

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 490/TT/2014

Coram:

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

**Date of Hearing : 20.01.2016
Date of Order : 22.02.2016**

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-1**: 315 MVA ICT-III at Ludhiana S/s associated with Northern Region System Strengthening Scheme-VII, **Asset-2**: 4th 400/220 kV, 315 x04 MVA ICT at Wagoora S/s associated with Northern Region System Strengthening Scheme-VII for Northern Region system strengthening scheme-VII, 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 Ltd.
Vidyut Bhawan, Vidyut Marg,
Jaipur-302 005
2. Ajmer Vidyut Vitran Nigam Ltd.
400 kV GSS Building (Ground Floor), Ajmer Road
Heerapura, Jaipur



3. Jaipur Vidyut Vitran Nigam Ltd.
400 kV GSS Building (Ground Floor), Ajmer Road
Heerapura, Jaipur
4. Jodhpur Vidyut Vitran Nigam Ltd.
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 Ltd.
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 Ltd.
Shakti Bhawan, 14, Ashok Marg
Lucknow- 226001
10. Delhi Transco Ltd.
Shakti Sadan, Kotla Road
New Delhi- 110002
11. BSES Yamuna Power Ltd.
BSES Bhawan, Nehru Place
New Delhi
12. BSES Rajdhani Power Ltd.
BSES Bhawan, Nehru Place
New Delhi
13. North Delhi Power Ltd.
Power Trading & Load Dispatch Group
Cennet Building
Pitampura, New Delhi-110034



14. Chandigarh Administration
Sector-9, Chandigarh
15. Uttarakhand Power Corporation Ltd.
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
 Shri S. K. Venkatesan, PGCIL
 Shri Y. K. Sehgal, PGCIL
 Shri Nitish Kumar, PGCIL
 Shri G. C. Dhal, PGCIL
 Shri Amit Yadav, PGCIL
 Shri Rakesh Prasad, PGCIL
 Shri S. S. Raju, PGCIL
 Shri Jasbir Singh, PGCIL
 Shri Anshul Garg, PGCIL

For Respondent: Shri Vinod Kumar Yadav, Rajasthan Discoms

ORDER

The present petition has been preferred by Power Grid Corporation of India Ltd. ("the petitioner"), for truing up of capital expenditure and tariff for **Asset-1**: 315 MVA ICT-III at Ludhiana S/s associated with Northern Region System Strengthening Scheme-VII and **Asset-2**: 4th 400/220 kV, 315 x04 MVA ICT at Wagoora S/s associated with Northern Region System Strengthening Scheme-VII for Northern Region system strengthening scheme-VII (hereinafter referred as



“transmission asset”) 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 1.4.2010 (COD of Asset-1) to 31.3.2014 for Asset-1 and 1.8.2010 (COD of Asset-2) to 31.3.2014 for Asset-2, and for determination of tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) for the period from 1.4.2014 to 31.3.2019.

2. The respondents are mostly distribution licensees who are procuring transmission service from the petitioner, mainly beneficiaries of the Northern Region, transmission licensees and central power purchase entities of States.

3. The petitioner has served the petition to 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 have been received from the public in response to the notices published by the petitioner under Section 64 of the Act. The hearing in this matter was held on 20.1.2016. None of the respondents have filed their reply. In response to letter dated 18.1.2016, the petitioner has submitted its replies vide affidavit dated 2.2.2016. The concerns expressed by respondents are being addressed in the respective Para of this order.

4. 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 administrative approval and expenditure sanction to the transmission project was accorded by the Board of Directors of PGCIL vide letter no. C/CP/NRSS-VII dated 27.10.2006 for ₹6099 lakh, including IDC of ₹302 lakh (based on 2nd Quarter, 2006 price level). Subsequently, the Revised Cost Estimate (RCE) for the project was approved vide letter no. C/CP/RCE-NRSS VII dated 16.8.2011 for ₹6914.00 lakh, including IDC of ₹403 lakh (based on 3rd Quarter, 2010 price level). The petitioner has established the transmission asset in the Northern Region.
- (b) The date of the commercial operation of Asset-1 is 1.4.2010 and Asset-2 is 1.8.2011.
- (c) The tariff for the 2009-14 period for Asset-1 and Asset-2 was allowed vide order dated 19.7.2011 in Petition No. 304/2010 and order dated 15.5.2012 in Petition No. 78/TT/2011, respectively, in accordance with the 2009 Tariff Regulations. The tariff allowed for the tariff period 2009-14 is as under:-

(₹ in lakh)

Asset-1	2010-11	2011-12	2012-13	2013-14
Depreciation	116.17	131.00	133.77	133.77
Interest on Loan	132.65	139.19	130.57	118.52
Return on Equity	115.28	130.01	132.77	132.77
Interest on Working Capital	15.51	16.70	17.13	17.42
O & M Expenses	171.74	181.57	191.94	202.92
Total	551.34	598.46	606.19	605.41



Asset-2	2011-12 (Pro-Rata)	2012-13	2013-14
Depreciation	128.88	215.76	217.52
Interest on Loan	147.54	233.90	217.15
Return on Equity	128.23	215.28	217.35
Interest on Working Capital	13.89	22.48	22.75
O & M Expenses	121.05	191.94	202.92
Total	539.58	879.37	877.69

- (d) The Commission, vide order dated 19.7.2011 in Petition No. 304/2010, has determined the tariff for Asset-1 from COD to 31.3.2014 considering the capital cost of ₹1969.80 lakh as on COD and estimated additional capital expenditure of ₹456.41 lakh during 2010-11 and ₹105.28 lakh during 2011-12.
- (e) Further, the Commission, vide order dated 15.5.2012 in Petition No. 78/TT/2011, has determined the tariff for Asset-2 from COD to 31.3.2014 considering the capital cost of ₹3269.55 lakh (excluding excess initial spares of ₹9.97 lakh) as on COD and and estimated additional capital expenditure of ₹796.09 lakh during 2011-12 and ₹78.84 lakh during 2012-13.
- (f) 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.
- (g) The instant petition was filed by the petitioner on 20.11.2014.



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

6. Clause (3) of the Regulation 6 of the 2009 Tariff Regulations provides as under:-

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

7. The petitioner has submitted the information as required under the 2009 Tariff Regulations for truing up of annual fixed charges for 2009-14 tariff period. The tariff for 2009-14 tariff period has been trued up in the subsequent paragraphs.

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:

- (i) Transmission system
 - (a) Transmission line - 0.75%
 - (b) Transmission Sub-station - 2.5%
 - (c) Series Compensation devices and HVDC Station - 3.5%”

9. The calculations for the treatment of initial spares has been shown in the table given below.

Description	Capital cost as on cut-off date	Initial Spares claimed	Ceiling limit as per Regulation 8 of 2009 regulations	Initial spares worked out and allowed	Excess initial spares claimed
	(a)	(b)	(c)	$(d)=((a-b)*c)/(100-c)\%$	$(e)=(b)-(d)$
Asset-1:					
Substation	2553.18	62.11	2.50%	63.87	0.00



Description	Capital cost as on cut-off date	Initial Spares claimed	Ceiling limit as per Regulation 8 of 2009 regulations	Initial spares worked out and allowed	Excess initial spares claimed
	(a)	(b)	(c)	$(d)=((a-b)*c)/(100-c)\%$	$(e)=(b)-(d)$
Asset-2					
Substation	4000.31	70.61	2.50%	100.76	0.00

10. The capital cost upto cut off date i.e. 31.3.2013 for Asset-1 and 31.3.2014 for Asset-2 has been considered. The petitioner has submitted the Auditor's Certificate certifying the capital cost and additional capitalization claimed. As, the initial spares claimed by the petitioner is within the ceiling limit as specified in the 2009 Tariff Regulations, the Commission has not considered any deduction of initial spares. Accordingly, the capital cost of ₹1069.80 lakh as on 1.4.2010 for Asset-1 and revised capital cost of ₹3279.55 lakh as on 1.8.2011 for Asset-2 has been considered for the tariff period 2009-14 (i.e. from COD to 31.3.2014).

Capital Cost

11. The petitioner has claimed admitted capital cost of ₹1069.80 lakh for the Asset-1 as on COD (i.e. 1.4.2010) for the purpose of tariff and has submitted the Auditor's Certificate dated 11.8.2014 for certifying the capital cost. Further, for Asset-2, the petitioner has claimed the revised capital cost of ₹3279.55 lakh as on COD (i.e. 1.8.2011) (as per Auditor's Certificate dated 11.8.2014) 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 submitted the Auditor’s Certificate dated 11.8.2014 in support of the actual capital cost incurred for Asset-1 and Asset-2 as on COD and additional capitalization claimed thereafter during 2009-14 tariff period. Accordingly, for Asset-1, the capital cost admitted as on 1.4.2010 vide order dated 19.7.2011 in Petition No. 304/2010 has been considered as the opening capital cost as on 1.4.2010 (COD of Asset-1) for determination of tariff in accordance with Regulation 7 of the 2009 Tariff Regulations. Further, for Asset-2, the revised capital cost ₹3279.55 lakh as on 1.8.2011 (COD of Asset-2) has been considered to work out the trued up tariff for the tariff period 2009-14 (i.e. from COD to 31.3.2014).

Additional Capitalization

14. The petitioner has claimed additional capitalization for Asset-1 and Asset-2 towards balance & retention payment incurred in transmission line within cut-off date under Regulation 9(1)(i) of the 2009 Tariff Regulations.

15. Clause (1), sub-clause(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 ₹398.96 lakh and ₹184.42 lakh during 2010-11 and 2011-12, respectively, for Asset-1 and additional capitalization of ₹641.75 lakh, ₹7.41 lakh and ₹71.60 lakh during 2011-12, 2012-13 and 2013-14, respectively, for Asset-2 towards balance and retention payment for works executed within cut-off date. In this regard, the Commission vide its letter dated 18.1.2016 directed the petitioner to provide the details of balance and retention payment yet to be made along with the details of the contract for which payment has been retained along with the amount retained. The petitioner in response submitted that the additional capitalization pertains to balance and retention payment upto 2013-14 and no further retention has been projected as shown in the Auditor’s Certificate submitted in instant petition.

17. The total capital cost of ₹2553.18 lakh for the Asset-1 and ₹4000.31 lakh for the Asset-2 including actual additional capitalization claimed by the petitioner is within the apportioned approved cost of ₹2657.96 lakh for Asset-1 and ₹4256.04 lakh for Asset-2, respectively. 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 table below:-

(₹ in lakh)



Asset-1: 315 MVA ICT-III at Ludhiana S/s associated with Northern Region System Strengthening Scheme-VII Approved Apportioned Cost: ₹2657.96 lakh							
Particulars	Capital cost up to COD	Total additional capitalization					Total capital cost as on 31.3.2014
		2010-11	2011-12	2012-13	2013-14	Total	
Approved in order dated 19.7.2011 in Petition No. 304/2010	1969.80	456.41	105.28	0.00	0.00	561.69	2531.49
Actual	1969.80	398.96	184.42	0.00	0.00	583.38	2553.18

(₹ in lakh)

Asset-2: 4th 400/220 kV, 315 x04 MVA ICT at Wagoora S/s associated with Northern Region System Strengthening Scheme-VII Approved Apportioned Cost: ₹4256.04 lakh							
Particulars	Capital cost up to COD	Total additional capitalization					Total capital cost including additional capitalization as on 31.3.2014
		2010-11	2011-12	2012-13	2013-14	Total	
Approved in order dated 15.5.2012 in Petition No. 78/TT/2011	3269.55	0.00	796.09	78.84	0.00	874.93	4144.48
Actual	3279.55	0.00	641.75	7.41	71.60	720.76	4000.31

Debt: Equity

18. Clause 1 & 3 of Regulation 12 of the 2009 Tariff Regulations provide 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 debt-equity ratio of 70:30 admitted as on as on COD by the Commission in its order dated 19.7.2011 in Petition No. 304/2010 for Asset-1 and order dated 15.5.2012 in Petition No. 78/TT/2011 for Asset-2. The admitted debt:equity ratio of 70:30 as on COD for the Assets has been considered for the purpose of trueing up of the approved tariff of tariff period 2009-14, as given under:-

(₹ in lakh)		
Funding	Amount (₹in lakh)	(%)
Asset-1		
Debt	1378.80	70.00
Equity	591.00	30.00
Total	1969.80	100.00
Asset-2		
Debt	2295.69	70.00
Equity	983.86	30.00
Total	3279.55	100.00

20. With respect to additional capitalization, the petitioner has submitted the debt:equity ratio of 70:30 for 2009-14 for the Asset-1 and Asset-II . The Commission vide its letter dated 18.1.2016 asked the petitioner 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 in response submitted the actual debt and equity infused during tariff period 2009-14 as follows:



	Sl. No.	Year	Total Addcap	Actual debt	Actual equity	Debt: Equity
Asset-1	1	2010-11	398.96	279.27	119.67	70:30
	2	2011-12	184.42	129.09	55.33	70:30
Asset-2	1	2011-12	641.75	449.14	192.61	69.99:70.01
	2	2012-13	7.41	5.19	2.22	70:30
	3	2013-14	71.60	50.12	24.60	70:30

21. The overall debt equity ratio as on 31.3.2014 for the Asset including additional capitalization is as under:-

(₹ in lakh)		
Funding	Amount (₹in lakh)	(%)
Asset-1		
Debt	1787.17	70.00
Equity	766.01	30.00
Total	2553.18	100.00
Asset-2		
Debt	2800.14	70.00
Equity	1200.17	30.00
Total	4000.31	100.00

Interest on Loan ("IOL")

22. 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”.

23. The Petitioner has submitted the weighted average rate of interest on loan based on its actual loan portfolio and rate of interest. 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 and allowed as follows:-

(₹ in lakh)

Particulars	2010-11	2011-12	2012-13	2013-14
Asset-1				
Approved vide order dated 19.7.2011	132.65	139.19	130.57	118.52
As claimed by petitioner	130.76	138.02	131.97	119.84
Allowed after true up	130.75	138.01	131.96	119.84

Asset-2	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 15.5.2012	0.00	147.54	233.90	217.15
As claimed by petitioner	0.00	145.02	223.73	207.92
Allowed after true up	0.00	145.01	223.72	207.91

24. For Asset-1, there is variation in interest on loan due to variation in additional capitalization during 2010-14 tariff period. Further for Asset-2, the interest on loan has decreased due to reduction in Capital Cost as on COD and actual additional capitalization during 2010-14 tariff period.

Return on Equity (“ROE”)

25. Clause (3), (4) and (5) of Regulation 15 of the 2009 Tariff Regulations provides 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 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 19.7.2011 and 15.5.2012. 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 tariff period 2000-14 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)) %
2010-11	19.931	19.358
2011-12	20.008	19.377
2012-13	20.008	19.377
2013-14	20.961	19.610

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

Particulars	(₹ in lakh)			
	2010-11	2011-12 (Pro-rata for Asset-2)	2012-13	2013-14
Asset-1				
Approved vide order dated 19.7.2011	115.28	130.01	132.77	132.77
As claimed by petitioner	125.98	143.06	148.42	150.20



Particulars	2010-11	2011-12 (Pro-rata for Asset-2)	2012-13	2013-14
Allowed after true up	125.99	143.07	148.43	150.22
Asset-2				
Approved vide order dated 15.5.2012	0.00	128.23	215.28	217.35
As claimed by petitioner	0.00	139.53	228.16	233.23
Allowed after true up	0.00	139.54	228.18	233.25

Asset-2	2010-11	2011-12 (Pro-rata)	2012-13	2013-14
Approved vide order dated 15.5.2012	0.00	128.23	215.28	217.35
As claimed by petitioner	0.00	139.53	228.16	233.23
Allowed after true up	0.00	139.54	228.18	233.25

28. The return on equity allowed in the instant order is more than the return on equity allowed vide order dated 19.7.2011 for Asset-1 and order dated 15.5.2012 for Asset-1 due to 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 19.7.2011 in Petition No. 304/2010 for Asset-1 and order dated 15.5.2012 in Petition No. 78/TT/2011 for Asset-2, 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 as on COD has been considered as 35 years for the Asset. 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	2010-11	2011-12 (Pro-rata for Asset-2)	2012-13	2013-14
Asset-1				
Approved vide order dated 19.7.2011	116.17	131.00	133.77	133.77
As claimed by petitioner	114.65	130.06	134.92	134.92
Allowed after true up	114.65	130.05	134.92	134.92
Asset-2				
Approved vide order dated 15.5.2012	0.00	128.88	215.76	217.52
As claimed by petitioner	0.00	126.74	207.14	208.61
Allowed after true up	0.00	126.73	207.14	208.61



33. The variation in depreciation is on account of reduction in Capital Cost as on COD and variation in additional capitalization vis-à-vis that approved in the Order.

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

34. 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 tariff period 2009-14 are same as that approved in the tariff order dated 19.7.2011 in Petition No. 304/2010 for Asset-1 and order dated 15.5.2012 in Petition No. 78/TT/2011 for Asset-2. Accordingly, the O&M Expenses claimed by the petitioner, allowed and trued up are the same, and are as follows:-

(₹ in lakh)				
Particulars	2010-11	2011-12 (Pro-rata for Asset-2)	2012-13	2013-14
Asset-1				
Approved vide order dated 19.7.2011	171.74	181.57	191.94	202.92
As claimed by petitioner	171.74	181.57	191.94	202.92
Allowed after true up	171.74	181.57	191.94	202.92
Asset-2				
Approved vide order dated 15.5.2012	0.00	121.05	191.94	202.92
As claimed by petitioner	0.00	121.05	191.94	202.92
Allowed after true up	0.00	121.05	191.94	202.92

Interest on working capital (“IWC”)

35. 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.

36. The petitioner submitted the rate of interest on working capital as 11.75% for the period 1.4.2010 to 31.3.2014 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.

37. The Commission in accordance with Clause (3) of Regulation 18 of the 2009 Tariff Regulations, as amended, has considered the rate of interest on working capital on normative basis, i.e., equal to State Bank of India short-term Prime Lending Rate as applicable as on 1.4.2010. State Bank of India Base Rate on 1.4.2010 was 11.75%. Therefore, interest rate of 11.75% has been considered to work out the interest on working capital in the instant case.

38. The IWC trued up is as under:-

(₹ in lakh)

Particulars	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	25.76	27.24	28.79	30.44
O & M expenses	14.31	15.13	16.00	16.91
Receivables	93.13	101.60	104.12	104.28
Total	133.20	143.97	148.91	151.63
Rate of Interest (%)	11.75	11.75	11.75	11.75
Interest	15.65	16.92	17.50	17.82

(₹ in lakh)

Particulars	2010-11	2011-12 (Pro-rata for Asset-2)	2012-13	2013-14
Asset-1				
Approved vide order	15.51	16.70	17.13	17.42



Particulars	2010-11	2011-12 (Pro-rata for Asset-2)	2012-13	2013-14
dated 19.7.2011				
As claimed by petitioner	15.65	16.92	17.50	17.82
Allowed after true up	15.65	16.92	17.50	17.82
Asset-1				
Approved vide order dated 15.5.2012	0.00	20.83	22.48	22.75
As claimed by petitioner	0.00	21.03	22.37	22.71
Allowed after true up	0.00	14.02	22.37	22.71

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

ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

40. The detailed computation of the various components of the trued up annual fixed charges for the Asset for the tariff period from 2010-11 to 2013-14 is summarised below:-

(₹ in lakh)				
Asset-1				
Particulars	2010-11	2011-12	2012-13	2013-14
Gross Block				
Opening Gross Block	2368.76	2553.18	2553.18	2553.18
Additional Capitalization	184.42	0.00	0.00	583.38
Closing Gross block	2553.18	2553.18	2553.18	3136.56
Average Gross block	2460.97	2553.18	2553.18	2844.87
Depreciation				
Rate of Depreciation (%)	4.659	5.094	5.284	4.743
Depreciable Value	1952.35	2214.87	2297.86	2297.86
Elapsed Life of the assets at beginning of the year	0	1	2	3
Weighted Balance Useful life of the assets	25	24	23	22



Asset-1				
Particulars	2010-11	2011-12	2012-13	2013-14
Remaining Depreciable Value	1952.35	0.00	0.00	0.00
Depreciation	114.65	130.05	134.92	134.92
Interest on Loan				
Gross Normative Loan	1378.80	1658.07	1787.17	1787.17
Cumulative Repayment upto Previous Year	0.00	114.65	244.70	379.62
Net Loan-Opening	1378.80	1543.42	1542.46	1407.54
Additions	279.27	129.09	0.00	0.00
Repayment during the year	114.65	130.05	134.92	134.92
Net Loan-Closing	1543.42	1542.46	1407.54	1272.62
Average Loan	1461.11	1542.94	1475.00	1340.08
Weighted Average Rate of Interest on Loan (%)	8.9487	8.9448	8.9465	8.9425
Interest	130.75	138.01	131.96	119.84
Return on Equity				
Opening Equity	591.00	710.69	766.01	766.01
Additions	119.69	55.33	0.00	0.00
Closing Equity	710.69	766.01	766.01	766.01
Average Equity	650.84	738.35	766.01	766.01
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50
MAT rate for the respective year (%)	19.931	20.008	20.008	20.961
Rate of Return on Equity (Pre Tax)(%)	19.358	19.377	19.377	19.610
Return on Equity (Pre Tax)	125.99	143.07	148.43	150.22
Interest on Working Capital				
Maintenance Spares	25.76	27.24	28.79	30.44
O & M Expenses	14.31	15.13	16.00	16.91
Receivables	93.13	101.60	104.12	104.28
Total	133.20	143.97	148.91	151.63
Interest	15.65	16.92	17.50	17.82
Annual Transmission Charges				



Asset-1				
Particulars	2010-11	2011-12	2012-13	2013-14
Depreciation	114.65	130.05	134.92	134.92
Interest on Loan	130.75	138.01	131.96	119.84
Return on Equity	125.99	143.07	148.43	150.22
Interest on Working Capital	15.65	16.92	17.50	17.82
O & M Expenses	171.74	181.57	191.94	202.92
Total	558.78	609.62	624.75	625.71

(₹ in lakh)

Asset-2			
Particulars	2011-12 (Pro-rata)	2012-13	2013-14
Gross Block			
Opening Gross Block	3279.55	3921.30	3928.71
Additional Capitalization	641.75	7.41	71.60
Closing Gross block	3921.30	3928.71	4000.31
Average Gross block	3600.43	3925.01	3964.51
Depreciation			
Rate of Depreciation (%)	3.520	5.278	5.262
Depreciable Value	3240.38	3532.50	3568.06
Elapsed Life of the assets at beginning of the year	0	1	2
Weighted Balance Useful life of the assets	25	24	23
Remaining Depreciable Value	3240.38	0.00	0.00
Depreciation	126.73	207.14	208.61
Interest on Loan			
Gross Normative Loan	2295.69	2744.83	2750.02
Cumulative Repayment upto Previous Year	0.00	126.73	333.88
Net Loan-Opening	2295.69	2618.10	2416.14
Additions	449.14	5.19	50.12
Repayment during the year	126.73	207.14	208.61
Net Loan-Closing	2618.10	2416.14	2257.65



Asset-2			
Particulars	2011-12 (Pro-rata)	2012-13	2013-14
Average Loan	2456.89	2517.12	2336.89
Weighted Average Rate of Interest on Loan (%)	8.8534	8.8881	8.8971
Interest	145.01	223.72	207.91
Return on Equity			
Opening Equity	983.86	1176.47	1178.69
Additions	192.61	2.22	21.48
Closing Equity	1176.47	1178.69	1200.17
Average Equity	1080.17	1177.58	1189.43
Return on Equity (Base Rate) (%)	15.50	15.50	15.50
MAT rate for the respective 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)	139.54	228.18	233.25
Interest on Working Capital			
Maintenance Spares	18.16	28.79	30.44
O & M Expenses	10.09	16.00	16.91
Receivables	91.06	145.56	145.90
Total	119.30	190.34	193.25
Interest	14.02	22.37	22.71
Annual Transmission Charges			
Depreciation	126.73	207.14	208.61
Interest on Loan	145.01	223.72	207.91
Return on Equity	139.54	228.18	233.25
Interest on Working Capital	14.02	22.37	22.71
O & M Expenses	121.05	191.94	202.92
Total	546.35	873.35	875.40



DETERMINATION OF ANNUAL TRANSMISSION CHARGES FOR 2014-19

41. The petitioner has claimed the transmission charges for Combined Asset-1&2 as under:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	344.83	344.83	344.83	344.83	344.83
Interest on Loan	299.61	268.97	238.30	207.60	176.89
Return on Equity	385.54	385.54	385.54	385.54	385.54
Interest on Working Capital	44.36	44.34	44.35	44.37	44.42
O & M Expenses	373.86	386.26	399.10	412.32	426.02
Total	1448.20	1429.94	1412.12	1394.66	1377.70

42. 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	56.08	57.94	59.87	61.85	63.90
O & M expenses	31.16	32.19	33.26	34.36	35.50
Receivables	241.37	238.32	235.35	232.44	229.62
Total	328.61	328.45	328.48	328.65	329.02
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	44.36	44.34	44.35	44.37	44.42

Capital Cost

43. 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.”

44. The petitioner has claimed capital cost of ₹2553.18 lakh and ₹4000.31 lakh for Asset-1 and Asset-2, respectively, as on 31.3.2014 and has not projected any additional capital expenditure during the tariff period 2014-19.

45. The trued up capital cost of ₹2553.18 lakh and ₹4000.31 lakh for Asset-1 and Asset-2, respectively, as on 31.3.2014 is considered for the purpose of tariff for tariff period 2014-19. Thus, for Combined Asset-1&2, the true up capital cost of ₹6553.49 lakh as on 31.3.2014 is considered for the purpose of tariff for tariff period 2014-19.

Additional Capital Expenditure

46. The petitioner has not claimed any additional expenditure for Combined Asset- 1&2 for the tariff period 2014-19. No additional capital expenditure has been considered for the tariff period 2014-19.

Debt:Equity Ratio

47. 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.”



48. 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. 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	(₹ in lakh)	
	Amount	(%)
Debt	4587.30	70.00
Equity	1966.19	30.00
Total	6553.49	100.00

Interest on Loan (“IOL”)

49. 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.”

50. The weighted average rate of IOL has been considered on the basis of rate prevailing as on 1.4.2014.



51. It is observed that the debt funding in the instant case is through bonds, which bear a fixed interest rate. 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	4587.30	4587.30	4587.30	4587.30	4587.30
Cumulative Repayment upto previous year	1057.03	1401.86	1746.68	2091.51	2436.33
Net Loan-Opening	3530.27	3185.45	2840.62	2495.80	2150.97
Additions during the year	0.00	0.00	0.00	0.00	0.00
Repayment during the year	344.82	344.82	344.82	344.82	344.82
Net Loan-Closing	3185.45	2840.62	2495.80	2150.97	1806.15
Average Loan	3357.86	3013.03	2668.21	2323.39	1978.56
Rate of Interest (%)	8.9224	8.9265	8.9305	8.9348	8.9397
Interest	299.60	268.96	238.28	207.59	176.88

Return on Equity (“ROE”)

52. 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.”

53. 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.

54. 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.

55. 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 for Combined Asset-1&2 is given below:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	1966.19	1966.19	1966.19	1966.19	1966.19
Additional Capitalization	0.00	0.00	0.00	0.00	0.00
Closing Equity	1966.19	1966.19	1966.19	1966.19	1966.19
Average Equity	1966.19	1966.19	1966.19	1966.19	1966.19
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
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)	385.57	385.57	385.57	385.57	385.57

Depreciation

56. 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.”

57. The petitioner has computed depreciation for Combined Asset-1&2 considering capital expenditure of ₹6553.49 lakh as on 31.3.2014.

58. We have considered the submissions of the petitioner and have allowed depreciation considering capital expenditure of ₹6553.49 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	6553.49	6553.49	6553.49	6553.49	6553.49
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Gross block at the end of the year	6553.49	6553.49	6553.49	6553.49	6553.49
Average gross block	6553.49	6553.49	6553.49	6553.49	6553.49
Rate of Depreciation (%)	5.262	5.262	5.262	5.262	5.262
Depreciable Value	5898.14	5898.14	5898.14	5898.14	5898.14
Elapsed Life of the assets at beginning of the year	3	4	5	6	7
Weighted Balance Useful life of the assets	22	21	20	19	18
Remaining Depreciable Value	4841.11	4496.29	4151.46	3806.64	3461.81
Depreciation	344.82	344.82	344.82	344.82	344.82



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

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

		(₹ in lakh)				
Particulars		2009-10	2010-11	2011-12	2012-13	2013-14
Actual (No. of bays)	400 kV Bays	2	2	2	2	2
	220 kV Bays	6	6	6	6	6
Norms as per Regulation	400 kV Bays (₹ lakh/bay)	60.30	62.30	64.37	66.51	68.71
	220 kV Bays (₹ lakh/bay)	42.21	43.61	45.06	46.55	48.10
Total (₹ in lakh)		373.86	386.26	399.1	412.32	426.02

60. 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 the 2014-19 tariff period 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.

61. 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.

62. The details of O&M Expenses allowed for Combined Asset-1&2 are given hereunder:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses Allowed	373.86	386.26	399.1	412.32	426.02

Interest on Working Capital (“IWC”)

63. 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;”

64. 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%.



65. 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	56.08	57.94	59.87	61.85	63.90
O & M Expenses	31.16	32.19	33.26	34.36	35.50
Receivables	241.37	238.33	235.35	232.45	229.62
Total	328.60	328.45	328.48	328.65	329.02
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	44.36	44.34	44.34	44.37	44.42

Annual Transmission Charges

66. The detailed computation of the various components of the annual fixed charges for the Combined Asset-1&2 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	6553.49	6553.49	6553.49	6553.49	6553.49
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	6553.49	6553.49	6553.49	6553.49	6553.49
Average Gross Block	6553.49	6553.49	6553.49	6553.49	6553.49
Depreciation					
Rate of Depreciation	5.262	5.262	5.262	5.262	5.262
Depreciable Value	5898.14	5898.14	5898.14	5898.14	5898.14
Elapsed Life of the assets at beginning of the year	3	4	5	6	7



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Weighted Balance Useful life of the assets	22	21	20	19	18
Remaining Depreciable Value	4841.11	4496.29	4151.46	3806.64	3461.81
Depreciation	344.82	344.82	344.82	344.82	344.82
Interest on Loan					
Gross Normative Loan	4587.30	4587.30	4587.30	4587.30	4587.30
Cumulative Repayment upto Previous Year	1057.03	1401.86	1746.68	2091.51	2436.33
Net Loan-Opening	3530.27	3185.45	2840.62	2495.80	2150.97
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	344.82	344.82	344.82	344.82	344.82
Net Loan-Closing	3185.45	2840.62	2495.80	2150.97	1806.15
Average Loan	3357.86	3013.03	2668.21	2323.39	1978.56
Weighted Average Rate of Interest on Loan (%)	8.9224	8.9265	8.9305	8.9348	8.9397
Interest	299.60	268.96	238.28	207.59	176.88
Return on Equity					
Opening Equity	1966.19	1966.19	1966.19	1966.19	1966.19
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	1966.19	1966.19	1966.19	1966.19	1966.19
Average Equity	1966.19	1966.19	1966.19	1966.19	1966.19
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
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)	385.57	385.57	385.57	385.57	385.57
Interest on Working Capital					
Maintenance Spares	56.08	57.94	59.87	61.85	63.90
O & M expenses	31.16	32.19	33.26	34.36	35.50
Receivables	241.37	238.33	235.35	232.45	229.62
Total	328.60	328.45	328.48	328.65	329.02
Interest	44.36	44.34	44.34	44.37	44.42



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Transmission Charges					
Depreciation	344.82	344.82	344.82	344.82	344.82
Interest on Loan	299.60	268.96	238.28	207.59	176.88
Return on Equity	385.57	385.57	385.57	385.57	385.57
Interest on Working Capital	44.36	44.34	44.34	44.37	44.42
O & M Expenses	373.86	386.26	399.10	412.32	426.02
Total	1448.22	1429.95	1412.12	1394.67	1377.71

Filing Fee and Publication Expenses

67. 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

68. 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



69. 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 of Service Tax is premature.

Sharing of Transmission Charges

70. 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.

71. This Order disposes of Petition No. 490/TT/2014.

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

**Sd/-
(A.S. Bakshi)
Member**



ANNEXURE-I**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO 2009-14**

(₹ in lakh)

2009-14	Asset-1			
Particulars	Interest Rate (%)	Loan deployed as on COD (1.4.2010)	Additions during the tariff period	Total
Bond XXVII - DOCO drawl on 15-Dec-2008	9.33	0.00	0.00	0.00
Bond XXVIII - DOCO drawl on 1-Apr-2010	9.33	190.00	0.00	190.00
Bond XXIX- DOCO drawl on 12-Mar-2009	9.20	0.00	0.00	0.00
Bond XXIX - DOCO drawl on 1-Apr-2010	9.20	300.00	0.00	300.00
Bond XXX- DOCO drawl on 29 Sep-2009	8.80	0.00	0.00	0.00
Bond XXX - Addcap for 2010-11 Addcap	8.80	0.00	27.25	27.25
Bond XXX - DOCO drawl on 1-Apr-2010	0.00	888.80	0.00	888.80
Bond XXXI- DOCO drawl on 25-Feb-2010	0.00	0.00	0.00	0.00
Bond XXXIV - Addcap for 2010-11 Addcap	0.00	0.00	252.02	252.02
Bond XXXIII - DOCO drawl on 8-Jul-2010	0.00	0.00	0.00	0.00
Bond XXXIV - DOCO drawl on 21-Oct-2010	0.00	0.00	0.00	0.00
Bond XXXIV - Addcap for 2011-12 Addcap	0.00	0.00	61.98	61.98
Bond XXXV - Addcap for 2011-12 Addcap	0.00	0.00	5.65	5.65
Bond XXXVI - Addcap for 2011-12 Addcap	0.00	0.00	24.00	24.00
Bond XXXVII - Addcap for 2011-12 Addcap	0.00	0.00	0.00	0.00
Bond XXXVII - Addcap for 2011-12 Addcap	0.00	0.00	37.46	37.46
Bond XXXVIII - Addcap for 2011-12 Addcap	0.00	0.00	0.00	0.00
Bond XXXVIII-Addcap for 2012-13 Addcap	0.00	0.00	0.00	0.00
Bond XXXVIII-Addcap for 2013-14 Addcap	0.00	0.00	0.00	0.00
Bond XLV-Addcap for 2013-14 Addcap	0.00	0.00	0.00	0.00
Total		1378.80	408.36	1787.16

(₹ in lakh)

2009-14	Asset-2			
Particulars	Interest Rate (%)	Loan deployed as on COD (1.8.2011)	Additions during the tariff period	Total
Bond XXVII - DOCO drawl on 15-Dec-2008	9.33	10.00	0.00	10.00



2009-14	Asset-2			
	Particulars	Interest Rate (%)	Loan deployed as on COD (1.8.2011)	Additions during the tariff period
Bond XXVIII - DOCO drawl on 1-Apr-2010	0.00	0.00	0.00	0.00
Bond XXIX- DOCO drawl on 12-Mar-2009	9.20	19.00	0.00	19.00
Bond XXIX - DOCO drawl on 1-Apr-2010	0.00	0.00	0.00	0.00
Bond XXX- DOCO drawl on 29 Sep-2009	8.80	1176.20	0.00	1176.20
Bond XXX - Addcap for 2010-11 Addcap	0.00	0.00	0.00	0.00
Bond XXX - DOCO drawl on 1-Apr-2010	0.00	0.00	0.00	0.00
Bond XXXI- DOCO drawl on 25-Feb-2010	8.90	427.00	0.00	427.00
Bond XXXIV - Addcap for 2010-11 Addcap	0.00	0.00	0.00	0.00
Bond XXXIII - DOCO drawl on 8-Jul-2010	8.64	254.00	0.00	254.00
Bond XXXIV - DOCO drawl on 21-Oct-2010	8.84	245.00	0.00	245.00
Bond XXXIV - Addcap for 2011-12 Addcap	0.00	0.00	0.00	0.00
Bond XXXV - Addcap for 2011-12 Addcap	0.00	0.00	0.00	0.00
Bond XXXVI - Addcap for 2011-12 Addcap	0.00	0.00	0.00	0.00
Bond XXXVII - Addcap for 2011-12 Addcap	9.25	0.00	157.54	157.54
Bond XXXVII - Addcap for 2011-12 Addcap	0.00	0.00	0.00	0.00
Bond XXXVIII - Addcap for 2011-12 Addcap	9.25	0.00	291.69	291.69
Bond XXXVIII-Addcap for 2012-13 Addcap	9.25	0.00	5.19	5.19
Bond XXXVIII-Addcap for 2013-14 Addcap	9.25	0.00	3.12	3.12
Bond XLV-Addcap for 2013-14 Addcap	9.65	0.00	47.00	47.00
Total		2131.20	504.54	2635.74

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

(₹ in lakh)

2009-14	Asset-1				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	0.00	1378.80	1658.07	1787.16	1787.16
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00	40.83
Net Loans Opening	0.00	1378.80	1658.07	1787.16	1746.33
Add: Drawl(s) during the year	0.00	279.27	129.09	0.00	0.00
Less: Repayment(s) of Loan during the year	0.00	0.00	0.00	40.83	117.17
Net Closing Loan	0.00	1658.07	1787.16	1746.33	1629.16



2009-14	Asset-1				
	2009-10	2010-11	2011-12	2012-13	2013-14
Average Net Loan	0.00	1518.44	1722.62	1766.75	1687.75
Interest on Loan	0.00	135.88	154.08	158.06	150.93
Rate of Interest on Loan (%)	0.0000	8.9487	8.9448	8.9465	8.9425

(₹ in lakh)

2009-14	Asset-2				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	0.00	0.00	2131.20	2580.43	2585.62
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00	0.00	2.41
Net Loans Opening	0.00	0.00	2131.20	2580.43	2583.21
Add: Drawl(s) during the year	0.00	0.00	449.23	5.19	50.12
Less: Repayment(s) of Loan during the year	0.00	0.00	0.00	2.41	136.01
Net Closing Loan	0.00	0.00	2580.43	2583.21	2497.32
Average Net Loan	0.00	0.00	2355.82	2581.82	2540.27
Interest on Loan	0.00	0.00	0.09	0.09	0.09
Rate of Interest on Loan (%)	0.00	0.00	208.57	229.48	226.01



ANNEXURE-II**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2014-19)**

(₹ in lakh)

2014-19 Particulars	Combined Asset-1&2			
	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
Bond XXVII - DOCO drawl on 15-Dec-2008	9.33	10.00	0.00	10.00
Bond XXVIII - DOCO drawl on 1-Apr-2010	9.33	190.00	0.00	190.00
Bond XXIX- DOCO drawl on 12-Mar-2009	9.20	19.00	0.00	19.00
Bond XXIX - DOCO drawl on 1-Apr-2010	9.20	300.00	0.00	300.00
Bond XXX- DOCO drawl on 29 Sep-2009	8.80	1176.20	0.00	1176.20
Bond XXX - Addcap for 2010-11 Addcap	8.80	27.25	0.00	27.25
Bond XXX - DOCO drawl on 1-Apr-2010	8.80	888.80	0.00	888.80
Bond XXXI- DOCO drawl on 25-Feb-2010	8.90	427.00	0.00	427.00
Bond XXXIV - Addcap for 2010-11 Addcap	8.84	252.02	0.00	252.02
Bond XXXIII - DOCO drawl on 8-Jul-2010	8.64	254.00	0.00	254.00
Bond XXXIV - DOCO drawl on 21-Oct-2010	8.84	245.00	0.00	245.00
Bond XXXIV - Addcap for 2011-12 Addcap	8.84	61.98	0.00	61.98
Bond XXXV - Addcap for 2011-12 Addcap	9.64	5.65	0.00	5.65
Bond XXXVI - Addcap for 2011-12 Addcap	9.35	24.00	0.00	24.00
Bond XXXVII - Addcap for 2011-12 Addcap	9.25	157.54	0.00	157.54
Bond XXXVII - Addcap for 2011-12 Addcap	9.25	37.46	0.00	37.46
Bond XXXVIII - Addcap for 2011-12 Addcap	9.25	291.69	0.00	291.69
Bond XXXVIII-Addcap for 2012-13 Addcap	9.25	5.19	0.00	5.19
Bond XXXVIII-Addcap for 2013-14 Addcap	9.25	3.12	0.00	3.12
Bond XLV-Addcap for 2013-14 Addcap	9.65	47.00	0.00	47.00
Total		4422.90	0.00	4422.90



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

(₹ in lakh)

2014-19	Combined Asset-1&2				
	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	4422.90	4422.90	4422.90	4422.90	4422.90
Cumulative Repayments of Loans upto Previous Year	296.42	617.36	955.02	1294.28	1637.46
Net Loans Opening	4126.48	3805.54	3467.88	3128.62	2785.44
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	320.94	337.66	339.26	343.18	343.18
Net Closing Loan	3805.54	3467.88	3128.62	2785.44	2442.26
Average Net Loan	3966.01	3636.71	3298.25	2957.03	2613.85
Interest on Loan	353.86	324.63	294.55	264.21	233.67
Rate of Interest on Loan (%)	8.9224	8.9265	8.9305	8.9348	8.9397

