

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**PETITION NO.16/TT/2015**

**Coram:**

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

**Date of Hearing: 03.02.2016  
Date of Order : 21.03.2016**

**In the Matter of:**

Truing up of transmission tariff for 2009-14 tariff block under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 and determination of transmission tariff for 2014-19 tariff block under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for Asset 1: LILO of One Circuit of 400 kV Bawana-Bahadurgarh-Hissar Line at Bhiwani Sub-station (DOCO: 01.09.2011) & Asset 2: 400/220 kV 315 MVA ICT-I & ICT-II along with associated bays at Bhiwani Sub-Station (DOCO:01-12-2012) under "765 kV System for Central Part of Northern Grid Part-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-122001 (Haryana)

**.....Petitioner**

**Versus**

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited,  
Vidyut Bhawan, Janpath,  
Jaipur.
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 - 171 004.
6. Punjab State Electricity Board.,  
Thermal Shed T-1A, Patiala.
7. Haryana Power Purchase Centre,  
Shakti Bhawan, Sector - 6  
Panchkula (Haryana) - 134 109
8. Power Development Department,  
Janipura Grid Station,  
Jammu (Tawi) 180 007 .
9. Uttar Pradesh Power Corporation Ltd.,  
Shakti Bhawan, 14, Ashok Marg,  
Lucknow - 226 001.
10. Delhi Transco Ltd.,  
Shakti Sadan, Kotla Road,  
New Delhi - 110 002
11. BSES Yamuna Power Ltd.,  
Shakti Kiran Building, Karkardooma,  
Delhi – 110 092.
12. BSES Rajdhani Power Ltd.,  
BSES Bhawan, Nehru Place,  
New Delhi.
13. North Delhi Power Limited  
Power trading & load Dispatch group  
Pitampura, New Delhi 110034
14. Chandigarh Administration,  
Sector - 9, Chandigarh
15. Uttarakhand Power Corporation Ltd.,  
UrjaBhawan, Kanwali Road,  
Dehradun
16. North Central Railway  
Allahabad

17. New Delhi Municipal Council,  
Palika Kendra, Sansad Marg,  
New Delhi - 110 002

.....Respondent(s)

The following were present:

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

For Respondent: Shri B.L.Sharma, Advocate, Rajasthan Discoms  
Shri S.K. Agarwal, Advocate, Rajasthan Discoms  
Shri S.P.Das, Advocate, Rajasthan Discoms

### ORDER

The petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as “the petitioner”) for revision of tariff 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 truing up of capital expenditure for the period COD 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 for LILO of One Circuit of 400 kV Bawana-Bahadurgarh-Hissar Line at Bhiwani Sub-station (referred as “ **Asset 1**” ) , 400/220 kV 315 MVA ICT-I along with associated bays at Bhiwani Sub-Station (referred as “**Asset 2A**”) and 400/220 kV 315 MVA ICT-II along with associated bays at Bhiwani Sub-Station “(referred as “**Asset 2B**”) under "765 kV System for Central Part of Northern Grid Part-III" in Northern Region (hereinafter collectively referred to as “the transmission assets”).



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

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

- a) The administrative approval and expenditure sanction to the transmission project, wherein Asset 1 was covered, was accorded by Board of Directors vide Memorandum: Ref.: C/CP/765 W system in Northern Grid dated 3.11.2009 for ₹107512 lakh, including IDC of ₹7712 lakh at 3<sup>rd</sup> Quarter, 2009 price level.
- b) The investment approval for the scheme covering Asset 2A and 2B was accorded by the Board of Directors of the petitioner, vide letter dated 27.10.2006 for ₹23825 lakh, including Interest During Construction (IDC) of ₹2085 lakh based on 2<sup>nd</sup> Quarter, 2006 price level.
- c) The annual transmissions charges for Asset-1 for 2009-14 tariff period was determined vide order dated 7.9.2012 in Petition No. 93/TT/2011 based on admitted capital cost of ₹1297.83 lakh after restricting of additional capital expenditure to ₹42.82 lakh and total capital cost as on 31.3.2014 to the approved apportioned capital expenditure of ₹1340.65 lakh.
- d) The annual transmissions charges for Asset-2A and Asset-2B for 2009-14 tariff periods were determined vide order dated 23.1.2014 in Petition No. 205/TT/2012 based on admitted capital cost of ₹2245.10 lakh for Asset-2A and ₹2249.30 lakh for Asset-2B for determination of tariff for 2009-14 tariff period after deduction of IDC of ₹58.80 lakh for Asset 2A and ₹58.92 lakh for Asset 2B for not condoning the delay of 6 months for both the assets.

e) The annual transmission charges were determined based on the following approved capital cost on COD and estimated additional capital expenditure towards the balance and retention payments from COD to 31.3.2014, as depicted below:-

(₹ in lakh)

Asset	COD	Approved apportioned cost	Capital cost as on COD	Additional capital expenditure allowed during 2009-14				Estimated total cost up to 31.3.2014
				2011-12	2012-13	2013-14	Total	
Asset 1	1.09.2011	1340.65	1297.83	42.82	-	-	42.82	1340.65
Asset 2A	1.12.2012	4046.43	2245.10	-	630.63	728.11	1358.74	3603.84
Asset 2B	1.12.2012	4046.43	2249.30	-	631.40	728.77	1360.17	3609.47

f) The tariff was determined for 2009-14 tariff period, based on the above capital cost and estimated additional capital expenditure for the transmission assets during 2009-14 as given below:-

#### Asset-1

(₹ in lakh)

Particulars	2011-12 (Pro-rata)	2012-13	2013-14
Depreciation	40.63	70.79	70.79
Interest on Loan	46.15	75.55	69.35
Return on Equity	40.36	70.30	70.30
Interest on Working Capital	2.80	4.80	4.70
O & M Expenses	5.45	9.87	10.43
<b>Total</b>	<b>135.39</b>	<b>231.31</b>	<b>225.57</b>

#### Asset-2A

(₹ in lakh)

Particulars	2012-13 (pro-rata)	2013-14
Depreciation	41.80	158.43
Interest on Loan	53.98	196.25
Return on Equity	44.76	169.90
Interest on Working Capital	7.57	25.82
O & M Expenses	78.43	248.74
<b>Total</b>	<b>226.54</b>	<b>799.14</b>

## Assets-2B

(₹ in lakh)

Particulars	2012-13 (pro-rata)	2013-14
Depreciation	41.88	158.71
Interest on Loan	54.07	196.57
Return on Equity	44.84	170.18
Interest on Working Capital	7.57	25.84
O & M Expenses	78.43	248.74
<b>Total</b>	<b>226.80</b>	<b>800.04</b>

g) The petitioner filed Appeal No.106 of 2014 against order dated 23.1.2014 in Petition No.205/TT/2012 before Hon'ble Appellate Tribunal for Electricity, contending that time over-run was not attributable to the petitioner. The APTEL has issued its judgement dated 27.3.2015 in Appeal No.106 of 2014 in this matter stating as follows:-

“This Appeal is partly allowed and the Impugned Order dated 23.1.2014 passed by the learned Central Commission in Petition No.205/TT/2012 is set aside to the extent stated above. The Appellant Petitioner is entitled to the delay of two months in the commissioning of the said transmission project and the Appellant is entitled to Interest during Constructions for the period of two months accordingly. The learned Central Commission is directed to pass the consequential orders within three months from today. There is no order as to cost.”

4. As per Regulation 6 of the 2009 Tariff Regulations, the Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014, as admitted by the Commission after prudence check at the time of truing up. Further, as per Regulation 15 of the 2009 Tariff Regulations, the petitioner is required to adjust the yearly impact of MAT rate in the truing up petition for 2009-14 tariff period.

5. In this context, the petitioner has filed the instant petition for revision of tariff for the tariff period 2009-14 in accordance with Regulation 6 of the 2009 Tariff Regulations.

6. 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 the Electricity Act, 2003 ("the Act"). No comments/objections have been received from the public in response to the notice in newspaper. Ajmer Vidyut Vitran Nigam Limited (AVVNL), Jaipur Vidyut Vitran Nigam Limited (JVVNL) and Jodhpur Vidyut Vitran Nigam Limited (JdVVNL), Respondent 2, Respondent 3 and Respondent 4 respectively (collectively referred to as "Rajasthan Discoms") have filed a combined reply vide affidavit dated 2.2.2016.

7. The hearing in this matter was held on 3.2.2016. During the hearing, the petitioner was directed to submit details depicting the un-discharged liabilities, if any, to be recovered in future in respect of the assets covered in the instant petition and an undertaking/certificate depicting that the actual equity infused during the tariff period 2009-14 and 2014-19. In response, the petitioner has submitted the information vide affidavit dated 11.2.2016.

8. Having heard the representatives of the parties and perused the material on record and keeping in view the judgement of Hon'ble Appellate Tribunal for Electricity in Appeal No.106 of 2014, we proceed to dispose of the petition.

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

9. 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”.

10. 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.

### **Capital Cost**

11. Regulation 7(1) of the 2009 Tariff Regulations specifies as follows:-

“(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 fund 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.

(2) The capital cost admitted by the Commission after prudence check shall form the basis for determination of tariff:

Provided that in case of the thermal generating station and the transmission system, prudence check of capital cost may be carried out based on the benchmark norms to be specified by the Commission from time to time:

Provided further that in cases where benchmark norms have not been specified, prudence check may include scrutiny of the reasonableness of the capital expenditure, financing plan, interest during construction, use of efficient technology, cost over-run and time over-run, and such other matters as may be considered appropriate by the Commission for determination of tariff.”

12. The petitioner has claimed the following capital cost as on COD in respect of each of the transmission asset for the purpose of tariff determination. This includes deduction of IDC of ₹58.80 lakh for Asset 2A and ₹58.92 lakh for Asset 2B in order dated



23.1.2014 in Petition No. 205/TT/2012. The details of capital cost claimed are as follows:-

(₹ in lakh)

Asset	COD	Actual capital cost on COD claimed in the instant petition
Asset1	1.9.2011	1310.05
Asset 2A	1.12.2012	3931.96*
Asset 2B	1.12.2012	

\*Cost after deducting IDC

13. We have considered the submissions of the petitioner. The capital cost claimed by the petitioner is certified by the Auditor's Certificates dated 11.10.2014. The capital cost as on COD considered for truing up tariff for Asset 1 is ₹1310.05 lakh in accordance with Regulation 7 of the 2009 Tariff Regulations.

14. In Petition No. 205/TT/2012, the petitioner had claimed IDC and IEDC of ₹160.07 lakh and ₹10.62 lakh for Asset-2A and ₹160.07 lakh and ₹10.62 lakh for Asset-2B respectively. As stated above, the time over-run of 6 months in case of assets was not condoned and accordingly IDC and IEDC of 6 months was disallowed for both the assets as shown below:-

(₹ in lakh)

<b>Asset-2A</b>		
	IDC	IEDC
Upto March 2012	85.09	10.62
April 2012 to May 2012	16.18	-
June 2012 to November 2012	58.80	-
Total IDC & IEDC claimed	160.07	10.62
<b>Total Disallowed (for 6 months-June 2012 to November 2012)</b>	<b>58.80</b>	<b>-</b>
<b>Asset-2B</b>		
	IDC	IEDC
Upto March 2012	85.22	10.64
April 2012 to May 2012	16.21	-
June 2012 to November 2012	58.92	-
Total IDC & IEDC claimed	160.35	10.64

<b>Total Disallowed (for 6 months-June 2012 to November 2012)</b>	<b>58.92</b>	<b>-</b>
<b>Combined Asset-2(2A+2B)</b>		
	<b>IDC</b>	<b>IEDC</b>
Upto March 2012	170.31	21.26
April 2012 to May 2012	32.39	-
June 2012 to November 2012	117.72	-
Total IDC & IEDC claimed	<b>320.42</b>	<b>21.26</b>
<b>Total Disallowed (for 6 months-June 2012 to November 2012)</b>	<b>117.72</b>	<b>-</b>

15. The petitioner has claimed IDC and IEDC of ₹405.75 lakh and ₹73.67 lakh for combined Asset-2A and Asset 2B. As the IDC and IEDC claimed by the petitioner has increased, the IDC and IEDC disallowed will also change proportionately. In the absence of breakup, we have considered the IDC and IEDC upto March, 2012 as admitted in order dated 23.1.2014 in Petition No. 205/TT/2012 as the same is based on audited accounts. The remaining IDC and IEDC claimed have been considered for the period April, 2012 to November, 2012. Taking into consideration the Hon`ble APTEL's judgement in Appeal 106 of 2014, IDC and IEDC for 2 months is allowed and IDC and IEDC of for 4 months is disallowed as shown below:-

<b>Combined Asset-2 (2A+2B)</b>		
	<b>IDC</b>	<b>IEDC</b>
Upto March 2012	170.31	21.26
April 2012 to November 2012	235.44	52.41
Total IDC and IEDC claimed	<b>405.75</b>	<b>73.67</b>
<b>Total Disallowed (for 4 months-Aug 2012 to November 2012)</b>	<b>117.72</b>	<b>26.21</b>

### **Treatment of Initial Spares**

16. No spares have been claimed for Asset 1. In case of Asset-2, the initial spares claimed as per Auditor's Certificate dated 11.10.2014 is ₹74.10 lakh. We have worked out the admissible initial spares by considering capital cost and additional capital expenditure upto cut-off date, as per Auditor's Certificates dated 11.10.2014 in accordance with the 2009 Tariff Regulations.

17. Regulation 8 of the 2009 Tariff Regulations provide for ceiling norms for capitalization of initial spares in respect of sub-station at 2.50%. Accordingly, the initial spares have been allowed as under:-

(₹ in lakh)

Particulars	Formula	Sub-station
		Asset-2
Capital cost as on cut off date	(a)	7343.82
Capital Cost after deducting excess IDC	(b)	7199.90
Initial Spares as per Auditor`s Certificate	(c)	74.10
Proportionate Initial Spares claimed after deducting IDC	$(d) = (c)/(a) * (b)$	72.65
Ceiling limit as per Regulation 8 of 2009 regulations	(e)	2.5%
Initial spares worked out	$(f) = ((b-d) * e) / (100\% - e)$	182.75
Excess initial spares	$(g) = (d) - (f)$	0.00

18. Accordingly, the capital cost as on COD considered for tariff computation of 2009-14 tariff period is as follows:-

Particulars	Asset 1	Asset 2
Capital cost as on COD	1310.05	4049.68
IDC & IEDC disallowed	0.00	143.93
Excess initial spares	0.00	0.00
Capital cost as on COD considered for tariff determination	<b>1310.05</b>	<b>3905.76</b>

### **Additional Capital Expenditure**

19. Regulation 6(1) of the 2009 Regulations provides that:-

“...The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2014...”

19. The petitioner has claimed additional capitalization for expenditure incurred before cut-off date against the transmission asset under Clause (1) (i) of Regulation 9 of the 2009 Tariff Regulations.

20. Clause 1 of Regulation 9 of the 2009 Tariff Regulations provides as follows:-

“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;”

21. The petitioner has submitted that it has incurred following additional capital expenditure for all of the assets during 2009-14 period towards balance and retention payments as certified vide Auditor’s Certificate dated 11.10.2014:-

(₹ in lakh)

Name of Asset	Capital Cost as on COD	Actual Cost	Additional Capital Expenditure				Total cost as on 31.3.2014
			2011-12	2012-13	2013-14	Total	
Asset-1	Approved	1297.83	42.82			42.82	1340.65
	Claimed	1310.05	105.06	16.38		121.44	1431.49
Asset-2A and 2B	Approved	4494.40	0	1262.03	1456.88	2718.91	7213.31
	Claimed	3931.96	-	1709.97	748.61	2458.58	6390.54

22. We have considered the submissions of the petitioner with regard to the actual capital expenditure incurred during 2009-14 period. The capital addition is based on actual capital expenditure incurred as per the Auditor’s Certificate dated 11.10.2014, and the total completion cost up to 31.3.2014 is within the approved apportioned cost of the assets for Asset 2A and Asset 2B. In case of Asset 1, the capital cost claimed as on 31.3.2014 is ₹1431.49 lakh, which exceeds the apportioned approved cost of ₹1340.65. Hence, the additional capital expenditure during 2011-12 has been restricted to ₹30.60 lakh and the additional capital expenditure during 2012-13 has not been considered, so as to restrict the completion cost as on 31.3.2014 to apportioned approved cost. The details of the capital cost of the instant assets considered for the purpose of computation is as follows:-

Name of Asset	Capital Cost as on COD	Actual Cost	Additional Capital Expenditure				Total cost as on 31.3.2014
			2011-12	2012-13	2013-14	Total	
Asset-1	Approved	1297.83	42.82	-	-	42.82	1340.65
	Claimed	1310.05	105.06	16.38	-	121.44	1431.49
	Allowed	1310.05	30.60	-	-	30.60	1340.65
Asset-2A and 2B	Approved	4494.40	-	1262.03	1456.88	2718.91	7213.31
	Claimed	3931.96	-	1709.97	748.61	2458.58	6390.54
	Allowed	3905.76	-	1709.97	748.61	2458.58	6364.34

### **Debt: Equity**

23. Regulation 12 of the 2009 Tariff Regulations provides as under:-

“12. Debt-Equity Ratio. (1) For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff:

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

(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.”

24. The admitted debt:equity ratio in the orders dated 7.9.2012 in Petition No. 93/TT/2011 and 23.1.2014 in Petition No. 205/TT/2012 has been considered for determination of tariff in accordance with the Regulation 12 of the 2009 Tariff Regulations.

25. The petitioner was directed to submit an undertaking/certificate depicting that the actual equity infused in the project is not less than 30% during the tariff period 2009-14 and 2014-19. The petitioner has submitted, vide affidavit dated 11.2.2016 that actual equity infused during the period is not less than 30%.

26. The details of the debt:equity considered for the purpose of tariff for 2009-14 tariff period is as follows:-

Funding	Capital cost as on DOCO	(%)	Additional capital expenditure during 2009-14	(%)	Total Cost as on 31.3.2014	(%)
<b>Asset 1</b>						
Debt	917.04	70.00	21.42	70.00	938.46	70.00
Equity	393.02	30.00	9.18	30.00	402.20	30.00
<b>Total</b>	<b>1310.05</b>	<b>100.00</b>	<b>30.60</b>	<b>100.00</b>	<b>1340.65</b>	<b>100.00</b>
<b>Asset 2</b>						
Debt	2734.03	70.00	1721.01	70.00	4455.03	70.00
Equity	1171.73	30.00	737.57	30.00	1909.30	30.00
<b>Total</b>	<b>3905.76</b>	<b>100.00</b>	<b>2458.58</b>	<b>100.00</b>	<b>6364.34</b>	<b>100.00</b>

### Return on Equity (“ROE”)

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

“(3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be.

(4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

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

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

(5) The generating company or the transmission licensee, as the case may be, shall recover the shortfall or refund the excess Annual Fixed Charge on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission:

Provided further that Annual Fixed Charge with respect to the tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations.”

28. The variation in the tax rate during the 2009-14 tariff period applicable to the petitioner as per the Finance Act of the relevant year for the purpose of grossing up of return on equity (ROE) has been furnished as follows:-

Year	MAT Rate claimed in the current petition (%)	Grossed up ROE (Base Rate/(1-t)) claimed in the current petition (%)
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

29. The ROE trued up and allowed is shown below:-

**Asset 1**

(₹ in lakh)

Return on Equity	2011-12 (pro rata)	2012-13	2013-14
Approved vide order dated 7.9.2012 in Petition No. 93/TT/2011	40.36	70.30	70.30
Claimed by the petitioner	46.21	82.75	84.22
Allowed after trued up in this order	44.94	77.93	78.87

**Asset 2**

(₹ in lakh)

Return on Equity	2012-13 (pro-rata)	2013-14
Approved vide order dated 23.1.2014 in Petition No. 205/TT/2012	89.60	340.08
Claimed by the petitioner	92.77	353.97
Allowed after trued up in this order	92.25	352.40

The difference in the approved ROE and that allowed after truing up is on account of actual grossed up ROE based on actual MAT rate and increase due to actual additional capital expenditure.

**Interest on Loan (“IoL”)**



30. Regulation 16 of the 2009 Tariff Regulations provide the methodology for working out weighted average rate of IoL. The Commission in its earlier order dated 8.6.2011 in Petition No. 238/2010 has dealt with similar issue and 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”.

31. The petitioner has submitted the weighted average rate of IoL, based on its actual loan portfolio and rate of interest. Accordingly, the IoL has been calculated based on actual interest rate submitted by the petitioner, in accordance with the Regulation 16 of the 2009 Tariff Regulations. The details of weighted average rate of interest are placed in Annexure-1. The IoL worked out is as follows:-

### **Asset 1**

(₹ in lakh)

Interest on Loan	2011-12 (pro-rata)	2012-13	2013-14
Approved vide order dated 7.9.2012 in Petition No. 93/TT/2011	46.15	75.55	69.35
Claimed by the petitioner	47.81	80.75	74.64
Allowed after trued up in this order	46.50	75.95	69.73

### **Asset 2**

(₹ in lakh)

Interest on Loan	2012-13 (pro-rata)	2013-14
Approved vide order dated 23.1.2014 in Petition No. 205/TT/2012	108.05	392.82
Claimed by the petitioner	101.52	368.17
Allowed after trued up in this order	100.97	366.60



The difference in the approved IoL and that allowed after truing up is on account of change in the weighted average rate of interest which is computed based on actual loan portfolio and rate of interest.

### **Depreciation**

32. The depreciation has been worked out as per the methodology provided in the Regulation 17 of the 2009 Tariff Regulations. We have considered the submissions of the petitioner. The depreciation allowed is as follows:-

#### **Asset 1**

(₹ in lakh)			
Depreciation	2011-12 (pro rata)	2012-13	2013-14
Approved vide order dated 7.9.2012 in Petition No. 93/TT/2011	40.63	70.79	70.79
Claimed by the petitioner	41.97	75.15	75.58
Allowed after trued up in this order	40.82	70.79	70.79

#### **Asset 2**

(₹ in lakh)		
Depreciation	2012-13 (pro-rata)	2013-14
Approved vide order dated 23.1.2014 in Petition No. 205/TT/2012	83.68	317.14
Claimed by the petitioner	77.64	297.06
Allowed after trued up in this order	77.17	295.66

The difference in the approved depreciation and that allowed after truing up is on account of change in gross block during the 2009-14 tariff period.

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

33. Clause (g) of Regulation 19 of the 2009 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The normative O&M Expenses are not required to be trued up. Accordingly, the total allowable O&M Expenses for the instant

assets have been worked out based on norms of O&M Expenses and the details are as follows:-

**Asset 1**

(₹ in lakh)			
O&M Expenses	2011-12 (pro rata)	2012-13	2013-14
Approved vide order dated 7.9.2012 in Petition No. 93/TT/2011	5.45	9.87	10.43
Claimed by the petitioner	5.45	9.87	10.43
Allowed after trued up in this order	5.45	9.87	10.43

**Asset 2**

(₹ in lakh)		
O&M Expenses	2012-13 (pro-rata)	2013-14
Approved vide order dated 23.1.2014 in Petition No. 205/TT/2012	156.86	497.48
Claimed by the petitioner	156.85	497.48
Allowed after trued up in this order	156.85	497.48

**Interest on Working Capital (IWC)**

34. The IWC has been worked out as per the methodology provided in the Regulation 18 of the 2009 Tariff Regulations.

35. We have considered the submission of the petitioner. The computation of the maintenance spares submitted by the petitioner are in line with the methodology provided in the Regulation 18 of the 2009 Tariff Regulations and the same is allowed as under:-

**Asset 1**

(₹ in lakh)			
Interest on Working Capital	2011-12 (pro rata)	2012-13	2013-14
Approved vide order dated 7.9.2012 in Petition No. 93/TT/2011	2.80	4.80	4.70
Claimed by the petitioner	2.98	5.24	5.18



Interest on Working Capital	2011-12 (pro rata)	2012-13	2013-14
Allowed after trued up in this order	2.90	4.96	4.88

## **Asset 2**

(₹ in lakh)

Interest on Working Capital	2012-13 (pro-rata)	2013-14
Approved vide order dated 23.1.2014 in Petition No. 205/TT/2012	15.14	51.66
Claimed by the petitioner	14.92	50.94
Allowed after trued up in this order	8.21	50.84

The difference in the approved IWC and that allowed after truing up is on account of change in the receivables during the 2009-14 tariff period.

## **APPROVED ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD**

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

## **Asset 1**

(₹ in lakh)

Particulars	2011-12 (pro-rata)	2012-13	2013-14
<b>Depreciation</b>			
Opening Gross Block	1310.05	1340.65	1340.65
Additional Capitalisation	30.60	0.00	0.00
Closing Gross Block	1340.65	1340.65	1340.65
Average Gross Block	1325.35	1340.65	1340.65
Rate of Depreciation (%)	5.28%	5.28%	5.28%
Depreciable Value	1192.82	1220.36	1206.59

Particulars	2011-12 (pro-rata)	2012-13	2013-14
Balance Useful life of the asset	0	25	24
Elapsed Life	0	0	1
Remaining Depreciable Value	1192.82	1220.36	1149.57
Depreciation during the year	40.82	70.79	70.79
Cumulative depreciation	40.82	111.61	182.39
<b>Interest on Loan</b>			
Gross Normative Loan	917.04	938.46	938.46
Cumulative Repayment upto Previous Year	0.00	40.82	111.61
Net Loan-Opening	917.04	897.63	826.85
Additions	21.42	0.00	0.00
Repayment during the year	40.82	70.79	70.79
Net Loan-Closing	897.63	826.85	756.06
Average Loan	907.33	862.24	791.45
Weighted Average Rate of Interest on Loan (%)	8.7858%	8.8080%	8.8108%
Interest on Loan	46.50	75.95	69.73
<b>Return on Equity</b>			
Opening Equity	393.02	402.20	402.20
Additions	9.18	0.00	0.00
Closing Equity	402.20	402.20	402.20
Average Equity	397.61	402.20	402.20
Return on Equity (Base Rate) (%)	15.500%	15.500%	15.500%
MAT rate for the respective year (%)	20.008%	20.008%	20.961%
Rate of Return on Equity (%)	19.377%	19.377%	19.610%
Return on Equity	44.94	77.93	78.87
<b>Interest on Working Capital</b>			
O & M expenses	0.78	0.82	0.87
Maintenance Spares	1.40	1.48	1.57
Receivables	40.18	39.92	39.12
Total	42.36	42.22	41.55
Rate of Interest (%)	11.75%	11.75%	11.75%
Interest on Working Capital	2.90	4.96	4.88
<b>Annual Transmission Charges</b>			
Depreciation	40.82	70.79	70.79
Interest on Loan	46.50	75.95	69.73
Return on Equity	44.94	77.93	78.87
Interest on Working Capital	2.90	4.96	4.88
O & M Expenses	5.45	9.87	10.43
<b>Total</b>	<b>140.62</b>	<b>239.50</b>	<b>234.71</b>

## Asset 2

(₹ in lakh)

Particulars	2012-13 (pro-rata)	2013-14
<b>Depreciation</b>		
Opening Gross Block	3905.76	5615.73
Additional Capitalisation	1709.97	748.61
Closing Gross Block	5615.73	6364.34
Average Gross Block	4760.74	5990.03
Rate of Depreciation	4.86%	4.94%
Depreciable Value	3954.74	5825.00
Balance Useful life of the asset	25	24
Elapsed Life	0	1
Remaining Depreciable Value	3954.74	4983.93
Depreciation during the year	77.17	295.66
Cumulative depreciation	77.17	372.82
<b>Interest on Loan</b>		
Gross Normative Loan	2734.03	3931.01
Cumulative Repayment upto Previous Year	0.00	77.17
Net Loan-Opening	2734.03	3853.84
Additions	1196.98	524.03
Repayment during the year	77.17	295.66
Net Loan-Closing	3853.84	4082.21
Average Loan	3293.93	3968.03
Weighted Average Rate of Interest on Loan (%)	9.1958%	9.2389%
Interest on Loan	100.97	366.60
<b>Return on Equity</b>		
Opening Equity	1171.73	1684.72
Additions	512.99	224.58
Closing Equity	1684.72	1909.30
Average Equity	1428.22	1797.01
Return on Equity (Base Rate )	15.500%	15.500%
MAT rate for the respective year	20.008%	20.961%
Rate of Return on Equity	19.377%	19.610%
Return on Equity	92.25	352.40
<b>Interest on Working Capital</b>		
O & M expenses	39.20	41.44
Maintenance Spares	70.58	74.62
Receivables	72.57	260.50
Total	182.36	376.56



Particulars	2012-13 (pro-rata)	2013-14
Rate of Interest	13.50%	13.50%
Interest on Working Capital	8.21	50.84
<b>Annual Transmission Charges</b>		
Depreciation	77.17	295.66
Interest on Loan	100.97	366.60
Return on Equity	92.25	352.40
Interest on Working Capital	8.21	50.84
O & M Expenses	156.85	497.48
<b>Total</b>	<b>435.44</b>	<b>1562.98</b>

### **DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD**

37. The petitioner has claimed the tariff charges for 2014-19 tariff period as under:-

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	408.17	424.64	424.64	424.64	424.64
Interest on Loan	459.77	449.78	411.13	372.26	333.29
Return on Equity	485.55	510.89	510.89	510.89	510.89
Interest on Working Capital	56.99	58.58	58.58	58.60	58.65
O & M Expenses	467.70	483.22	499.28	515.81	532.96
<b>Total</b>	<b>1878.18</b>	<b>1927.11</b>	<b>1904.52</b>	<b>1882.20</b>	<b>1860.43</b>

38. The details submitted by the petitioner in support of its claim for interest on working capital are given hereunder:-

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	38.98	40.27	41.61	42.98	44.41
Maintenance Spares	70.16	72.48	74.89	77.37	79.94
Receivables	313.03	321.19	317.42	313.70	310.07
<b>Total</b>	<b>422.17</b>	<b>433.94</b>	<b>433.94</b>	<b>434.05</b>	<b>434.42</b>
Rate of Interest (%)	13.5	13.5	13.5	13.5	13.5
<b>Interest</b>	<b>56.99</b>	<b>58.58</b>	<b>58.58</b>	<b>58.60</b>	<b>58.65</b>

## **Capital Cost**

39. Clause (3) and (6) of Regulation 9 of 2014 Tariff Regulation provide as follows:-

“(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.”

“(6) The following shall be excluded or removed from the capital cost of the existing and new project:

- (a) The assets forming part of the project, but not in use; (b) Decapitalisation of Asset;”

40. The capital cost worked out as on 31.3.2014 has been considered as opening capital cost as on 1.4.214.

<b>Name of Asset</b>	<b>Capital cost as on 1.4.2014</b>
Asset1	1340.65
Asset 2A & Asset 2B	6364.34
<b>Total cost of assets</b>	<b>7704.99</b>

## **Additional Capital Expenditure**

41. Clause (3) of Regulation 14 of the 2014 Tariff Regulations provides as under:-

“(3) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:

- (i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;
- (ii) Change in law or compliance of any existing law;
- (iii) Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies of statutory authorities responsible for national security/internal security;
- (iv) Deferred works relating to ash pond or ash handling system in the original scope of work;
- (v) Any liability for works executed prior to the cut-off date, after prudence check of the details of such undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.;

(vi) Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments.”

42. Clause 13 of Regulation 3 of the 2014 Tariff Regulations defines “cut-off” as follows:-

“Cut - off Date” means 31<sup>st</sup> March of the year closing after two years of the year of commercial operation of whole or part of the project, and in case the whole or part of the project is declared under commercial operation in the last quarter of a year, the cut - off date shall be 31<sup>st</sup> March of the year closing after three years of the year of commercial operation:”

43. The notional COD of the Combined Assets is 1.12.2012 and the cut-off date works out to be 31.3.2015. The petitioner has claimed additional capital expenditure of ₹861.53 lakh for 2014-15 period.

44. As the capital cost of Asset1 was restricted to apportioned approved cost, the additional capital expenditure during 2014-15 has not been considered. Accordingly, the capital cost of the instant assets including additional capital expenditure during 2014-19 tariff period is admitted under Regulation 14(1)(i) as below, subject to true up on actual basis:-

(₹ in lakh)

Asset	Admitted cost as on 1.4.2014	Additional capital expenditure allowed during 2014-15	Estimated total on 31.3.2019
Combined Assets	7704.99	835.56	8540.55

### **Debt: Equity**

45. Clause (1) and (3) of Regulation 19 of the 2014 Tariff Regulations provides as under:-

“19. Debt-Equity Ratio: (1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. If the equity



actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.”

“(3) In case of the generating station and the transmission system including communication 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.”

“(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 as maybe 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.”

46. The details of the debt:equity considered for the purpose of tariff for 2014-19 tariff period are as follows:-

(₹ in lakh)

<b>Funding</b>	<b>Capital cost as on 31.3.2014</b>	<b>(%)</b>	<b>Additional capital expenditure during 2014-19</b>	<b>(%)</b>	<b>Total Cost as on 31.3.2019</b>	<b>(%)</b>
Debt	5393.49	70.00	584.89	70.00	5978.38	70.00
Equity	2311.50	30.00	250.67	30.00	2562.16	30.00
<b>Total</b>	<b>7704.99</b>	<b>100.00</b>	<b>835.56</b>	<b>100.00</b>	<b>8540.55</b>	<b>100.00</b>

### **Return on Equity (“ROE”)**

47. Clause (1) and (2) of Regulations 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.”

48. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during the 2013-14 has been considered for the purpose of ROE, which shall be trued up with actual tax rate in accordance with Clause (3) of Regulation 25 of the 2014 Tariff Regulations. The ROE allowed is as follows:-

	(₹ in lakh)				
<b>Return on Equity</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Opening Equity	2311.50	2562.16	2562.16	2562.16	2562.16
Additions	250.67	0.00	0.00	0.00	0.00
Closing Equity	2562.16	2562.16	2562.16	2562.16	2562.16
Average Equity	2436.83	2562.16	2562.16	2562.16	2562.16
Return on Equity (Base Rate)(%)	15.500%	15.500%	15.500%	15.500%	15.500%
MAT Rate for respective year(%)	20.961%	20.961%	20.961%	20.961%	20.961%
Rate of Return on Equity (%)	19.610%	19.610%	19.610%	19.610%	19.610%
Return on Equity	477.87	502.45	502.45	502.45	502.45

### **Interest on Loan (“IoL”)**

49. Clause 5 and Clause 6 of Regulation 26 of the 2014 Tariff Regulations provides as follows:-

“(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. The petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2014-19 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up or next revision of tariff. The details of weighted average rate of interest for 2014-19 tariff period are placed in Annexure 2, IoL allowed is as follows:-

(₹ in lakh)

Interest on Loan	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	5393.49	5978.38	5978.38	5978.38	5978.38
Cumulative Repayment upto Previous Year	555.22	956.49	1373.56	1790.63	2207.71
Net Loan-Opening	4838.27	5021.89	4604.82	4187.75	3770.68
Additions	584.89	0.00	0.00	0.00	0.00
Repayment during the year	401.28	417.07	417.07	417.07	417.07
Net Loan-Closing	5021.89	4604.82	4187.75	3770.68	3353.61
Average Loan	4930.08	4813.35	4396.28	3979.21	3562.14
Weighted Average Rate of Interest on Loan (%)	9.1858%	9.1972%	9.2063%	9.2117%	9.2159%
Interest on Loan	452.87	442.69	404.73	366.55	328.28

### **Depreciation**

51. Clause (2), (5) and (6) of Regulation 27 of the 2014 Tariff Regulations provides 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.”

52. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2014 and accumulated depreciation up to 31.3.2014. The detailed calculations for depreciation for the transmission asset are worked out and allowed as follows:-

(₹ in lakh)					
<b>Depreciation</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Opening Gross Block	7704.99	8540.55	8540.55	8540.55	8540.55
Additional Capitalisation	835.56	0.00	0.00	0.00	0.00
Closing Gross Block	8540.55	8540.55	8540.55	8540.55	8540.55
Average Gross Block	8122.77	8540.55	8540.55	8540.55	8540.55
Freehold Land (avg. cost)	447.55	518.98	518.98	518.98	518.98
Rate of Depreciation	4.94%	4.88%	4.88%	4.88%	4.88%
Depreciable Value	6907.69	7595.41	7219.41	7219.41	7219.41
Balance Useful life of the asset	23	22	21	20	19
Elapsed Life	2	3	4	5	6
Remaining Depreciable Value	6971.98	6946.71	6529.64	6112.56	5695.49
Depreciation during the year	401.28	417.07	417.07	417.07	417.07
Depreciation upto previous year	555.22	956.49	1373.56	1790.63	2207.71
Cumulative depreciation	956.49	1373.56	1790.63	2207.71	2624.78

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

53. The petitioner has submitted that the wage revision of the employees of the petitioner company is due during 2014-19 and actual impact of wage hike which will be effective from a future date has also not been factored in fixation of the normative O&M rate specified for the 2014-19 tariff period. The petitioner has also submitted that it will approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase.

54. We have considered the submissions of the petitioner. We would like to clarify that any application filed by the petitioner for revision of O&M Expenses on account of wage

revision will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations. The O&M Expenses are allowed for the instant transmission assets as per the prevailing norms.

55. Clause 3(a) of Regulation 29 of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The total allowable O&M Expenses for the instant assets are as follows:-

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
<b>400 kV Bays :</b>					
No. of Bays	2	2	2	2	2
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
<b>220 kV Bays :</b>					
No. of Bays	8	8	8	8	8
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.1
<b>D/C Twin/Triple Conductor:</b>					
Line Length	13.325	13.325	13.325	13.325	13.325
Norms (₹ lakh/Km)	0.707	0.731	0.755	0.78	0.806
Total O&M Expenses (₹ lakh)	<b>467.70</b>	<b>483.22</b>	<b>499.28</b>	<b>515.81</b>	<b>532.96</b>

### **Interest on Working Capital ("IWC")**

56. Clause 1 (c) of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specifies 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;"

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

58. 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 components of the working capital and interest thereon have been worked as follows:-

(₹ in lakh)					
<b>Interest on Working Capital</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
O & M expenses	38.96	40.25	41.59	42.97	44.40
Maintenance Spares	70.16	72.48	74.89	77.37	79.94
Receivables	309.37	317.25	313.60	310.00	306.49
<b>Total</b>	<b>418.48</b>	<b>429.98</b>	<b>430.08</b>	<b>430.34</b>	<b>430.83</b>
Rate of Interest (%)	13.50%	13.50%	13.50%	13.50%	13.50%
<b>Interest on Working Capital</b>	<b>56.50</b>	<b>58.05</b>	<b>58.06</b>	<b>58.10</b>	<b>58.16</b>

### **ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD**

59. The transmission charges allowed for the instant transmission assets for the 2014-19 tariff period are summarised below:-

(₹ in lakh)					
<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
<b>Depreciation</b>					
Opening Gross Block	7704.99	8540.55	8540.55	8540.55	8540.55
Additional Capitalisation	835.56	0.00	0.00	0.00	0.00
Closing Gross Block	8540.55	8540.55	8540.55	8540.55	8540.55
Average Gross Block	8122.77	8540.55	8540.55	8540.55	8540.55
Rate of Depreciation	4.94%	4.88%	4.88%	4.88%	4.88%
Depreciable Value	6907.69	7595.41	7219.41	7219.41	7219.41
Balance Useful life of the asset	23	22	21	20	19
Elapsed Life	2	3	4	5	6
Remaining Depreciable Value	6971.98	6946.71	6529.64	6112.56	5695.49
Depreciation	401.28	417.07	417.07	417.07	417.07
Cumulative depreciation (incl. of AAD)	956.49	1373.56	1790.63	2207.71	2624.78
<b>Interest on Loan</b>					
Gross Normative Loan	5393.49	5978.38	5978.38	5978.38	5978.38

<b>Particulars</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Cumulative Repayment upto Previous Year	555.22	956.49	1373.56	1790.63	2207.71
Net Loan-Opening	4838.27	5021.89	4604.82	4187.75	3770.68
Additions	584.89	0.00	0.00	0.00	0.00
Repayment during the year	401.28	417.07	417.07	417.07	417.07
Net Loan-Closing	5021.89	4604.82	4187.75	3770.68	3353.61
Average Loan	4930.08	4813.35	4396.28	3979.21	3562.14
Weighted Average Rate of Interest on Loan	9.1858%	9.1972%	9.2063%	9.2117%	9.2159%
Interest	452.87	442.69	404.73	366.55	328.28
<b>Return on Equity</b>					
Opening Equity	2311.50	2562.16	2562.16	2562.16	2562.16
Additions	250.67	0.00	0.00	0.00	0.00
Closing Equity	2562.16	2562.16	2562.16	2562.16	2562.16
Average Equity	2436.83	2562.16	2562.16	2562.16	2562.16
Return on Equity (Base Rate )	15.500%	15.500%	15.500%	15.500%	15.500%
MAT rate for the respective year	20.961%	20.961%	20.961%	20.961%	20.961%
Rate of Return on Equity	19.610%	19.610%	19.610%	19.610%	19.610%
Return on Equity	477.87	502.45	502.45	502.45	502.45
<b>Interest on Working Capital</b>					
O & M expenses	38.96	40.25	41.59	42.97	44.40
Maintenance Spares	70.16	72.48	74.89	77.37	79.94
Receivables	309.37	317.25	313.60	310.00	306.49
Total	418.48	429.98	430.08	430.34	430.83
Rate of Interest (%)	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on working capital	56.50	58.05	58.06	58.10	58.16
<b>Annual Transmission Charges</b>					
Depreciation	401.28	417.07	417.07	417.07	417.07
Interest on Loan	452.87	442.69	404.73	366.55	328.28
Return on Equity	477.87	502.45	502.45	502.45	502.45
Interest on Working Capital	56.50	58.05	58.06	58.10	58.16
O & M Expenses	467.70	483.22	499.28	515.81	532.96
<b>Total</b>	<b>1856.21</b>	<b>1903.48</b>	<b>1881.60</b>	<b>1859.98</b>	<b>1838.93</b>

60. The petitioner has prayed to allow to recover the deferred tax liability upto 31.3.2019 from the beneficiaries or the long term customers/DICs as and when the same gets materialised. The Rajasthan Discoms have that the petitioner and have raised apprehensions about the tenability of the petitioner's claim. As per Regulation 49 of the 2014 Tariff regulations, the deferred tax liabilities for the period 1.4.2009 upto

31.3.2014 and 1.4.2014 upto 31.3.2019 shall not be recoverable from the beneficiaries or the long term customers/DICs. Accordingly, the petitioner's prayer is rejected.

### **Filing Fee and the Publication Expenses**

61. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The Respondents to the petition in their reply 2.2.2016 have raised apprehensions against the same. 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 Regulation 52 (1) of the 2014 Tariff Regulations.

### **Licence Fee & RLDC Fees and Charges**

62. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 52 (2) (b) of the 2014 Tariff Regulations for 2014-19 tariff period. The Respondents to the petition in their reply 2.2.2016 have raised apprehensions against the same. The petitioner shall also be entitled for recovery of RLDC fee & charges in accordance with Regulations 52 (2) (a) of the 2014 Tariff Regulations for 2014-19 tariff period.

### **Service Tax**

63. The petitioner has prayed for reimbursement of service tax if it is subjected to such tax in future. The Rajasthan Discoms have raised the issue of service tax in their replay and their apprehensions against the same. We are of the view that the petitioner's prayer is premature.

### **Sharing of Transmission Charges**





64. 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.

65. This order disposes of Petition No.16/TT/2015.

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

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

**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2009-14)****Asset-1**

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
BOND XXXIII-DOCO DRAWL ON 01-SEP-2011-	8.64	680.00	0.00	680.00
BOND-XXXIV-DOCO DRAWL ON 01-SEP-2011-	8.84	150.00	0.00	150.00
BOND-XXXV-DOCO DRAWL ON 01-SEP-2011-	9.64	78.50	0.00	78.50
BOND XXXVI-ADDCAP FOR 2011-2012 Add Cap-	9.35	0.00	41.54	41.54
BOND XXXVI-DOCO-	9.35	8.50	0.00	8.50
BOND XXXVII-ADDCAP FOR 2011-2012 Add Cap-	9.25	0.00	32.00	32.00
BONO XL-ADDCAP FOR 2012-2013 Add Cap-	9.30	0.00	11.47	11.47
<b>Total</b>		<b>917.00</b>	<b>85.01</b>	<b>1002.01</b>

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

Summary	(₹ in lakh)		
	2011-12	2012-13	2013-14
Gross Opening Loan	917.00	990.54	1002.01
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00
<b>Net Loans Opening</b>	<b>917.00</b>	<b>990.54</b>	<b>1002.01</b>
Add: Draw(s) during the Year	73.54	11.47	0.00
Less: Repayments of Loan during the year	0.00	0.00	0.00
<b>Net Closing Loan</b>	<b>990.54</b>	<b>1002.01</b>	<b>1002.01</b>
Average Net Loan	953.77	996.28	1002.01
Rate of Interest on Loan (%)	8.7858%	8.8080%	8.8108%
<b>Interest on Loan</b>	<b>83.80</b>	<b>87.75</b>	<b>88.28</b>

## DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2009-14)

### Asset2

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
BOND-XXXIV-DOCO-	8.84	900.00	0.00	900.00
BOND XXXVI-DOCO-	9.35	1300.00	0.00	1300.00
BOND XL-ADDCAP FOR 2012-2013 Add Cap-	9.30	0.00	1196.98	1196.98
BOND XL-DOCO-	9.30	552.20	0.00	552.20
BOND - XLV-ADDCAP FOR 2013-2014 Add Cap-	9.65	0.00	524.03	524.03
<b>Total</b>		<b>2752.20</b>	<b>1721.01</b>	<b>4473.21</b>

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

(₹ in lakh)

Summary	2012-13	2013-14
Gross Opening Loan	2752.20	3949.18
Cumulative Repayments of Loans upto Previous Year	0.00	0.00
<b>Net Loans Opening</b>	<b>2752.20</b>	<b>3949.18</b>
Add: Draw(s) during the Year	1196.98	524.03
Less: Repayments of Loan during the year	0.00	0.00
<b>Net Closing Loan</b>	<b>3949.18</b>	<b>4473.21</b>
Average Net Loan	3350.69	4211.20
Rate of Interest on Loan (%)	9.1958%	9.2389%
<b>Interest on Loan</b>	<b>308.12</b>	<b>389.07</b>



**DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2014-19)****Combined Asset-**

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND XXXIII-1.DOCO DRAWL ON 01-SEP-2011-	8.64	680.00	0.00	680.00
BOND-XXXIV-2.DOCO DRAWL ON 01-SEP-2011-	8.84	150.00	0.00	150.00
BOND-XXXIV-8.DOCO-	8.84	900.00	0.00	900.00
BOND-XXXV-3.DOCO DRAWL ON 01-SEP-2011-	9.64	78.50	0.00	78.50
BOND XXXVI-4.DOCO-	9.35	8.50	0.00	8.50
BOND XXXVI-5.ADDCAP FOR 2011-2012 Add Cap-	9.35	41.54	0.00	41.54
BOND XXXVI-9.DOCO-	9.35	1300.00	0.00	1300.00
BOND XXXVII-6.ADDCAP FOR 2011-2012 Add Cap-	9.25	32.00	0.00	32.00
BOND XL-10.DOCO-	9.30	552.20	0.00	552.20
BOND XL-11.ADDCAP FOR 2012-2013 Add Cap-	9.30	1196.98	0.00	1196.98
BOND XL-7.ADDCAP FOR 2012-2013 Add Cap-	9.30	11.47	0.00	11.47
BOND - XLV-12.ADDCAP FOR 2013-2014 Add Cap-	9.65	524.03	0.00	524.03
<b>Total</b>		<b>5475.22</b>	<b>0.00</b>	<b>5475.22</b>

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	5475.22	5475.22	5475.22	5475.22	5475.22
Cumulative Repayments of Loans up to Previous Year	0.00	144.17	297.55	687.67	1121.46
Net Loans Opening	<b>5475.22</b>	<b>5331.05</b>	<b>5177.67</b>	<b>4787.55</b>	<b>4353.76</b>
Add: Drawl(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments during the year	144.17	153.38	390.12	433.79	433.79
Net Closing Loan	<b>5331.05</b>	<b>5177.67</b>	<b>4787.55</b>	<b>4353.76</b>	<b>3919.97</b>
Average Net Loan	5403.14	5254.36	4982.61	4570.66	4136.87
Rate of Interest on Loan (%)	9.1858%	9.1972%	9.2063%	9.2117%	9.2159%
Interest on Loan	<b>496.32</b>	<b>483.25</b>	<b>458.71</b>	<b>421.03</b>	<b>381.25</b>