. In response, the petitioner has submitted that it has claimed transmission tariff as per the 2009 Tariff Regulations based on Auditor Certificate and has requested to approve the tariff as claimed.

7. The petitioner has submitted the actual capital expenditure as on COD for the purpose of truing up. The admissible capital cost as on COD has been examined. Accordingly, the true up of annual fixed charges has been carried out as discussed in subsequent paragraph.

Initial Spares

8. Regulation 8 of the 2009 Tariff Regulations provides that initial spares shall be capitalised as a percentage of the original project cost, subject to following ceiling norms:-

“Transmission line:	0.75%
Transmission sub-station	2.5%
Series compensation devices& HVDC Station:	3.5%”

9. Regulation 3(29) of the 2009 Tariff Regulations provides as follows:-



“(29) ‘original project cost’ means the capital expenditure incurred by the generating company or the transmission licensee, as the case may be, within the original scope of the project up to the cut-off date as admitted by the Commission;”

10. The petitioner has deducted excess initial spares of ₹39.75 lakh and ₹62.37 lakh for Asset-I and Asset-II respectively from the capital cost of sub-station (including PLCC) as on COD. We have considered capital cost as on cut-off date to work out the admissible initial spares. The excess initial spares worked out and allowed for sub-station as per above regulation is shown in the table below:-

(₹ in lakh)					
Description	Capital cost as on cut-off date	Initial Spares claimed	Ceiling limit as per Regulation 8 of 2009 regulations	Initial spares worked out	Excess initial spares claimed
	(a)	(b)	(c)	$(d) = ((a - b) * c) / (100 - c)\%$	$(e) = (b) - (d)$
Asset-I	682.25	55.81	2.50%	16.06	39.75
Asset-II	1002.54	85.87	2.50%	23.50	62.37

The variation in initial spares worked out above and allowed in earlier order in Petition No. 84/TT/2011 is on account of change of capital cost upto cut-off date.

Capital Cost

11. The petitioner has claimed capital cost of ₹4736.71 lakh for Asset-I and ₹8265.95 lakh for Asset-II as on COD after deducting excess initial spares of ₹39.75 lakh and ₹62.37 lakh from ₹4776.46 lakh and ₹8328.32 lakh respectively for the purpose of tariff.



12. Clause (1) of Regulation 7 of the 2009 Tariff Regulations provides that:-

“(1) Capital cost for a project shall include:

(a) the expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan - (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check;

(b) capitalised initial spares subject to the ceiling rates specified in regulation 8; and

(c) additional capital expenditure determined under regulation 9:

Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost.”

13. The petitioner has filed an application for the determination of tariff based on the Auditor's Certificate certifying the capital cost and additional capitalization claimed. The revised capital cost of ₹4736.71 lakh excluding excess initial spares of ₹39.75 lakh has been considered as on COD i.e. 1.9.2011 for tariff computation from 1.9.2011 to 31.3.2011 for Asset-I. Further, the revised capital cost of ₹8265.95 lakh excluding excess initial spares of ₹62.37 lakh has been considered as on COD i.e. 1.10.2011 for tariff computation from 1.10.2011 to 31.3.2014 for Asset-II.

Additional Capital Expenditure

14. The petitioner has claimed additional capitalization under Regulation 9(1)(i) of the 2009 Tariff Regulations.



15. Clause (1)(i) of Regulation 9 of the 2009 Tariff Regulations provides that:-

“Additional Capitalisation. (1) The capital expenditure 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; “

16. The petitioner has claimed additional capitalization of ₹452.80 lakh, ₹257.82 lakh and ₹18.27 lakh for 2011-12, 2012-13 and 2013-14 respectively for Asset-I towards actual balance and retention payment. Further, the petitioner has claimed additional capitalization of ₹473.38 lakh, ₹189.87 lakh and ₹24.03 lakh for 2011-12, 2012-13 and 2013-14 respectively for Asset-II towards actual balance and retention payment.

17. The total capital cost of ₹5465.60 lakh for Asset-I including actual additional capitalisation claimed by the petitioner is well within the overall approved apportioned cost of ₹6080.29 lakh. Further, the total capital cost of ₹8953.23 lakh for Asset-II including actual additional capitalisation claimed by the petitioner is also well within the overall approved apportioned cost of ₹11159.86 lakh Hence, considering the submissions made by the petitioner, we have allowed total capital cost including additional capitalization under Regulation 9(1)(i) of the 2009 Tariff Regulations as shown in the following table:-



(₹ in lakh)

Cost as per Investment Approval is ₹6080.29 lakh (Asset-I)							
Particulars	Name of the asset	Capital cost upto COD	2011-12	2012-13	2013-14	Total add cap	Total capital cost as on 31.3.2014
Approved in order dated 25.4.2012	Asset-I	4737.72	686.82	50.00	0.00	736.82	5474.54
Allowing in this order		4736.71	452.80	257.82	18.27	728.89	5465.60

Cost as per Investment Approval is ₹11159.86 lakh (Asset-II)							
Particulars	Name of the asset	Capital cost upto COD	2011-12	2012-13	2013-14	Total add cap	Total capital cost as on 31.3.2014
Approved in order dated 25.4.2012	Asset-II	8267.88	415.94	167.65	0.00	583.59	8851.47
Allowed in this case		8265.95	473.38	189.87	24.03	687.28	8953.23

Debt: Equity

18. Clause 1 & 3 of Regulation 12 of the 2009 Tariff Regulations provides that:-

“(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:

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

.....

(3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”



19. The petitioner has claimed true up Annual Fixed Charge based on the admitted debt-equity ratio of 70:30 as on 1.9.2011 and 1.10.2011. The admitted debt:equity ratio of 70:30 as on 1.9.2011 for Asset-I and 1.10.2011 for Asset-II has been considered for the purpose of true up of tariff of 2009-14 tariff period, as given under:-

Funding (Asset-I)	Amount (₹ in lakh)	(%)
Debt	3315.80	70.00
Equity	1420.91	30.00
Total	4736.71	100.00

Funding (Asset-II)	Amount (₹ in lakh)	(%)
Debt	5786.17	70.00
Equity	2479.78	30.00
Total	8265.95	100.00

20. With respect to additional capitalization, the petitioner has submitted the debt:equity ratio of 70:30 for 2011-12, 2012-13 and 2013-14 for Asset-I and Asset-II. The petitioner was directed to confirm that the actual equity infused for additional capitalization during the 2009-14 tariff period is not less than 30%. In response, the petitioner vide affidavit dated 12.2.2016 has submitted that actual loan deployed for 2011-12, 2012-13 and 2013-14 is 70% for Asset-I and Asset-II, therefore the balance amount has been deployed as equity i.e. 30%. The overall debt:equity as on 31.3.2014 for Asset-I and Asset-II including additional capitalization is as under:-

Funding (Asset-I)	Amount (in ₹ lakh)	(%)
Debt	3826.02	70.00
Equity	1639.58	30.00
Total	5465.60	100.00



Funding (Asset-II)	Amount (in ₹ lakh)	(%)
Debt	6267.28	70.00
Equity	2685.95	30.00
Total	8953.23	100.00

Interest on Loan (“IOL”)

21. 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”.

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

23. 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-I** and the IOL has been worked out for Asset-I and Asset-II and allowed as follows:-

Particulars (Asset-I)	(₹ in lakh)		
	2011-12 (pro-rata)	2012-13	2013-14
Approved vide order dated 25.4.2012	180.18	312.03	287.93
As claimed by petitioner	176.26	305.75	289.21
Allowed after true up	176.25	305.75	289.20

Particulars (Asset-II)	(₹ in lakh)		
	2011-12 (pro-rata)	2012-13	2013-14
Approved vide order dated 25.4.2012	255.94	499.58	463.69
As claimed by petitioner	257.32	506.96	472.43



Particulars (Asset-II)	2011-12 (pro-rata)	2012-13	2013-14
Allowed after true up	257.32	506.97	472.44

24. The interest on loan has decreased for Asset-I due to lower additional capitalization whereas it has increased for Asset-II due to higher additional capitalization as compared to the admitted additional capitalization.

Return on Equity (“ROE”)

25. Clause (3), (4) and (5) of Regulation 15 of the 2009 Tariff Regulations provide as follows:-

“(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 maybe, 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.”

26. The petitioner has submitted that MAT rate of 11.330% applicable for 2008-09 was considered in the order dated 25.4.2012. However, for truing up



purpose, the computation of RoE for the tariff period 2009-14 has been done on the basis of actual MAT rate applicable 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)) %
2011-12	20.008	19.377
2012-13	20.008	19.377
2013-14	20.961	19.610

27. Accordingly, ROE as allowed for Asset-I and Combined Asset-I & II and is shown in the table below:-

Particulars (Asset-I)	(₹ in lakh)		
	2011-12 (pro-rata)	2012-13	2013-14
Approved vide order dated 25.4.2012	155.44	285.79	287.10
As claimed by petitioner	168.29	309.15	320.98
Allowed after true up	168.28	309.15	320.98

Particulars (Asset-II)	(₹ in lakh)		
	2011-12 (Pro-rata)	2012-13	2013-14
Approved vide order dated 25.4.2012	222.25	459.80	464.20
As claimed by petitioner	247.13	513.54	526.01
Allowed after true up	247.12	513.54	526.01

28. The variation in return on equity is on account of variation in additional capitalisation and increase in the applicable MAT rate for the purpose of grossing up of base rate of return on equity.



Depreciation

29. 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”

30. Clause (4) of Regulation 17 of the 2009 Tariff Regulations provides 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.”

31. The Commission, in its order dated 25.4.2012 in Petition No. 84/TT/2011 has worked out the depreciation in accordance with Regulation 17 of the 2009 Tariff Regulations.

32. The weighted average useful life of the transmission asset has been considered as per Regulations 3 (42) and 17 (4) of the 2009 Tariff Regulations. For the purpose of calculation, the weighted average useful life of the asset has been considered as 34 years for both Asset-I and Asset-II. 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 as under:-



(₹ in lakh)

Particulars (Asset-I)	2011-12 (pro-rata)	2012-13	2013-14
Approved vide order dated 25.4.2012	156.73	288.30	289.62
As claimed by petitioner	153.08	281.33	288.62
Allowed after true up	153.08	281.33	288.61

(₹ in lakh)

Particulars (Asset-II)	2011-12 (pro-rata)	2012-13	2013-14
Approved vide order dated 25.4.2012	224.27	464.05	468.48
As claimed by petitioner	224.92	467.36	473.01
Allowed after true up	224.91	467.35	473.00

The variation in depreciation is on account of lower additional capitalization for Asset-I and higher additional capitalization for Asset-II for 2009-14 tariff period.

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

33. The petitioner has computed O&M Expenses for the assets mentioned in the petition and in accordance with the O&M norms for lines and bays specified in Regulation 19(g) of the 2009 Tariff Regulations. The O&M Expenses claimed by the petitioner for Asset-I & II are same as that approved in the tariff orders. Accordingly, the O&M Expenses claimed by the petitioner, allowed and trued up are the same, and are as follows:-

(₹ in lakh)

Particulars (Asset-I)	2011-12 (pro-rata)	2012-13	2013-14
Approved vide order dated 25.4.2012	82.03	148.67	157.15
As claimed by petitioner	82.03	148.67	157.15
Allowed after true up	82.03	148.67	157.15



(₹ in lakh)			
Particulars (Asset-II)	2011-12 (pro-rata)	2012-13	2013-14
Approved vide order dated 25.4.2012	132.38	279.92	295.91
As claimed by petitioner	132.28	279.92	295.91
Allowed after true up	132.38	279.92	295.91

Interest on working capital (“IWC”)

34. 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.

35. The petitioner has submitted that the rate of interest on working capital has been considered as 11.75% for Asset-I & II as per clause (3)(ii) 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.

36. In accordance with Clause (3)(ii) of Regulation 18 of the 2009 Tariff Regulations (Second Amendment), rate of interest on working capital shall be on normative basis and in case of transmission assets declared under commercial operation after 1.7.2010 shall be equal to SBI Base Rate plus 350 basis points as on 1st April of the year in which the transmission asset was declared under commercial operation. State Bank of India base Bate as on 1.4.2011 was 8.25%. Therefore, interest rate of 11.75% for Asset-I and II has been considered to work out the interest on working capital in the instant case.



37. The IWC trued up is as under:-

(₹ in lakh)			
Particulars	2011-12	2012-13	2013-14
Maintenance Spares	12.30	22.30	23.57
O & M expenses	6.84	12.39	13.10
Receivables	98.92	178.32	180.24
Total	118.06	213.01	216.91
Rate of Interest (%)	11.75	11.75	11.75
Interest	13.87	25.03	25.49

(₹ in lakh)			
Particulars	2011-12	2012-13	2013-14
Maintenance Spares	19.86	41.99	44.39
O & M expenses	11.03	23.33	24.66
Receivables	147.11	301.82	301.82
Total	178.00	367.13	370.87
Rate of Interest (%)	11.75	11.75	11.75
Interest	20.91	43.14	43.58

(₹ in lakh)			
Particulars (Asset-I)	2011-12 (pro-rata)	2012-13	2013-14
Approved vide order dated 25.4.2012	13.77	24.83	24.80
As claimed by petitioner	13.87	25.03	25.49
Allowed after true up	13.87	25.03	25.49

(₹ in lakh)			
Particulars (Asset-II)	2011-12 (pro-rata)	2012-13	2013-14
Approved vide order dated 25.4.2012	20.38	41.85	42.08
As claimed by petitioner	20.92	43.14	43.58
Allowed after true up	20.91	43.14	43.58

38. The variation in IWC is on account of variation in IOL, Depreciation and ROE during 2009-14 tariff period.



ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

39. The detailed computation of the various components of the trued up annual fixed charges for Asset-I and Asset-II for the tariff period 2009-14 is summarised below:-

(₹ in lakh)			
Particulars (Asset-I)	2011-12 (Pro-rata)	2012-13	2013-14
Gross Block			
Gross Opening Block	4736.71	5189.51	5447.33
Additional Capitalisation	452.80	257.82	18.27
Gross Closing Block	5189.51	5447.33	5465.60
Average Gross Block	4963.11	5318.42	5456.46
Depreciation			
Rate of Depreciation (%)	5.288%	5.290%	5.289%
Depreciable Value	4466.80	4786.58	4910.82
Elapsed Life (Beginning of the year)	0	1	2
Weighted Balance Useful life of the assets	34	33	32
Remaining Depreciable Value	4466.80	4633.50	4476.42
Depreciation	153.08	281.33	288.61
Interest on Loan			
Gross Normative Loan	3315.80	3632.76	3813.23
Cumulative Repayment upto Previous Year	0.00	153.08	434.40
Net Loan-Opening	3315.80	3479.68	3378.83
Additional Capitalisation	316.96	180.47	12.79
Repayment during the year	153.08	281.33	288.61
Net Loan-Closing	3479.68	3378.83	3103.00
Average Loan	3397.74	3429.26	3240.91
Weighted Average Rate of Interest on Loan (%)	8.8931	8.9159	8.9236
Interest	176.25	305.75	289.20
Return on Equity			
Opening Equity	1420.91	1556.75	1634.10
Additional Capitalisation	135.84	77.35	5.48
Closing Equity	1556.75	1634.10	1639.58
Average Equity	1488.83	1595.43	1636.84



Particulars (Asset-I)	2011-12 (Pro-rata)	2012-13	2013-14
Return on Equity (Base Rate) (%)	15.50	15.50	15.50
Tax rate for the year (%)	20.008	20.008	20.961
Rate of Return on Equity (Pre Tax) (%)	19.377	19.377	19.610
Return on Equity (Pre Tax)	168.28	309.15	320.98
Interest on Working Capital			
Maintenance Spares	12.30	22.30	23.57
O & M expenses	6.84	12.39	13.10
Receivables	98.92	178.32	180.24
Total	118.06	213.01	216.91
Interest	13.87	25.03	25.49
Annual Transmission Charges			
Depreciation	153.08	281.33	288.61
Interest on Loan	176.25	305.75	289.20
Return on Equity	168.28	309.15	320.98
Interest on Working Capital	13.87	25.03	25.49
O & M Expenses	82.03	148.67	157.15
Total	593.51	1069.92	1081.45

(₹ in lakh)

Particulars (Asset-II)	2011-12 (Pro-rata)	2012-13	2013-14
Gross Block			
Gross Opening Block	8265.95	8739.33	8929.20
Additional Capitalisation	473.38	189.87	24.03
Gross Closing Block	8739.33	8929.20	8953.23
Average Gross Block	8502.64	8834.27	8941.22
Depreciation			
Rate of Depreciation (%)	5.291	5.290	5.290
Depreciable Value	7652.38	7950.84	8047.09
Elapsed Life (Beginning of the year)	0	1	2
Weighted Balance Useful life of the assets	34	33	32
Remaining Depreciable Value	7652.38	7725.93	7354.83
Depreciation	224.91	467.35	473.00
Interest on Loan			
Gross Normative Loan	5786.17	6117.55	6250.46



Particulars (Asset-II)	2011-12 (Pro-rata)	2012-13	2013-14
Cumulative Repayment upto Previous Year	0.00	224.91	692.27
Net Loan-Opening	5786.17	5892.64	5558.19
Additional Capitalisation	331.38	132.91	16.82
Repayment during the year	224.91	467.35	473.00
Net Loan-Closing	5892.64	5558.19	5102.01
Average Loan	5839.40	5725.42	5330.10
Weighted Average Rate of Interest on Loan (%)	8.8134	8.8547	8.8635
Interest	257.32	506.97	472.44
Return on Equity			
Opening Equity	2479.78	2621.78	2678.74
Additional Capitalisation	142.00	56.96	7.21
Closing Equity	2621.78	2678.74	2685.95
Average Equity	2550.78	2650.26	2682.35
Return on Equity (Base Rate) (%)	15.50	15.50	15.50
Tax rate for the year (%)	20.008	20.008	20.961
Rate of Return on Equity (Pre Tax) (%)	19.377	19.377	19.610
Return on Equity (Pre Tax)	247.12	513.54	526.01
Interest on Working Capital			
Maintenance Spares	19.86	41.99	44.39
O & M expenses	11.03	23.33	24.66
Receivables	147.11	301.82	301.82
Total	178.00	367.13	370.87
Interest	20.91	43.14	43.58
Annual Transmission Charges			
Depreciation	224.91	467.35	473.00
Interest on Loan	257.32	506.97	472.44
Return on Equity	247.12	513.54	526.01
Interest on Working Capital	20.91	43.14	43.58
O & M Expenses	132.38	279.92	295.91
Total	882.64	1810.92	1810.93

DETERMINATION OF ANNUAL TRANSMISSION CHARGES FOR 2014-19

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

(₹ in lakh)



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	762.73	762.73	762.73	762.73	762.73
Interest on Loan	695.65	628.38	560.81	493.09	425.37
Return on equity	848.26	848.26	848.26	848.26	848.26
Interest on Working Capital	76.09	75.31	74.54	73.80	73.08
O & M Expenses	416.28	430.15	444.44	459.19	474.40
Total	2799.01	2744.83	2690.78	2637.07	2583.84

41. 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	62.44	64.52	66.67	68.88	71.16
O & M expenses	34.69	35.85	37.04	38.27	39.53
Receivables	466.50	457.47	448.46	439.51	430.64
Total	563.63	557.84	552.17	546.66	541.33
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	76.09	75.31	74.54	73.80	73.08

Capital Cost

42. 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 tried 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.”



43. The petitioner has claimed capital expenditure of ₹14418.83 lakh as on 31.3.2014 for Combined Asset-I & II the tariff period 2014-19. The trued up capital cost of ₹14418.83 lakh as on 31.3.2014 for Combined Asset-I & II is considered to work out the tariff for tariff period 2014-19.

Additional Capital Expenditure

44. The petitioner has not projected any additional capitalization for 2014-19 tariff period. The petitioner was directed vide letter dated 30.1.2016 to submit the amount of balance and retention payment yet to be made along with the details of contract for which the payment has been retained. In response, the petitioner vide affidavit dated 12.2.2016 has submitted that no balance and retention payment need to be made. Accordingly, no additional capitalization has been considered for tariff computation for 2014-19 tariff period.

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 70:30 as on 31.3.2014. The admitted debt:equity ratio of 70:30 after true-up for the tariff period ending 31.3.2014 has been considered as opening debt:equity ratio as on 1.4.2014. Further, as no additional capitalization has been claimed for 2014-19 tariff period



debt:equity ratio as on 1.4.2014 will remain same as on 31.3.2019. The details of the debt:equity considered for the purpose of tariff for 2014-19 tariff period is as follows:-

Particulars	As on 1.4.2014	
	Amount (in ₹ lakh)	(%)
Debt	10093.30	70.00
Equity	4325.53	30.00
Total	14418.83	100.00

Interest on Loan (“IOL”)

47. 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.”

48. The weighted average rate of IOL has been considered on the basis of rate prevailing as on 1.4.2014. The IOL has been worked out in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of weighted average rate of interest are placed at **Annexure-II** and the IOL has been worked out and allowed as follows:-



(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross loan opening	10093.30	10093.30	10093.30	10093.30	10093.30
Cumulative Repayment upto COD/previous year	1888.28	2651.02	3413.75	4176.48	4939.21
Net Loan-Opening	8205.01	7442.28	6679.55	5916.81	5154.08
Additions during the year	0.00	0.00	0.00	0.00	0.00
Repayment during the year	762.73	762.73	762.73	762.73	762.73
Net Loan-Closing	7442.28	6679.55	5916.81	5154.08	4391.35
Average Loan	7823.64	7060.91	6298.18	5535.45	4772.71
Rate of Interest (%)	8.8917	8.8994	8.9045	8.9081	8.9125
Interest	695.66	628.38	560.82	493.10	425.37

Return on Equity (“ROE”)

49. 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:

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

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.”



50. The petitioner has computed ROE at the rate of 19.610% after grossing up the ROE of 15.50% 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.

51. 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.

52. 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 worked is given below:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	4325.53	4325.53	4325.53	4325.53	4325.53
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Equity	4325.53	4325.53	4325.53	4325.53	4325.53
Average Equity	4325.53	4325.53	4325.53	4325.53	4325.53
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)	848.24	848.24	848.24	848.24	848.24

Depreciation

53. 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."



54. The petitioner has computed depreciation considering capital expenditure of ₹14418.83 lakh as on 31.3.2014 for Combined Asset-I & II for 2014-19 tariff period.

55. We have considered the submissions of the petitioner and have allowed depreciation considering capital expenditure of ₹14418.83 lakh as on 31.3.2014 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	14418.83	14418.83	14418.83	14418.83	14418.83
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Gross block at the end of the year	14418.83	14418.83	14418.83	14418.83	14418.83
Average gross block	14418.83	14418.83	14418.83	14418.83	14418.83
Rate of Depreciation (%)	5.290	5.290	5.290	5.290	5.290
Depreciable Value	12976.95	12976.95	12976.95	12976.95	12976.95
Elapsed Life of the assets at beginning of the year	3	4	5	6	7
Weighted Balance Useful life of the assets	31	30	29	28	27
Remaining Depreciable Value	11088.66	10325.93	9563.20	8800.47	8037.73
Depreciation	762.73	762.73	762.73	762.73	762.73

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

56. The petitioner has computed normative O&M Expenses as per sub clause (a) of clause (3) of Regulation 29 of the 2014 Tariff Regulations. Accordingly, the petitioner’s entitlement to O&M Expenses have been worked out as given hereunder:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expense for line					
Norm (₹lakh/km)					



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Double Circuit (Twin & Triple Conductor)	0.707	0.731	0.755	0.780	0.806
Single Circuit (Twin & Triple Conductor)	0.404	0.418	0.432	0.446	0.461
Line (km)					
400 kV D/C Gorakhpur-Lucknow line	263.933	263.933	263.933	263.933	263.933
Patiala Ludhiana line	76.215	76.215	76.215	76.215	76.215
Total O&M Expense (line) (₹lakh)	54.48	56.35	58.22	60.13	62.14
O&M Expense for Bay					
Norm (₹lakh/Bay)					
400 kV	60.30	62.30	64.37	66.51	68.71
Bays					
400 kV	6	6	6	6	6
Total O&M Expense (Bay) (₹lakh)	361.80	373.80	386.22	399.06	412.26
Total O&M Expense (line & Bay) (₹lakh)	416.28	430.15	444.44	459.19	474.40

57. 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 Company is due during 2014-19 and actual impact of wage hike, which will be effective at a future date, has not been factored in fixation of the normative O&M rate specified for the tariff period 2014-19. The petitioner has prayed to be allowed to approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase. Rajasthan Discoms submitted that the 2014 Tariff Regulations have been framed after detailed discussion and consultation and thus the sanctity of the regulations should be maintained and any request by the petitioner for revision of O&M norms should not be entertained. Rajasthan Discoms further



submitted that expected wage rise in future as mentioned by the petitioner may be thoroughly checked and any additional charges should be allowed in accordance with the law. The petitioner in response submitted that O&M expenditure been arrived by the Hon'ble Commission after considering (i) normalized actual O&M expenses of the petitioner on its various projects in various regions during the year 2008-09, 2009-10, 2010-11, 2011-12 and 2012-13. It is submitted that the wage revision of the employees of the petitioner's company is due during 2014-19 and actual impact of wage hike which will be effective from the future date has also not been factored in the fixation of the normative O&M rates prescribed for the tariff block 2014-19. The scheme of wage revision applicable to CPSUs being binding on the petitioner, the petitioner reserves the right to approach the Hon'ble Commission for suitable revision in the norms for O&M expenditure for claiming impact of wage hike, if any, during 2014-19.

58. 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.

59. 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	416.28	430.15	444.44	459.19	474.40



Interest on Working Capital (“IWC”)

60. 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;”

61. 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%.

62. 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). Further, there is difference in IWC claimed by the petitioner and approved by the Commission for tariff period 2014-19, due to difference in RoE claimed and approved in this order. The interest on working capital worked out is shown in the table below:-



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	62.44	64.52	66.67	68.88	71.16
O & M Expenses	34.69	35.85	37.04	38.27	39.53
Receivables	466.50	457.47	448.46	439.51	430.64
Total	563.63	557.84	552.17	546.65	541.33
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	76.09	75.31	74.54	73.80	73.08

Annual Transmission Charges

63. 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:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Block					
Opening Gross Block	14418.83	14418.83	14418.83	14418.83	14418.83
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	14418.83	14418.83	14418.83	14418.83	14418.83
Average Gross Block	14418.83	14418.83	14418.83	14418.83	14418.83
Depreciation					
Rate of Depreciation (%)	5.290	5.290	5.290	5.290	5.290
Depreciable Value	12976.95	12976.95	12976.95	12976.95	12976.95
Elapsed Life (Beginning of the year)	3	4	5	6	7
Weighted Balance Useful life of the assets	31	30	29	28	27
Remaining Depreciable Value	11088.66	10325.93	9563.20	8800.47	8037.73
Depreciation	762.73	762.73	762.73	762.73	762.73
Interest on Loan					
Gross Normative Loan	10093.30	10093.30	10093.30	10093.30	10093.30



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Cumulative Repayment upto Previous Year	1888.28	2651.02	3413.75	4176.48	4939.21
Net Loan-Opening	8205.01	7442.28	6679.55	5916.81	5154.08
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	762.73	762.73	762.73	762.73	762.73
Net Loan-Closing	7442.28	6679.55	5916.81	5154.08	4391.35
Average Loan	7823.64	7060.91	6298.18	5535.45	4772.71
Weighted Average Rate of Interest on Loan (%)	8.8917	8.8994	8.9045	8.9081	8.9125
Interest	695.66	628.38	560.82	493.10	425.37
Return on Equity					
Opening Equity	4325.53	4325.53	4325.53	4325.53	4325.53
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	4325.53	4325.53	4325.53	4325.53	4325.53
Average Equity	4325.53	4325.53	4325.53	4325.53	4325.53
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)	848.24	848.24	848.24	848.24	848.24
Interest on Working Capital					
Maintenance Spares	62.44	64.52	66.67	68.88	71.16
O & M expenses	34.69	35.85	37.04	38.27	39.53
Receivables	466.50	457.47	448.46	439.51	430.64
Total	563.63	557.84	552.17	546.65	541.33
Interest	76.09	75.31	74.54	73.80	73.08
Annual Transmission Charges					
Depreciation	762.73	762.73	762.73	762.73	762.73
Interest on Loan	695.66	628.38	560.82	493.10	425.37
Return on Equity	848.24	848.24	848.24	848.24	848.24
Interest on Working Capital	76.09	75.31	74.54	73.80	73.08
O & M Expenses	416.28	430.15	444.44	459.19	474.40
Total	2798.99	2744.80	2690.77	2637.05	2583.82



Filing Fee and Publication Expenses

64. 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

65. 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

66. 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. Rajasthan Discoms submitted that the petitioner's claim is on presumption basis and should not be allowed. The petitioner in response has submitted that Service tax on



transmission has been put on negative list w.e.f 1.4.2012 and therefore the transmission charges, is exclusive of service tax and the same shall be borne and additionally paid by the respondent(s) to the petitioner and the same shall be charged, billed separately by the petitioner in case same is withdrawn from the negative list at any time as above in future. We are of the view that the petitioner's prayer is premature.

Sharing of Transmission Charges

67. 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.

68. This order disposes of Petition No. 527/TT/2014.

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

Sd/-
(A.S. Bakshi)
Member



ANNEXURE-I**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO****(₹ in lakh)**

Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXX DOCO DRAWL ON 1 SEP 2011	8.80%	300.00	0.00	300.00
BOND XXXI DOCO DRAWL ON 1 SEP 2011	8.90%	600.00	0.00	600.00
BOND XXXIII DOCO DRAWL ON 1 SEP 2011	8.64%	1000.00	0.00	1000.00
BOND XXXIV DOCO DRAWL ON 1 SEP 2011	8.84%	1056.00	0.00	1056.00
BOND XXXV-ADDCAP FOR 2011-2012 Add Cap-	9.64%	0.00	27.50	27.50
BOND-XXXV-DOCO	9.64%	359.80	0.00	359.80
BOND-XXXVI-ADDCAPFOR 2011-2012 Add Cap-	9.35%	0.00	44.80	44.80
BOND-XXXVIII-ADD CAP FOR 2011-2012 Add Cap-	9.25%	0.00	244.66	244.66
SBI (21.03.2012)- ADDCAP FOR 2012-13 Add cap-	0.00%	0.00	0.00	0.00
SBI (21.03.2012)- ADDCAP FOR 2013-14 Add cap-	0.00%	0.00	0.00	0.00
BOND XL-ADDCAP FOR 2012-2013 Add Cap-	0.00%	0.00	0.00	0.00
BOND XLI-ADDCAP FOR 2012-2013 Add Cap-	0.00%	0.00	0.00	0.00
Total		3315.80	316.96	3632.76



(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXX DOCO DRAWL ON 1 OCT 2011	8.80%	405.00	0.00	405.00
BOND XXXI DOCO DRAWL ON 1 OCT 2011	8.90%	1042.00	0.00	1042.00
BOND XXXIII DOCO DRAWL ON 1 OCT 2011	8.64%	2094.00	0.00	2094.00
BOND XXXIV DOCO DRAWL ON 1 OCT 2011	8.84%	2144.00	0.00	2144.00
BOND XXXV DOCO DRAWL ON 1 OCT 2011	9.64%	100.00	0.00	100.00
BOND XXXVIII-ADDCAP FOR 2011-2012 Add Cap-	9.25%	0.00	236.18	236.18
SBI (21.03.2012)- ADDCAP FOR 2012-13 Add cap-	10.64%	0.00	95.20	95.20
SBI (21.03.2012)- ADDCAP FOR 2012-13 Add cap-	0.00%	0.00	0.00	0.00
SBI (21.03.2012)- ADDCAP FOR 2013-14 Add cap-	0.00%	0.00	0.00	0.00
Total		5785.00	331.38	6116.38



**CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN
FOR TARIFF PERIOD 2009-14**

(₹ in lakh)

Details of Loan (Asset-I)	2011-12	2012-13	2013-14
Gross Opening Loan	3315.80	3632.76	3813.23
Cumulative Repayment of loan upto previous year	0.00	0.00	0.00
Net Loan Opening	3315.80	3632.76	3813.23
Additions during the year	316.96	180.47	12.79
Repayment during the year	0.00	0.00	75.00
Net Loan Closing	3632.76	3813.23	3751.02
Average Loan	3474.28	3723.00	3782.13
Weighted Average Rate of Interest (%)	8.89%	8.92%	8.92%
Interest	308.97	331.94	337.50

(₹ in lakh)

Details of Loan (Asset-II)	2011-12	2012-13	2013-14
Gross Opening Loan	5785.00	6116.38	6249.29
Cumulative Repayment of loan upto previous year	0.00	0.00	0.00
Net Loan Opening	5785.00	6116.38	6249.29
Additions during the year	331.38	132.91	16.82
Repayment during the year	0.00	0.00	120.58
Net Loan Closing	6116.38	6249.29	6145.53
Average Loan	5950.69	6182.84	6197.41
Weighted Average Rate of Interest (%)	8.81%	8.85%	8.86%
Interest	524.46	547.47	549.31



ANNEXURE-II**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO****(₹ in lakh)**

Particulars (Combined Asset-I & II)	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXX-1 DOCO DRAWL ON 1 SEP 2011	8.80%	300.00	0.00	300.00
BOND XXX-13 DOCO DRAWL ON 1 OCT 2011	8.80%	405.00	0.00	405.00
BOND XXXI-14 DOCO DRAWL ON 1 OCT 2011	8.90%	1042.00	0.00	1042.00
BOND XXXI-2. DOCO DRAWL ON 1 SEP 2011	8.90%	600.00	0.00	600.00
BOND XXXIII-15. DOCO DRAWL ON 1 OCT 2011	8.64%	2094.00	0.00	2094.00
BOND XXXIII-3. DOCO DRAWL ON 1 SEP 2011	8.64%	1000.00	0.00	1000.00
BOND XXXIV-16. DOCO DRAWL ON 1 OCT 2011	8.84%	2144.00	0.00	2144.00
BOND XXXIV.4 DOCO DRAWL ON 1 SEP 2011	8.84%	1056.00	0.00	1056.00
BOND XXXV-17. DOCO DRAWL ON 1 OCT 2011	9.64%	100.00	0.00	100.00
BOND-XXXV-6-DOCO	9.64%	359.80	0.00	359.80
BOND XXXV-7.ADDCAP FOR 2011-2012 Add Cap-	9.64%	27.50	0.00	27.50
BOND-XXXVI-8.ADDCAPFOR 2011-2012 Add Cap-	9.35%	44.80	0.00	44.80
BOND XXXVIII-21.ADDCAP FOR 2011-2012 Add Cap-	9.25%	236.18	0.00	236.18
BOND-XXXVIII-9.ADD CAP FOR 2011-2012 Add Cap-	9.25%	244.66	0.00	244.66
SBI (21.03.2012)-12.ADDCAP FOR 2012-13 Add cap-	10.25%	3.62	0.00	3.62
SBI (21.03.2012)-18. ADDCAP FOR 2012-13 Add cap-	10.25%	132.91	0.00	132.91



Particulars (Combined Asset-I & II)	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
SBI (21.03.2012)-19.ADDCAP FOR 2013-14 Add cap-	10.25%	16.82	0.00	16.82
SBI (21.03.2012)-20.ADDCAP FOR 2011-12 Add cap-	10.25%	95.20	0.00	95.20
SBI (21.03.2012)-5.ADDCAP FOR 2013-14 Add cap-	10.25%	12.79	0.00	12.79
BOND XL-10.ADDCAP FOR 2012-2013 Add Cap-	9.30%	97.85	0.00	97.85
BOND XLI-11.ADDCAP FOR 2012-2013 Add Cap-	8.85%	79.00	0.00	79.00
Total		10092.13	0.00	10092.13



**CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN
FOR TARIFF PERIOD 2014-19**

(₹ in lakh)

Details of Loan (Combined Asset-I & II)	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	10092.13	10092.13	10092.13	10092.13	10092.13
Cumulative Repayment of loan upto previous year	195.58	915.66	1676.34	2478.49	3280.64
Net Loan Opening	9896.55	9176.47	8415.79	7613.64	6811.49
Additions during the year	0.00	0.00	0.00	0.00	0.00
Repayment during the year	720.08	760.68	802.15	802.15	802.15
Net Loan Closing	9176.47	8415.79	7613.64	6811.49	6009.34
Average Loan	9536.51	8796.13	8014.72	7212.57	6410.42
Weighted Average Rate of Interest (%)	8.89%	8.90%	8.90%	8.91%	8.91%
Interest	847.96	782.80	713.67	642.50	571.33

