

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 2/TT/2015

Coram:

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

Date of Hearing : 13.01.2016

Date of Order : 29.02.2016

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:** (a) 50MVAR Bus reactor at Hisar Sub-station (b) LILO of 400 kV Moga-Hissar line, ICT-I at Fatehabad Sub-station, 4 nos. 220 kV line bays (feeders from Fatehabad-1 and Fatehabad-2) and 50 MVAR bus reactor bay along with associated bays at Fatehabad Sub-station,(c) Total upstream system including Malerkotla-Ludhiana-Jalandhar transmission line along with associated bays at Ludhiana Sub-station Malerkotla Sub-station, **Asset-II:** (a) ICT-I along with associated bays at Ludhiana Sub-station; (b) ICT-II along with associated bays at Ludhiana Sub-station, **Asset-III:** 315 MVA, 400/220 kV ICT-II along with associated bays at 400/220 kV Fatehabad Sub-station under Northern Region System Strengthening Scheme-III in Northern Region, under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999.

And in the matter of:

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

.....**Petitioner**

Versus

1. 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 Vivek Kumar Singh, PGCIL
 Shri S. S. Raju, PGCIL
 Shri D.K Karma PGCIL
 Smt. Sangeeta Edwards, PGCIL
 Shri S.C Taneja, PGCIL
 Shri S. K. Venkatesan, PGCIL
 Shri Rakesh Prasad, PGCIL

For Respondent: Shri S.K Agarwal, Advocate, Rajasthan Discoms
 Shri S.P Das, Advocate, Rajasthan Discoms
 Smt. Neelam, Advocate, 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-I:** (a) 50MVAR Bus reactor at Hisar Sub-station (b) LILO of 400 kV Moga-Hissar line,



ICT-I at Fatehabad Sub-station, 4 nos. 220 kV line bays (feeders from Fatehabad-1 and Fatehabad-2) and 50 MVAR bus reactor bay along with associated bays at Fatehabad Sub-station, (c) Total upstream system including Malerkotla-Ludhiana-Jalandhar transmission line along with associated bays at Ludhiana Sub-station Malerkotla Sub-station, **Asset-II:** (a) ICT-I along with associated bays at Ludhiana Sub-station; (b) ICT-II along with associated bays at Ludhiana Sub-station, **Asset-III:** 315 MVA, 400/220 kV ICT-II along with associated bays at 400/220 kV Fatehabad Sub-station under Northern Region System Strengthening Scheme-III in Northern Region (hereinafter referred as “the 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 1.4.2009 to 31.3.2014, and for determination of tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) for the period from 1.4.2014 to 31.3.2019.

2. The respondents are mostly 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 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 13.1.2016. Reply has been filed by Rajasthan Discoms vide affidavit dated 11.1.2016. The petitioner has not submitted any reply to the issues raised by the respondents. The concerns expressed by respondents are being addressed in the respective para of this order. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

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

(a) The investment approval for the transmission scheme was accorded by Board of Directors of the petitioner's company vide Memorandum dated 13.7.2004 at an estimated cost of ₹23052 lakh including IDC of ₹1477 lakh. Subsequently, the approval for revised cost estimate was accorded by Board of Directors vide Memorandum dated 26.2.2008 at an estimated cost of ₹32690 lakh which includes IDC of ₹1826 lakh. The details of transmission assets and their date of commercial operation are as under:

Assets	Name of transmission assets	Date of commercial operation
Asset-I	(a) 50 MVAR Bus Reactor at Hissar sub-station	1.7.2007
	(b) LILO of 400 kV Moga-Hissar line, ICT-I at Fatehabad sub-station, 4 Nos. 220kV line bays (feeders from Fatehabad-1 and Fatehabad-2) and 50 MVAR Bus Reactor bay along with associated bays at Fatehabad sub-station.	1.2.2008
	(c) Total Upstream System including Malerkotla-Ludhiana-Jalandhar transmission line along with associated bays at Ludhiana sub-station, Malerkotla sub-station.	1.6.2008
Asset-II	(a) ICT-I along with associated bays at Ludhiana sub-station.	1.6.2008



Assets	Name of transmission assets	Date of commercial operation
	(b) ICT-II along with associated bays at Ludhiana sub-station.	1.7.2008
Asset-III	315 MVA, 400/220kV ICT-II along with associated bays at 400/220kV Fatehabad sub-station.	1.4.2008

(b) The tariff for the 2009-14 period for Asset-I, II and III was allowed vide order dated 4.4.2011 in Petition No. 268/2010 in accordance with the 2009 Tariff Regulations. Further, in order dated 7.2.2013 in Petition No. 305/2010, in the matter of replacement of existing porcelain insulators by polymer insulators, the tariff for 2009-14 period for Asset-I was revised. The tariff allowed for the tariff period 2009-14 is as under:-

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Asset-I					
Depreciation	1081.60	1111.01	1126.64	1126.64	1126.64
Interest on Loan	1268.01	1214.81	1131.98	1027.22	922.55
Return on Equity	1109.26	1148.88	1165.32	1165.32	1165.32
Interest on Working Capital	110.55	113.08	114.35	114.62	115.04
O & M Expenses	768.87	812.83	859.39	908.53	960.45
Total	4338.29	4400.62	4397.69	4342.34	4290.00
Asset-II					
Depreciation	288.94	305.18	318.20	318.20	318.20
Interest on Loan	376.27	369.88	357.66	328.10	298.53
Return on Equity	324.75	341.92	355.33	355.33	355.33
Interest on Working Capital	36.88	38.38	39.66	40.08	40.56
O & M Expenses	324.88	343.48	363.14	383.88	405.84
Total	1351.72	1398.84	1433.99	1425.59	1418.46
Asset-III					
Depreciation	59.76	69.56	72.79	72.79	72.79
Interest on Loan	66.70	72.41	69.82	63.11	56.43
Return on Equity	59.36	69.09	72.30	72.30	72.30
Interest on Working Capital	8.33	9.11	9.46	9.60	9.77
O & M Expenses	89.08	94.18	99.57	105.26	111.28
Total	283.23	314.35	323.93	323.06	322.57



- (a) In order dated 18.6.2010 in Petition No. 65/2010, tariff was determined for (i) 50 MVAR Bus Reactor at Hissar sub-station, (ii) LILO of 400 KV Moga-Hissar line, ICT-I at Fatehabad sub-station, 4 nos 220 kV line bays (feeders from Fatehabad-1 and Fatehabad-2) and 50 MVAR Bus Reactor bay alongwith associated bays at Fatehabad sub-station. (iii) 315 MVA, 400/220 kV ICT-II along with associated bays at 400/220 kV Fatehabad sub-station from COD to 31.3.2009 in accordance with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004. Further, in order dated 15.2.2010 in Petition No. 163/2009, the tariff was determined for (i) ICT-I along with associated bays at Ludhiana sub-station; (ii) Total upstream system including Malerkotla-Ludhiana-Jalandhar transmission line along with associated bays at Ludhiana sub-station, Malerkotla Sub-station and Jalandhar sub-station and shunt reactor along with associated bays at Ludhiana Sub-station; (iii) ICT-II alongwith associated bays at Ludhiana Sub-station from COD to 31.3.2009 in accordance with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004.
- (b) In order dated 4.4.2011 in Petition No. 268/2010, the tariff was determined for Asset-I, II and III from tariff period 2009-14 considering the capital cost as on 31.3.2009 of ₹20709.59 lakh, ₹6122.58 lakh and ₹1007.42 lakh for Asset I, II and III, respectively.
- (c) The MAT rate applicable as on 2008-09 was considered to arrive at rate of return on equity for the tariff period 2009-14, which is required to be



adjusted as per the actual MAT rate applicable for the respective year at the time of truing up of tariff for 2009-14 tariff period.

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

5. 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”.

6. 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.

7. Respondents No. 2, 3 & 4, i.e. Ajmer Vidyut Vitran Nigam Ltd., Jaipur Vidyut Vitran Nigam Ltd. and Jodhpur Vidyut Vitran Nigam Ltd. hereinafter collectively referred as ‘Rajasthan Discoms’ vide affidavit dated 11.1.2016 have submitted that the petitioner has sought truing up of transmission tariff for 2009-14 tariff period on account of the additional capitalization from 1.4.2009 to 31.3.2014 on basis of additional cost, payment of taxes on MAT rate, ROE, service tax, O&M, filing fee, RLDC fees, charges, taxes, cess and duties, etc. Rajasthan Discoms have submitted that old porcelain insulators were to be replaced for Asset-I in terms of directives of the Commission issued on 7.2.2013. As per submission of Rajasthan Discoms, the variation in figures in actual additional capitalization against that approved cost are not explained by the



petitioner. Also, substantial expenditure was made during 2009-10 and 2010-11 only, therefore, it is requested to conduct prudence check while allowing truing up for tariff period 2009-14.

Capital Cost

8. The petitioner has claimed admitted capital cost as on 31.3.2009 of ₹20709.59 lakh, ₹6122.58 lakh and ₹1007.42 lakh for Asset I, II and III, respectively, for the purpose of tariff of all the assets.

9. 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.”

10. The petitioner has submitted the Auditor’s Certificate certifying the capital cost of Asset-I, II and III as on 31.3.2009 and additional capitalization claimed thereafter. Accordingly, for Asset-I, II and III, the capital cost admitted as on 31.3..2009 has been considered as the opening capital cost as on 1.4.2009 for determination of tariff in accordance with Regulation 7 of the 2009 Tariff Regulations.



Additional Capitalization

11. The petitioner has claimed additional capitalization from 1.4.2009 to 31.3.2014 for Asset-I, II and III towards balance & retention payment incurred in transmission line under Clause 1(i) and 2(viii) of Regulation 9 of the 2009 Tariff Regulations on account of balance payments before cut-off date, balance payments after cut-off date and replacement of insulators with polymer insulators, respectively.

12. Clause 1(i) and 2(viii) 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...;

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

.....

(viii) Any undischarged liability towards final payment/withheld payment due to contractual exigencies for works executed within the cut-off date, after prudence check of the details of such deferred liability, total estimated cost of package, reason for such withholding of payment and release of such payments etc.”

13. The petitioner has claimed additional capitalization of ₹1335.10 lakh, ₹245.53 lakh, ₹352.49 lakh and ₹90.83 lakh during 2009-10, 2010-11 and 2011-12 and 2013-14, respectively, and de-capitalization of ₹141.71 lakh and ₹147.55 lakh in 2009-10 and 2010-11, respectively, for Asset-I. Further, the petitioner has claimed additional capitalization of ₹195.70 lakh, ₹115.97 lakh, ₹323.87 lakh and



₹89.00 lakh during 2009-10, 2010-11, 2011-12 and 2013-14, respectively, for Asset-II and ₹258.82 lakh, ₹25.00 lakh and ₹97.32 lakh during 2009-10, 2010-11 and 2011-12, respectively, for Asset-III. In this regard, the petitioner was directed to provide justification for increase in actual additional capital expenditure vis-à-vis that approved for Asset-I and Asset-II in 2009-14 tariff period. The petitioner, vide its affidavit dated 28.1.2016, has submitted that increase in actual additional capitalization is due to enhanced land compensation. The petitioner further submitted the following details of actual payment made in case of Asset-I and Asset-II:-

- a) In case of Fatehabad Sub-station (covered in Asset-I(b), the local people affected by land acquisition filed case for enhanced land compensation and decision was taken on 1.4.2009 for enhanced land compensation and appeal was filed against the order in Hon'ble High Court by petitioner but was rejected.
- b) In respect of Ludhiana Sub-station (covered in Asset-I(c), Asset-II(a) and Asset-II(b)), payment against the order passed by District Court of ADJ, Ludhiana in respect of LAC cases no. 3 of 29.4.2010 for enhancement of land compensation under section-19 of Land Acquisition Act, 1894.

14. The total capital cost as on 31.3.2014 of ₹22444.28 lakh, ₹6847.12 lakh and ₹1388.56 lakh for the Asset-I, II and III, respectively including actual additional capitalization claimed by the petitioner is within the apportioned approved cost of ₹22989.88 lakh, ₹7359.80 lakh and ₹2340.65 lakh for the Asset-I, II and III, respectively. Hence, considering the submissions made by the



petitioner, we have allowed total capital cost including additional capitalization under Clause 1(i) and 2(viii) of Regulation 9 of the 2009 Tariff Regulations as shown in the table below:-

(₹ in lakh)

Asset-I: Approved Apportioned Cost: ₹22989.88 lakh								
Particulars	Capital cost as on 31.3.2009	Additional Capital Expenditure (2009-14)						Capital Cost as on 31.3.2014
		2009-10	2010-11	2011-12	2012-13	2013-14	Total	
Approved As per Petition No. 268/2010 (Add Cap)	20709.59	884.14	627.01	0.00	0.00	0.00	1511.15	23116.80
Approved As per Petition No. 305/2010(Add Cap)		210.75	137.38	837.67	0.00	0.00	1185.80	
Approved As per Petition No. 305/2010(De-cap)		-142.19	-147.55	0.00	0.00	0.00	-289.74	
Total Approved		952.70	616.84	837.67	0.00	0.00	2407.21	
Actual Add cap Claimed as per Auditor's Certificate	20709.59	1335.10	245.53	352.49	0.00	90.83	2023.95	22444.28
Actual De-cap Claimed as per Auditor's Certificate		-141.71	-147.55	0.00	0.00	0.00	-289.26	
Actual Claimed as per Auditor's Certificate		1193.39	97.98	352.49	0.00	90.83	1734.69	

(₹ in lakh)

Asset-II: Approved Apportioned Cost: ₹7359.80 lakh								
Particulars	Capital cost as on 31.3.2009	Additional Capital Expenditure (2009-14)						Capital Cost as on 31.3.2014
		2009-10	2010-11	2011-12	2012-13	2013-14	Total	
Approved As per Petition No. 268/2010 (Add Cap)	6122.58	143.58	511.32	0.00	0.00	0.00	654.90	6777.48
Actual Claimed as per Auditor's Certificate	6122.58	195.70	115.97	323.87	0.00	89.00	724.54	6847.12



(₹ in lakh)

Asset-III: Approved Apportioned Cost: ₹2340.65 lakh								
Particulars	Capital cost as on 31.3.2009	Additional Capital Expenditure (2009-14)						Capital Cost as on 31.3.2014
		2009-10	2010-11	2011-12	2012-13	2013-14	Total	
Approved As per Petition No. 268/2010 (Add Cap)	1007.42	248.82	122.32	0.00	0.00	0.00	371.14	1378.56
Actual Claimed as per Auditor's Certificate	1007.42	258.82	25	97.32	0.00	0.00	381.14	1388.56

Debt: Equity

15. 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.”

16. The petitioner has claimed trued up Annual Fixed Charge based on debt-equity ratio of 70:30 admitted as on 31.3.2009 in order dated 4.4.2011 in Petition No. 268/2010 for Asset-I, II and III. The admitted debt:equity ratio of 70:30 as on 31.3.2009 has been considered for the purpose of truing up of the approved tariff of tariff period 2009-14, as given under:-



(₹ in lakh)		
Funding	Amount	(%)
Asset-I		
Debt	14496.71	70.00
Equity	6212.88	30.00
Total	20709.59	100.00
Asset-II		
Debt	4286.38	70.00
Equity	1836.20	30.00
Total	6122.58	100.00
Asset-III		
Debt	705.19	70.00
Equity	302.23	30.00
Total	1007.42	100.00

17. With respect to additional capitalization, the petitioner has submitted the debt:equity ratio of 70:30 for 2009-14 for the Asset-I, II and III. The petitioner was directed to confirm that actual equity infused for the additional capitalisation during 2009-14 period is not less than 30% for the given transmission asset. The petitioner has submitted affidavit dated 28.1.2016 confirming that the actual debt and equity infused during tariff period 2009-14. As the petitioner has deployed the equity of not less than 30% in line with Regulation 12 of the 2009 Tariff Regulations, the normative debt:equity ratio of 70:30 has been considered with respect to additional capitalization.

18. The overall debt equity ratio as on 31.3.2014 for the instant assets including additional capitalization is as under:-



(₹ in lakh)		
Funding	Amount	(%)
Asset-I		
Debt	15710.99	70.00
Equity	6733.29	30.00
Total	22444.28	100.00
Asset-II		
Debt	4793.56	70.00
Equity	2053.56	30.00
Total	6847.12	100.00
Asset-III		
Debt	971.99	70.00
Equity	416.57	30.00
Total	1388.56	100.00

Interest on Loan (“IOL”)

19. 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”.

20. 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	2009-10	2010-11	2011-12	2012-13	2013-14
Asset-I					
Approved vide order dated 4.4.2011	1268.01	1214.81	1131.98	1027.22	922.55
As claimed by petitioner	1278.58	1218.93	1130.75	1037.78	936.11
Allowed after true up	1278.59	1218.94	1130.75	1037.78	936.10
Asset-II					
Approved vide order dated 4.4.2011	376.27	369.88	357.66	328.10	298.53
As claimed by petitioner	377.79	360.28	346.04	327.14	300.32
Allowed after true up	377.79	360.28	346.03	327.14	300.32
Asset-III					
Approved vide order dated 4.4.2011	66.70	72.41	69.82	63.11	56.43
As claimed by petitioner	66.99	69.96	67.46	63.88	57.16
Allowed after true up	67.00	69.97	67.47	63.89	57.17

21. There is variation in interest on loan due to variation in additional capitalization during 2019-14 tariff period.

Return on Equity (“ROE”)

22. 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:

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

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

(5) The generating company or the transmission licensee, as the case 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.”

23. The petitioner has submitted that MAT rate of 11.330% applicable for 2008-09 was considered in the order dated 4.4.2011. 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)) %
2009-10	16.995	18.674
2010-11	19.931	19.358
2011-12	20.008	19.377
2012-13	20.008	19.377
2013-14	20.961	19.610

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

Particulars	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Asset-I					
Approved vide order dated 4.4.2011	1109.26	1148.88	1165.32	1165.32	1165.32
As claimed by petitioner	1193.62	1274.84	1289.18	1299.43	1317.73
Allowed after true up	1193.62	1274.84	1289.18	1299.43	1317.73
Asset-II					
Approved vide order dated 4.4.2011	324.75	341.92	355.33	355.33	355.33
As claimed by petitioner	348.37	370.18	383.33	392.74	400.08
Allowed after true up	348.37	370.18	383.33	392.75	400.09
Asset-III					
Approved vide order dated 4.4.2011	59.36	69.09	72.30	72.30	72.30
As claimed by petitioner	63.69	74.26	77.89	80.72	81.69
Allowed after true up	63.69	74.26	77.89	80.72	81.69



25. The return on equity allowed in the instant order is more than the return on equity allowed vide order dated 4.4.2011 for Assets-I, II & III due to increase in equity on account of additional capitalisation and increase in the applicable MAT rate for the purpose of grossing up of base rate of return on equity.

Depreciation

26. 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”

27. 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.”

28. In order dated 4.4.2011 in Petition No. 268/2010 depreciation was worked out for Assets-I, II & III in accordance with Regulation 17 of the 2009 Tariff Regulations.



29. 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 30, 25 and 25 years for Asset-I, II and III. 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	2009-10	2010-11	2011-12	2012-13	2013-14
Asset-I					
Approved vide order dated 4.4.2011	1081.60	1111.01	1126.64	1126.64	1126.64
As claimed by petitioner	1084.21	1102.63	1113.98	1123.28	1125.68
Allowed after true up	1084.21	1102.64	1113.98	1123.29	1125.68
Asset-II					
Approved vide order dated 4.4.2011	288.94	305.18	318.20	318.20	318.20
As claimed by petitioner	290.32	297.59	308.80	317.35	319.70
Allowed after true up	290.33	297.59	308.80	317.35	319.70
Asset-III					
Approved vide order dated 4.4.2011	59.76	69.56	72.79	72.79	72.79
As claimed by petitioner	60.02	67.52	70.75	73.32	73.32
Allowed after true up	60.02	67.52	70.75	73.32	73.32

30. The variation in depreciation is on account of variation in additional capitalization vis-à-vis that approved in the order.

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

31. 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 4.4.2011 in Petition No. 268/2010 for Assets-I, II & III. Accordingly, the O&M Expenses claimed by the petitioner, allowed and trued up are the same, and are as follows:-

(₹ in lakh)					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Asset-I					
Approved vide order dated 4.4.2011	768.87	812.83	859.39	908.53	960.45
As claimed by petitioner	768.87	812.83	859.39	908.53	960.45
Allowed after true up	768.87	812.83	859.39	908.53	960.45
Asset-II					
Approved vide order dated 4.4.2011	324.88	343.48	363.14	383.88	405.84
As claimed by petitioner	324.88	343.48	363.14	383.88	405.84
Allowed after true up	324.88	343.48	363.14	383.88	405.84
Asset-III					
Approved vide order dated 4.4.2011	89.08	94.18	99.57	105.26	111.28
As claimed by petitioner	89.08	94.18	99.57	105.26	111.28
Allowed after true up	89.08	94.18	99.57	105.26	111.28

Interest on working capital (“IWC”)

32. 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.

33. The petitioner has submitted that the rate of interest on working capital has been considered as 12.25% as per Clause (3) of Regulation 18 of the 2009 Tariff Regulations and the components of working capital are also considered in



accordance with sub-clause (c) of clause (1) of Regulation 18 of the 2009 Tariff Regulations.

34. The Commission in its order dated 6.1.2011 in Petition No. 122/2010 approved rate of interest on working capital of 12.25% applicable for 2008-09. In accordance with clause (3) of Regulation 18 of the 2009 Tariff Regulations, rate of interest on working capital shall be on normative basis and in case of transmission assets declared under commercial operation prior to 1.4.2009, shall be equal to short-term Prime Lending Rate as applicable as on 1.4.2009. The State Bank of India short-term Prime Lending Rate on 1.4.2009 was 12.25%. Therefore, interest rate of 12.25% has been considered to work out the interest on working capital in the instant case.

35. The IWC trued up is as under:-

(₹ in lakh)

Asset-I					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	115.33	121.92	128.91	136.28	144.07
O & M expenses	64.07	67.74	71.62	75.71	80.04
Receivables	739.64	754.14	751.66	747.77	743.07
Total	919.05	943.80	952.18	959.76	967.18
Rate of Interest (%)	12.25	12.25	12.25	12.25	12.25
Interest	112.58	115.62	116.64	117.57	118.48

(₹ in lakh)

Asset-II					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	48.73	51.52	54.47	57.58	60.88
O & M expenses	27.07	28.62	30.26	31.99	33.82
Receivables	229.80	235.02	240.18	243.66	244.58
Total	305.61	315.17	324.92	333.23	339.28
Rate of Interest (%)	12.25	12.25	12.25	12.25	12.25



Asset-II					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Interest	37.44	38.61	39.80	40.82	41.56

(₹ in lakh)

Asset-III					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	13.36	14.13	14.94	15.79	16.69
O & M expenses	7.42	7.85	8.30	8.77	9.27
Receivables	48.04	52.51	54.19	55.50	55.57
Total	68.82	74.48	77.43	80.06	81.54
Rate of Interest (%)	12.25	12.25	12.25	12.25	12.25
Interest	8.43	9.12	9.48	9.81	9.99

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Asset-I					
Approved vide order dated 4.4.2011	110.55	113.08	114.35	114.62	115.04
As claimed by petitioner	112.58	115.62	116.64	117.57	118.48
Allowed after true up	112.58	115.62	116.64	117.57	118.48
Asset-II					
Approved vide order dated 4.4.2011	36.88	38.38	39.66	40.08	40.56
As claimed by petitioner	37.44	38.61	39.80	40.82	41.56
Allowed after true up	37.44	38.61	39.80	40.82	41.56
Asset-III					
Approved vide order dated 4.4.2011	8.33	9.11	9.46	9.60	9.77
As claimed by petitioner	8.43	9.12	9.49	9.81	9.99
Allowed after true up	8.43	9.12	9.48	9.81	9.99

36. 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

37. The detailed computation of the various components of the trued up annual fixed charges for the Asset for the tariff period from 2009-10 to 2013-14 is summarised below:-



(₹ in lakh)

Asset-I					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Block					
Opening Gross Block	20709.59	20807.57	21160.06	21160.06	21250.89
Additional Capitalization	97.98	352.49	0.00	90.83	1734.69
Closing Gross block	20807.57	21160.06	21160.06	21250.89	22985.58
Average Gross block	20758.58	20983.82	21160.06	21205.48	22118.24
Depreciation					
Rate of Depreciation (%)	5.223	5.255	5.265	5.297	5.089
Depreciable Value	18599.10	18932.40	19135.11	19293.73	19334.61
Elapsed Life of the assets at beginning of the year	0	1	2	3	4
Weighted Balance Useful life of the assets	30	29	28	27	26
Remaining Depreciable Value	17982.25	17231.34	16331.41	15376.05	14293.64
Depreciation	1084.21	1102.64	1113.98	1123.29	1125.68
Interest on Loan					
Gross Normative Loan	14496.71	15332.08	15400.67	15647.41	15647.41
Cumulative Repayment upto Previous Year	616.85	1701.06	2803.70	3917.68	5040.97
Net Loan-Opening	13879.86	13631.02	12596.97	11729.73	10606.44
Additions	835.37	68.59	246.74	0.00	63.58
Repayment during the year	1084.21	1102.64	1113.98	1123.29	1125.68
Net Loan-Closing	13631.02	12596.97	11729.73	10606.44	9544.34
Average Loan	13755.44	13113.99	12163.35	11168.09	10075.39
Weighted Average Rate of Interest on Loan (%)	9.2951	9.2949	9.2964	9.2924	9.2910
Interest	1278.59	1218.94	1130.75	1037.78	936.10
Return on Equity					
Opening Equity	6212.88	6570.90	6600.29	6706.04	6706.04
Additions	358.02	29.39	105.75	0.00	27.25
Closing Equity	6570.90	6600.29	6706.04	6706.04	6733.29
Average Equity	6391.89	6585.59	6653.16	6706.04	6719.66



Asset-I					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT rate for the respective year (%)	16.995	19.931	20.008	20.008	20.961
Rate of Return on Equity (Pre Tax) (%)	18.674	19.358	19.377	19.377	19.610
Return on Equity (Pre Tax)	1193.62	1274.84	1289.18	1299.43	1317.73
Interest on Working Capital					
Maintenance Spares	115.33	121.92	128.91	136.28	144.07
O & M Expenses	64.07	67.74	71.62	75.71	80.04
Receivables	739.64	754.14	751.66	747.77	743.07
Total	919.05	943.80	952.18	959.76	967.18
Interest	112.58	115.62	116.64	117.57	118.48
Annual Transmission Charges					
Depreciation	1084.21	1102.64	1113.98	1123.29	1125.68
Interest on Loan	1278.59	1218.94	1130.75	1037.78	936.10
Return on Equity	1193.62	1274.84	1289.18	1299.43	1317.73
Interest on Working Capital	112.58	115.62	116.64	117.57	118.48
O & M Expenses	768.87	812.83	859.39	908.53	960.45
Total	4437.87	4524.86	4509.95	4486.60	4458.44

(₹ in lakh)

Asset-II					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Block					
Opening Gross Block	6122.58	6318.28	6434.25	6758.12	6758.12
Additional Capitalization	195.70	115.97	323.87	0.00	89.00
Closing Gross block	6318.28	6434.25	6758.12	6758.12	6847.12
Average Gross block	6220.43	6376.27	6596.19	6758.12	6802.62
Depreciation					
Rate of Depreciation (%)	4.667	4.667	4.682	4.696	4.700
Depreciable Value	5071.82	5212.07	5409.99	5555.74	5595.79



Asset-II					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Elapsed Life of the assets at beginning of the year	0	1	2	3	4
Weighted Balance Useful life of the assets	25	24	23	22	21
Remaining Depreciable Value	4928.25	4778.17	4678.50	4515.44	4238.14
Depreciation	290.33	297.59	308.80	317.35	319.70
Interest on Loan					
Gross Normative Loan	4286.38	4423.37	4504.55	4731.26	4731.26
Cumulative Repayment upto Previous Year	143.57	433.90	731.49	1040.29	1357.65
Net Loan-Opening	4142.81	3989.47	3773.06	3690.96	3373.61
Additions	136.99	81.18	226.71	0.00	62.30
Repayment during the year	290.33	297.59	308.80	317.35	319.70
Net Loan-Closing	3989.47	3773.06	3690.96	3373.61	3116.21
Average Loan	4066.14	3881.26	3732.01	3532.29	3244.91
Weighted Average Rate of Interest on Loan (%)	9.2910	9.2825	9.2721	9.2614	9.2551
Interest	377.79	360.28	346.03	327.14	300.32
Return on Equity					
Opening Equity	1836.20	1894.91	1929.70	2026.86	2026.86
Additions	58.71	34.79	97.16	0.00	26.70
Closing Equity	1894.91	1929.70	2026.86	2026.86	2053.56
Average Equity	1865.56	1912.31	1978.28	2026.86	2040.21
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT rate for the respective year (%)	16.995	19.931	20.008	20.008	20.961
Rate of Return on Equity (Pre Tax) (%)	18.674	19.358	19.377	19.377	19.610
Return on Equity (Pre Tax)	348.37	370.18	383.33	392.75	400.09
Interest on Working Capital					
Maintenance Spares	48.73	51.52	54.47	57.58	60.88
O & M Expenses	27.07	28.62	30.26	31.99	33.82



Asset-II					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Receivables	229.80	235.02	240.18	243.66	244.58
Total	305.61	315.17	324.92	333.23	339.28
Interest	37.44	38.61	39.80	40.82	41.56
Annual Transmission Charges					
Depreciation	290.33	297.59	308.80	317.35	319.70
Interest on Loan	377.79	360.28	346.03	327.14	300.32
Return on Equity	348.37	370.18	383.33	392.75	400.09
Interest on Working Capital	37.44	38.61	39.80	40.82	41.56
O & M Expenses	324.88	343.48	363.14	383.88	405.84
Total	1378.81	1410.14	1441.11	1461.94	1467.51

(₹ in lakh)

Asset-III					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Block					
Opening Gross Block	1007.42	1266.24	1291.24	1388.56	1388.56
Additional Capitalization	258.82	25.00	97.32	0.00	0.00
Closing Gross block	1266.24	1291.24	1388.56	1388.56	1388.56
Average Gross block	1136.83	1278.74	1339.90	1388.56	1388.56
Depreciation					
Rate of Depreciation (%)	5.280	5.280	5.280	5.280	5.280
Depreciable Value	1023.15	1150.87	1205.91	1249.70	1249.70
Elapsed Life of the assets at beginning of the year	1	2	3	4	5
Weighted Balance Useful life of the assets	24	23	22	21	20
Remaining Depreciable Value	986.99	1054.68	1042.21	1015.26	941.94
Depreciation	60.02	67.52	70.75	73.32	73.32
Interest on Loan					
Gross Normative Loan	705.19	886.36	903.86	971.99	971.99



Asset-III					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Cumulative Repayment upto Previous Year	36.16	96.18	163.70	234.45	307.76
Net Loan-Opening	669.03	790.18	740.16	737.54	664.22
Additions	181.17	17.50	68.12	0.00	0.00
Repayment during the year	60.02	67.52	70.75	73.32	73.32
Net Loan-Closing	790.18	740.16	737.54	664.22	590.91
Average Loan	729.60	765.17	738.85	700.88	627.57
Weighted Average Rate of Interest on Loan (%)	9.18324	9.14409	9.13152	9.11521	9.11037
Interest	67.00	69.97	67.47	63.89	57.17
Return on Equity					
Opening Equity	302.23	379.88	387.38	416.57	416.57
Additions	77.65	7.50	29.20	0.00	0.00
Closing Equity	379.88	387.38	416.57	416.57	416.57
Average Equity	341.05	383.63	401.97	416.57	416.57
Return on Equity (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT rate for the respective year (%)	16.995	19.931	20.008	20.008	20.961
Rate of Return on Equity (Pre Tax) (%)	18.674	19.358	19.377	19.377	19.610
Return on Equity (Pre Tax)	63.69	74.26	77.89	80.72	81.69
Interest on Working Capital					
Maintenance Spares	13.36	14.13	14.94	15.79	16.69
O & M Expenses	7.42	7.85	8.30	8.77	9.27
Receivables	48.04	52.51	54.19	55.50	55.57
Total	68.82	74.48	77.43	80.06	81.54
Interest	8.43	9.12	9.48	9.81	9.99
Annual Transmission Charges					
Depreciation	60.02	67.52	70.75	73.32	73.32
Interest on Loan	67.00	69.97	67.47	63.89	57.17
Return on Equity	63.69	74.26	77.89	80.72	81.69



Asset-III					
Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Interest on Working Capital	8.43	9.12	9.48	9.81	9.99
O & M Expenses	89.08	94.18	99.57	105.26	111.28
Total	288.22	315.05	325.16	332.99	333.45

DETERMINATION OF ANNUAL TRANSMISSION CHARGES FOR 2014-19

38. The petitioner has claimed the transmission charges for Combined Asset-I, II & III as under:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	1523.45	1523.45	1523.45	1523.45	1523.45
Interest on Loan	1215.55	1112.08	970.93	829.78	688.63
Return on Equity	1797.04	1831.20	1831.20	1831.20	1831.20
Interest on Working Capital	179.53	180.43	179.76	179.17	178.67
O & M Expenses	1359.77	1404.96	1451.65	1499.77	1549.54
Total	6075.34	6052.12	5956.99	5863.37	5771.49

39. 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	203.97	210.74	217.75	224.97	232.43
O & M expenses	113.31	117.08	120.97	124.98	129.13
Receivables	1012.56	1008.69	992.83	977.23	961.92
Total	1329.84	1336.51	1331.55	1327.18	1323.48
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	179.53	180.43	179.76	179.17	178.67

40. Rajasthan Discoms have submitted that the tariff sought for tariff period 2014-19 appear to be on higher side and needs to be rationalized. The proposed transmission tariff is not tenable as the petitioner has not provided the actual figures and tariff is merely based on AFC, O&M, depreciation, interest on



depreciation, etc. The reasons submitted for determination of tariff for tariff period 2014-19 are payment of taxes on MAT, ROE, interest on loan, deferred tax liability, service tax, O&M expenses, filing fee, publication of notices in newspapers, etc. and are rudimentary in nature without being specific. The proposal appears to be vague and is not specific for lack of categorical details and necessitates prudent check.

Capital Cost

41. Clause (1) & (3) of Regulation 9 of the 2014 Tariff Regulations specify as follows:-

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

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

- (a) the capital cost admitted by the Commission prior to 1.4.2014 duly trued up by excluding liability, if any, as on 1.4.2014;
- (b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and
- (c) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15.”

42. The trued up capital cost of ₹ 22444.28 lakh, ₹ 6847.12 lakh and ₹1388.56 lakh for Asset-I, II and III, respectively, as on 31.3.2014 is considered for the purpose of tariff for tariff period 2014-19. Thus, for Combined Asset-I, II & III, the true up capital cost of ₹30679.97 lakh as on 31.3.2014 is considered for the purpose of tariff for tariff period 2014-19.



Additional Capital Expenditure

43. The petitioner has claimed capital cost of ₹30679.97 lakh for Combined Assets-I, II & III as on 31.3.2014 and has projected additional capital expenditure of ₹316.71 lakh for Asset-I and ₹844.52 lakh for Asset-II and no add cap for Asset-III during 2014-15 for the tariff period 2014-19 towards payment made for land in accordance with Clause 1(i) of Regulation 14 of the 2014 Tariff Regulations. In this regard, the petitioner was directed to provide the details that whether all the balance/retention payments for assets under this petition have been claimed or some payments are still to be claimed. The petitioner in response vide its affidavit dated 28.1.2016 submitted the following details:

- a) Asset-I(a)- There is no further balance/retention payment for the asset. Additional capitalization for tariff period 2009-14 and 2014-19 is nil.
- b) Asset-I(b)- There is no further balance/retention payment for the asset. Additional capitalization for tariff period 2009-14 is ₹550.70 lakh and for 2014-19 is nil.
- c) Asset-I(c), II(a), II(b) & III- There is no balance/retention payment during tariff period 2009-14. Details of actual payment made during 2014-19 shall be submitted in truing up petition.

44. Further, the additional capital expenditure for Assets- I(c), II(a) and II(b) in tariff period 2014-19 is due to enhanced land compensation due to court order. Part payment is made in 2014-15 and remaining payment during subsequent years. Accordingly, this additional capital expenditure may be allowed under



Regulation 14(3)(i) of the 2014 Tariff Regulations. The petitioner was directed to provide the copy of court case for enhanced compensation towards land substantiating the claimed amount, amount of compensation actually paid in 2014-15 and yet to be paid. The petitioner vide affidavit dated 28.1.2016 submitted the copy of court case for enhanced compensation towards land for Fatehabad Sub-station and land for Ludhina Sub-station. Further, the amount of ₹900.00 lakh is paid in 2014-15 and ₹100.00 lakh is estimated to be paid against Ludhiana court case. Also, the petitioner was directed to provide the actual payments made for additional capitalization for 2014-15 towards enhanced land compensation. The petitioner in response submitted that actual payment during tariff period 2014-19 shall be submitted at the time of truing up of 2014-19.

45. As the total capital cost of ₹31841.20 lakh for the Combined Asset-I, II & III including actual additional capitalization claimed by the petitioner is within the apportioned approved cost of ₹32690.33 lakh for Combined Asset-I, II & III. We have considered the submissions of the petitioner. Additional capitalization of ₹31841.20 lakh is allowed, as claimed by the petitioner under Clause (1)(i) of Regulation 14 of the 2014 Tariff Regulations which will be reviewed at the time of truing up.

46. The total capital cost including additional capitalisation during 2014-19 period considered for computation of tariff is given in table below:-

Particulars	Capital cost as on 31.3.2014	Additional Net capitalisation (after deducting de-capitalisation)					Total additional capitalisation	Total capital cost as on 31.3.2019
		2014-15	2015-16	2016-17	2017-18	2018-19		
		Asset	30679.97	1161.23	0.00	0.00		



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	Amount	(₹ in lakh)
		(%)
Debt	21476.54	70.00
Equity	9203.42	30.00
Total	30679.96	100.00

49. Further, normative debt:equity ratio of 7:30 has been proposed for additional capitalization for tariff period 2014-19. The details of debt:equity ratio including additional capitalization is as follows:

Particulars	Amount	(₹ in lakh)
		(%)
Debt	21476.54	70.00
Equity	9203.42	30.00
Total	30679.96	100.00

Interest on Loan (“IOL”)

50. 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.”

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. It is observed that there were some computational errors in the petitioner’s submissions which have been corrected. 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	21476.54	22289.40	22289.40	22289.40	22289.40
Cumulative Repayment upto previous year	8225.08	9748.53	11271.98	12795.43	14318.87
Net Loan-Opening	13251.46	12540.87	11017.42	9493.97	7970.53
Additions during the year	812.86	0.00	0.00	0.00	0.00
Repayment during the year	1523.45	1523.45	1523.45	1523.45	1523.45
Net Loan-Closing	12540.87	11017.42	9493.97	7970.53	6447.08



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Average Loan	12896.17	11779.15	10255.70	8732.25	7208.80
Rate of Interest (%)	9.2720	9.2728	9.2739	9.2754	9.2775
Interest	1195.74	1092.26	951.10	809.95	668.80

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:

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

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

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. It is observed that there were some computational errors in the petitioner's submissions which have been corrected. Accordingly, the ROE allowed for Combined Asset-I, II & III is given below:-



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	9203.42	9551.79	9551.79	9551.79	9551.79
Additional Capitalization	348.37	0.00	0.00	0.00	0.00
Closing Equity	9551.79	9551.79	9551.79	9551.79	9551.79
Average Equity	9377.61	9551.79	9551.79	9551.79	9551.79
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)	1838.95	1873.11	1873.11	1873.11	1873.11

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-I, II & III considering capital expenditure of ₹30679.97 lakh as on 31.3.2014.

58. We have considered the submissions of the petitioner and have allowed depreciation considering capital expenditure of ₹30679.97 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	30679.97	31841.20	31841.20	31841.20	31841.20
Additional Capitalisation	1161.23	0.00	0.00	0.00	0.00
Gross block at the end of the year	31841.20	31841.20	31841.20	31841.20	31841.20
Average gross block	31260.59	31841.20	31841.20	31841.20	31841.20
Rate of Depreciation (%)	4.873	4.785	4.785	4.785	4.785
Depreciable Value	26261.03	26261.03	26261.03	26261.03	26261.03
Elapsed Life of the assets at beginning of the year	5	6	7	8	9
Weighted Balance Useful life of the assets	23	22	21	20	19
Remaining Depreciable Value	18035.95	16512.50	14989.05	13465.60	11942.15
Depreciation	1523.45	1523.45	1523.45	1523.45	1523.45

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		2014-15	2015-16	2016-17	2017-18	2018-19
Actual line length (km)	Single Circuit (Twin & Triple Conductor)	120.505	120.505	120.505	120.505	120.505
	Double Circuit (Twin & Triple Conductor)	29.226	29.226	29.226	29.226	29.226
Actual (No. of bays)	400 kV Bays	13	13	13	13	13
	220 kV Bays	12	12	12	12	12
Norms as per Regulation	Single Circuit (Twin & Triple Conductor) (₹lakh/km)	0.404	0.404	0.404	0.404	0.404
	Double Circuit (Twin & Triple Conductor) (₹lakh/km)	0.707	0.707	0.707	0.707	0.707
	400 kV Bays (₹lakh/bay)	60.30	60.30	60.30	60.30	60.30
	220 kV Bays (₹lakh/bay)	42.21	43.61	45.06	46.55	48.10
Total (₹ in lakh)		1359.77	1404.96	1451.65	1499.77	1549.54

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-I, II & III are given hereunder:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses Allowed	1359.77	1404.96	1451.65	1499.77	1549.54

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 allowed is shown in the table below:-

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	203.97	210.74	217.75	224.97	232.43
O & M Expenses	113.31	117.08	120.97	124.98	129.13
Receivables	1016.32	1012.45	996.60	980.99	965.68
Total	1333.60	1340.27	1335.32	1330.94	1327.24
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	180.04	180.94	180.27	179.68	179.18

Annual Transmission Charges

66. The detailed computation of the various components of the annual fixed charges for the Combined Asset-I, II & III 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	30679.97	31841.20	31841.20	31841.20	31841.20
Additional Capitalisation	1161.23	0.00	0.00	0.00	0.00
Closing Gross Block	31841.20	31841.20	31841.20	31841.20	31841.20
Average Gross Block	31260.59	31841.20	31841.20	31841.20	31841.20
Depreciation					
Rate of Depreciation	4.873	4.785	4.785	4.785	4.785
Depreciable Value	26261.03	26261.03	26261.03	26261.03	26261.03
Elapsed Life of the assets at beginning of the year	5	6	7	8	9
Weighted Balance Useful life of the assets	23	22	21	20	19



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Remaining Depreciable Value	18035.95	16512.50	14989.05	13465.60	11942.15
Depreciation	1523.45	1523.45	1523.45	1523.45	1523.45
Interest on Loan					
Gross Normative Loan	21476.54	22289.40	22289.40	22289.40	22289.40
Cumulative Repayment upto Previous Year	8225.08	9748.53	11271.98	12795.43	14318.87
Net Loan-Opening	13251.46	12540.87	11017.42	9493.97	7970.53
Additions	812.86	0.00	0.00	0.00	0.00
Repayment during the year	1523.45	1523.45	1523.45	1523.45	1523.45
Net Loan-Closing	12540.87	11017.42	9493.97	7970.53	6447.08
Average Loan	12896.17	11779.15	10255.70	8732.25	7208.80
Weighted Average Rate of Interest on Loan (%)	9.2720	9.2728	9.2739	9.2754	9.2775
Interest	1195.74	1092.26	951.10	809.95	668.80
Return on Equity					
Opening Equity	9203.42	9551.79	9551.79	9551.79	9551.79
Additions	348.37	0.00	0.00	0.00	0.00
Closing Equity	9551.79	9551.79	9551.79	9551.79	9551.79
Average Equity	9377.61	9551.79	9551.79	9551.79	9551.79
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)	1838.95	1873.11	1873.11	1873.11	1873.11
Interest on Working Capital					
Maintenance Spares	203.97	210.74	217.75	224.97	232.43
O & M expenses	113.31	117.08	120.97	124.98	129.13
Receivables	1016.32	1012.45	996.60	980.99	965.68
Total	1333.60	1340.27	1335.32	1330.94	1327.24
Interest	180.04	180.94	180.27	179.68	179.18
Annual Transmission Charges					
Depreciation	1523.45	1523.45	1523.45	1523.45	1523.45



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Loan	1195.74	1092.26	951.10	809.95	668.80
Return on Equity	1838.95	1873.11	1873.11	1873.11	1873.11
Interest on Working Capital	180.04	180.94	180.27	179.68	179.18
O & M Expenses	1359.77	1404.96	1451.65	1499.77	1549.54
Total	6097.94	6074.71	5979.58	5885.95	5794.07

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.

Deferred Tax Liability

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

Sharing of Transmission Charges

71. 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.

72. This order disposes of Petition No. 2/TT/2015.

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 Particulars	Asset-I			
	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
BOND XX-28-DOCODRAWL ON 01-FEB-2008 - 01-FEB-2008-	8.93	2500.00	0.00	2500.00
BOND XX-1-DOCO DRAWL ON 01-Apr-2008	8.93	0.00	0.00	0.00
BOND XX-10-DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	8.93	0.00	0.00	0.00
BOND XX-27-DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	8.93	2100.00	0.00	2100.00
BOND XXI-29-DOCO DRAWL ON 01-FEB-2008 - 01-FEB-2008-	8.73	500.00	0.00	500.00
BOND XXI-2-DOCO DRAWL ON 01-APR-2008-	8.73	0.00	0.00	0.00
BOND XXI-11-DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	0.00	0.00	0.00	0.00
BOND XXI-30-DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	0.00	167.00	0.00	167.00
BOND XXII-33-DOCO -01-JUL-2007-	0.00	55.00	0.00	55.00
BOND XXII -32-DOCO DRAWL ON 01-FEB-2008 - 01-FEB-2008-	0.00	700.00	0.00	700.00
BOND XXII -13- DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	0.00	0.00	0.00	0.00
BOND XXII -31-DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	0.00	750.00	0.00	750.00
BOND XXII-100-DOCO DRAWL ON 01-APR-2008-	0.00	0.00	0.00	0.00
BOND XXI-12-DOCO- 01-JUL-2008-	0.00	0.00	0.00	0.00
BOND XXIV-36-DOCO - 01-JUL-2007-	0.00	28.00	0.00	28.00
BOND XXIV-35-DOCO DRAWL ON 01-FEB-2008 - 01-FEB-2008-	0.00	600.00	0.00	600.00
BOND XXIV-4-DOCO DRAWL ON 01-APR-2008-	0.00	0.00	0.00	0.00
BOND XXIV-15-DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	0.00	0.00	0.00	0.00
BOND XXIV-34-DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	0.00	700.00	0.00	700.00
BOND XXIV-14-DOCO DRAWL ON 01-JUL-2008 - 01-JUL-2008-	0.00	0.00	0.00	0.00
BOND XXV-38-DOCO DRAWL ON 01-FEB-2008 - 01-FEB-2008-	0.00	2159.00	0.00	2159.00



2009-14	Asset-I			
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
BOND XXV-37-DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	0.00	500.00	0.00	500.00
BOND XXVI-41-ADDCAP FOR 2007-2008 DRAWL ON 31-MAR-2008 - 31-MAR-2008-	0.00	152.00	0.00	152.00
BOND XXVI-40-ADDCAP FOR 2007-2008 02-JUL-2007 - 02-JUL-2007-	0.00	19.00	0.00	19.00
BOND XXVI-45-ADDCAP FOR 2009-2010 ADD CAP-	0.00	0.00	532.00	532.00
BOND XXVI-39-DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	0.00	2600.00	0.00	2600.00
BOND XXVIII-42-ADDCAP FOR 2008-2009 DRAWL ON 29-SEP-2008 - 29-SEP-2008-	0.00	852.00	0.00	852.00
BOND XXVIII-43-ADDCAP FOR 2008-2009 DRAWL ON 31-MAR-2009 - 31-MAR-2009-	0.00	87.12	0.00	87.12
BOND XXX-44-ADDCAP FOR 2009-2010 ADD CAP-	0.00	0.00	303.37	303.37
BOND XXX-46-ADDCAP FOR 2010-2011 ADD CAP-	0.00	0.00	68.59	68.59
BOND XXXI-47-ADDCAP FOR 2011-2012 ADD CAP-	0.00	0.00	246.74	246.74
BOND XXXI-ADDCAP FOR 2013-2014 ADD CAP-	0.00	0.00	12.26	12.26
BOND XXXIII-49-ADDCAP FOR 2013-2014 ADD CAP-	0.00	0.00	51.32	51.32
Total		14469.12	1214.28	15683.40

(₹ in lakh)

2009-14	Asset-II			
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
BOND XX-10-DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	8.93	600.00	0.00	600.00
BOND XXI-11-DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	8.73	25.00	0.00	25.00
BOND XXII -13- DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	8.68	200.00	0.00	200.00
BOND XXI-12-DOCO- 01-JUL-2008-	8.68	47.00	0.00	47.00
BOND XXIV-15-DOCO DRAWL ON 01-	9.95	129.00	0.00	129.00



2009-14	Asset-II			
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
JUN-2008 - 01-JUN-2008-				
BOND XXIV-14-DOCO DRAWL ON 01-JUL-2008 - 01-JUL-2008-	9.95	38.00	0.00	38.00
BOND XXV-16-DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	10.10	200.00	0.00	200.00
BOND XXV-17-DOCO DRAWL ON 01-JUL-2008 -01-JUL-2008-	10.10	73.00	0.00	73.00
BOND XXVI-19-DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	9.30	700.00	0.00	700.00
BOND XXVI-18-DOCO DRAWL ON 01-JUL-2008 - 01-JUL-2008-	9.30	663.00	0.00	663.00
BOND XXVIII-20-ADDCAP FOR 2008-2009 DRAWL ON 29-SEP-2008 - 29-SEP-2008-	9.33	798.99	0.00	798.99
BOND XXVIII-21-DOCO DRAWL ON 29-SEP-2008 - 29-SEP-2008-	9.33	1052.00	0.00	1052.00
BOND XXX-22-ADDCAP FOR 2009-2010 ADD CAP-	8.80	0.00	137.00	137.00
BOND XXX-23-ADDCAP FOR 2010-2011 ADD CAP-	8.80	0.00	29.81	29.81
BOND XXXI-24-ADDCAP FOR 2010-2011 ADD CAP-	8.90	0.00	51.37	51.37
BOND XXXI-26-ADDCAP FOR 2011-2012 ADD CAP-	8.90	0.00	226.71	226.71
BOND XXXIII-25-ADDCAP FOR 2013-2014 ADD CAP-	8.64	0.00	62.30	62.30
Total		4525.99	507.19	5033.18

(₹ in lakh)

2009-14	Asset-III			
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
BOND XX-1-DOCO DRAWL ON 01-Apr-2008	8.93	200.00	0.00	200.00
BOND XXI-2-DOCO DRAWL ON 01-APR-2008-	8.73	100.00	0.00	100.00
BOND XXII-100-DOCO DRAWL ON 01-APR-2008-	8.68	100.00	0.00	100.00
BOND XXIV-4-DOCO DRAWL ON 01-	9.95	100.00	0.00	100.00



2009-14	Asset-III			
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
APR-2008-				
BOND XXV-5-DOCO DRAWL ON 01-APR-2008-	10.10	100.00	0.00	100.00
BOND XXVI-6-DOCO DRAWL ON 01-APR-2008-	9.30	101.00	0.00	101.00
BOND XXVIII-Loan 7-	9.33	5.89	0.00	5.89
BOND XXX-7-ADDCAP FOR 2009-2010 ADD CAP-	8.80	0.00	181.17	181.17
BOND XXXI-8-ADDCAP FOR 2010-2011 ADD CAP-	8.90	0.00	17.50	17.50
BOND XXXI-9-ADDCAP FOR 2011-2012 ADD CAP-	8.90	0.00	68.12	68.12
Total		706.89	266.79	973.68

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

(₹ in lakh)

2009-14	Asset-I				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	14469.12	15304.49	15373.08	15619.82	15619.82
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	674.99	1846.82	3096.91
Net Loans Opening	14469.12	15304.49	14698.09	13773.00	12522.91
Add: Drawl(s) during the year	835.37	68.59	246.74	0.00	63.58
Less: Repayment(s) of Loan during the year	0.00	674.99	1171.83	1250.09	1302.67
Net Closing Loan	15304.49	14698.09	13773.00	12522.91	11283.82
Average Net Loan	14886.81	15001.29	14235.55	13147.96	11903.37
Interest on Loan	1383.75	1394.36	1323.39	1221.76	1105.94
Rate of Interest on Loan (%)	9.2951	9.2949	9.2964	9.2924	9.2910



(₹ in lakh)

2009-14	Asset-II				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	4525.99	4662.99	4744.17	4970.88	4970.88
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	86.59	309.51	686.68
Net Loans Opening	4525.99	4662.99	4657.58	4661.37	4284.20
Add: Drawl(s) during the year	137.00	81.18	226.71	0.00	62.30
Less: Repayment(s) of Loan during the year	0.00	86.59	222.92	377.17	414.24
Net Closing Loan	4662.99	4657.58	4661.37	4284.20	3932.26
Average Net Loan	4594.49	4660.29	4659.48	4472.79	4108.23
Interest on Loan	0.09	0.09	0.09	0.09	0.09
Rate of Interest on Loan (%)	426.88	432.59	432.03	414.24	380.22

(₹ in lakh)

2009-14	Asset-III				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	706.89	888.06	905.56	973.68	973.68
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	41.66	100.07	158.97
Net Loans Opening	706.89	888.06	863.90	873.61	814.71
Add: Drawl(s) during the year	181.17	17.50	68.12	0.00	0.00
Less: Repayment(s) of Loan during the year	0.00	41.66	58.41	58.90	81.14
Net Closing Loan	888.06	863.90	873.61	814.71	733.57
Average Net Loan	797.48	875.98	868.76	844.16	774.14
Interest on Loan	0.09	0.09	0.09	0.09	0.09
Rate of Interest on Loan (%)	73.23	80.10	79.33	76.95	70.53



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

(₹ in lakh)

2014-19 Particulars	Combined Assets- I, II & III			
	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND XX-28-DOCODRAWL ON 01-FEB-2008 - 01-FEB-2008-	8.93	2500.00	0.00	2500.00
BOND XX-1-DOCO DRAWL ON 01-Apr-2008	8.93	200.00	0.00	200.00
BOND XX-10-DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	8.93	600.00	0.00	600.00
BOND XX-27-DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	8.93	2100.00	0.00	2100.00
BOND XXI-29-DOCO DRAWL ON 01-FEB-2008 - 01-FEB-2008-	8.73	500.00	0.00	500.00
BOND XXI-2-DOCO DRAWL ON 01-APR-2008-	8.73	100.00	0.00	100.00
BOND XXI-11-DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	8.73	25.00	0.00	25.00
BOND XXI-30-DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	8.73	167.00	0.00	167.00
BOND XXII-33-DOCO -01-JUL-2007-	8.68	55.00	0.00	55.00
BOND XXII -32-DOCO DRAWL ON 01-FEB-2008 - 01-FEB-2008-	8.68	700.00	0.00	700.00
BOND XXII -13- DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	8.68	200.00	0.00	200.00
BOND XXII -31-DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	8.68	750.00	0.00	750.00
BOND XXII-100-DOCO DRAWL ON 01-APR-2008-	8.68	100.00	0.00	100.00
BOND XXI-12-DOCO- 01-JUL-2008-	8.68	47.00	0.00	47.00
BOND XXIV-36-DOCO - 01-JUL-2007-	9.95	28.00	0.00	28.00
BOND XXIV-35-DOCO DRAWL ON 01-FEB-2008 - 01-FEB-2008-	9.95	600.00	0.00	600.00
BOND XXIV-4-DOCO DRAWL ON 01-APR-2008-	9.95	100.00	0.00	100.00
BOND XXIV-15-DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	9.95	129.00	0.00	129.00
BOND XXIV-34-DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	9.95	700.00	0.00	700.00
BOND XXIV-14-DOCO DRAWL ON 01-JUL-2008 - 01-JUL-2008-	9.95	38.00	0.00	38.00



2014-19	Combined Assets- I, II & III			
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND XXV-38-DOCO DRAWL ON 01-FEB-2008 - 01-FEB-2008-	10.10	2159.00	0.00	2159.00
BOND XXV-5-DOCO DRAWL ON 01-APR-2008-	10.10	100.00	0.00	100.00
BOND XXV-16-DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	10.10	200.00	0.00	200.00
BOND XXV-37-DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	10.10	500.00	0.00	500.00
BOND XXV-17-DOCO DRAWL ON 01-JUL-2008 -01-JUL-2008-	10.10	73.00	0.00	73.00
BOND XXVI-41-ADDCAP FOR 2007-2008 DRAWL ON 31-MAR-2008 - 31-MAR-2008-	9.30	152.00	0.00	152.00
BOND XXVI-40-ADDCAP FOR 2007-2008 02-JUL-2007 - 02-JUL-2007-	9.30	19.00	0.00	19.00
BOND XXVI-45-ADDCAP FOR 2009-2010 ADD CAP-	9.30	532.00	0.00	532.00
BOND XXVI-6-DOCO DRAWL ON 01-APR-2008-	9.30	101.00	0.00	101.00
BOND XXVI-19-DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	9.30	700.00	0.00	700.00
BOND XXVI-39-DOCO DRAWL ON 01-JUN-2008 - 01-JUN-2008-	9.30	2600.00	0.00	2600.00
BOND XXVI-18-DOCO DRAWL ON 01-JUL-2008 - 01-JUL-2008-	9.30	663.00	0.00	663.00
BOND XXVIII-Loan 7-	9.33	5.89	0.00	5.89
BOND XXVIII-20-ADDCAP FOR 2008-2009 DRAWL ON 29-SEP-2008 - 29-SEP-2008-	9.33	798.99	0.00	798.99
BOND XXVIII-42-ADDCAP FOR 2008-2009 DRAWL ON 29-SEP-2008 - 29-SEP-2008-	9.33	852.00	0.00	852.00
BOND XXVIII-21-DOCO DRAWL ON 29-SEP-2008 - 29-SEP-2008-	9.33	1052.00	0.00	1052.00
BOND XXVIII-43-ADDCAP FOR 2008-2009 DRAWL ON 31-MAR-2009 - 31-MAR-2009-	9.33	87.12	0.00	87.12
BOND XXX-44-ADDCAP FOR 2009-2010 ADD CAP-	8.80	303.37	0.00	303.37
BOND XXX-22-ADDCAP FOR 2009-2010 ADD CAP-	8.80	137.00	0.00	137.00
BOND XXX-46-ADDCAP FOR 2010-2011 ADD CAP-	8.80	68.59	0.00	68.59
BOND XXX-7-ADDCAP FOR 2009-2010 ADD CAP-	8.80	181.17	0.00	181.17



2014-19	Combined Assets- I, II & III			
	Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period
BOND XXX-23-ADDCAP FOR 2010-2011 ADD CAP-	8.80	29.81	0.00	29.81
BOND XXXI-24-ADDCAP FOR 2010-2011 ADD CAP-	8.90	51.37	0.00	51.37
BOND XXXI-8-ADDCAP FOR 2010-2011 ADD CAP-	8.90	17.50	0.00	17.50
BOND XXXI-26-ADDCAP FOR 2011-2012 ADD CAP-	8.90	226.71	0.00	226.71
BOND XXXI-9-ADDCAP FOR 2011-2012 ADD CAP-	8.90	68.12	0.00	68.12
BOND XXXI-47-ADDCAP FOR 2011-2012 ADD CAP-	8.90	246.74	0.00	246.74
BOND XXXI-ADDCAP FOR 2013-2014 ADD CAP-	8.90	12.26	0.00	12.26
BOND XXXIII-49-ADDCAP FOR 2013-2014 ADD CAP-	8.64	51.32	0.00	51.32
BOND XXXIII-25-ADDCAP FOR 2013-2014 ADD CAP-	8.64	62.30	0.00	62.30
Total		21690.26	0.00	21690.26

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

(₹ in lakh)

2014-19	Combined Asset-I, II & III				
	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	21690.26	21690.26	21690.26	21690.26	21690.26
Cumulative Repayments of Loans upto Previous Year	5740.61	7548.13	9355.65	11163.17	12970.69
Net Loans Opening	15949.65	14142.13	12334.61	10527.09	8719.57
Add: Drawl(s) during the year	0.00	0.00	0.00	0.00	0.00
Less: Repayment(s) of Loan during the year	1807.52	1807.52	1807.52	1807.52	1807.52
Net Closing Loan	14142.13	12334.61	10527.09	8719.57	6912.05
Average Net Loan	15045.89	13238.37	11430.85	9623.33	7815.81
Interest on Loan	1395.06	1227.57	1060.09	892.60	725.11
Rate of Interest on Loan (%)	9.2720	9.2728	9.2739	9.2754	9.2775

