

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

PETITION NO. 4/TT/2015

Coram:

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

**Date of Hearing: 03.02.2016
Date of Order : 26.02.2016**

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 (A) 15.5 km loop in portion of both circuits of 400 KV D/C Bareilly-Lucknow Transmission Line to provide arrangement for evacuating Rosa Power out of LILO of both circuits and (B) 315 MVA 400/220 kV ICT at Bhiwadi under NRTSS in Northern Region

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,
VidyutBhawan, 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. Chandigarh Administration,
Sector - 9, Chandigarh
12. Uttarakhand Power Corporation Ltd.,
UrjaBhawan, Kanwali Road,
Dehradun
13. Rajasthan RajyaVidyutPrasaran Nigam Limited,
VidyutBhawan, Janpath,
Jaipur.
14. Ajmer VidyutVitran Nigam Ltd.,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur.
15. North Central Railway
Allahabad
16. BSES Yamuna Power Ltd.,
Shakti Kiran Building, Karkardooma,
Delhi – 110 092.



17. BSES Rajdhani Power Ltd.,
BSES Bhawan, Nehru Place,
New Delhi.

18. Rosa Power Supply Company Ltd.
Rosarkothi
DistShahajahnpur (UP)

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

20. North Delhi Power Limited
Power trading & load Dispatch group
Pitampura, New Delhi 110034

.....Respondent(s)

The following were present:

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

For Respondents: Shri S.K. Agarwal, Advocate, Rajasthan Discoms
Shri S.P. Das, Advocate, Rajasthan Discoms
Shri B.L. Sharma, 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 from date of commercial operation 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 in respect of



15.5 Km Loop in portion of both circuits of 400 KV D/C Bareilly-Lucknow Transmission Line (“ Asset-A”) to provide arrangement for evacuating Rosa Power out of LILO of both circuits and 315 MVA 400/220 kV ICT at Bhiwadi (“Asset-B”) under NRTSS in Northern Region (hereinafter referred to as “the transmission assets”).

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

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

a) The investment approval to the Northern Regional Transmission Strengthening Scheme was accorded by Board of Directors of the petitioner company vide memorandum dated 17.3.2010 for ₹96568 lakh including IDC of ₹7003 lakh (based on 3rd Quarter, 2009 price level). Both the Asset A & B were commissioned on 1.4.2012 respectively. The apportioned approved cost for Asset A is ₹2573.44 lakh and Asset B is ₹2337.56 lakh. The commercial operation date of both the assets were 1.4.2012 within the schedule date of commercial operation of 1.12.2012 as per investment approval.

b) The annual transmissions charges for Asset-A for 2009-14 tariff periods were determined vide order dated 27.1.2014 in Petition No. 196/TT/2012 based on admitted capital cost of ₹1611.21 lakh. The estimated additional capital expenditure considered by the Commission for determination of tariff for 2009-14 tariff period was ₹519.17 lakh for 2012-13 for Asset-A.



- c) The annual transmissions charges for Asset-B for 2009-14 tariff periods were determined vide order dated 24.6.2013 in Petition No. 71/TT/2012 based on admitted capital cost of ₹1200.03 lakh for Asset-II after deduction of excess initial spares of ₹2.93 lakh as on COD. The estimated additional capital expenditure considered by the Commission for determination of tariff for 2009-14 tariff period was ₹1134.60 lakh out of the claimed ₹1293.56 lakh for 2012-13 after restricting the estimated completion cost as on 31.3.2014 to approved apportioned capital expenditure of ₹2337.56 lakh.
- d) The Commission determined the tariff 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:-

For Asset-A

Particulars	(₹in lakh)	
	2012-13	2013-14
Depreciation	98.78	112.48
Interest on Loan	113.79	120.69
Return on Equity	98.11	111.72
Interest on Working Capital	7.79	8.61
O & M Expenses	11.48	12.13
Total	329.95	365.63

For Asset-B

Particulars	(₹in lakh)	
	2012-13	2013-14
Depreciation	93.42	123.38
Interest on Loan	113.69	141.28
Return on Equity	92.68	122.44
Interest on Working Capital	17.50	20.12
O & M Expenses	191.94	202.92
Total	509.24	610.14



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 newspaper 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. Respondent No. 2, 3 and 4, Rajasthan discoms, have filed a reply to the petition vide affidavit dated 2.2.2016.

7. The hearing in this matter was held on 3.2.2016. During the hearing, the petitioner submitted that the cost variation in Asset-B is because of the replacement of supplier at lower bid price. The initial contract for ICT was cancelled as the concerned agency did not carried out type test. The same work was given to other agency at very low cost and hence there is reduction in the cost of Asset B. The petitioner has submitted a affidavit dated 25.2.2016 for explaining the reason for cost variation..

8. Having heard the representatives of the parties and perused the material on record, 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. The petitioner has claimed the actual capital cost upto COD as ₹1642.90 lakh for Asset-A and ₹1202.96 lakh for Asset-B as certified vide Auditor’s Certificates dated 19.9.2014 and 23.8.14 respectively, in respect of the transmission asset for the purpose of tariff determination.

12. Clause (1) and (2) of the Regulation 7 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.”

13. We have considered the submission of the petitioner in respect of the actual capital cost of Asset A & B as on COD. The admissible capital cost as on COD of Asset- A and Asset-B has been worked out in the subsequent paragraphs after treatment of initial spares for the purpose of true up for 2009-14 tariff period.

Initial Spares

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

“Transmission line:	0.75%
Transmission sub-station	2.50%
Series compensation devices & HVDC Station:	3.50%”

15. The Commission had disallowed excess initial spares of ₹2.93 lakh against Asset-B against claimed initial spares of ₹61.29 lakh in order dated 24.6.2013 in petition 71/TT/2013.

16. The petitioner has not claimed any initial spares for Asset A. For Asset-B, the petitioner has claimed actual initial spares excluding IEDC and IDC of ₹65.46 lakh as



certified vide Auditors certificate dated 23.8.2014. However, the petitioner has submitted that “the tariff orders of the major assets covered under the instant project are awaited for which truing up petitioner shall be filed subsequent to receiving the final order. As the tariff orders of major assets are awaited, the petitioner requested to allow the claim of initial spares.

17. The Commission has considered the submission of the petitioner and is of the view that the initial spares for the individual element needs to be addressed in the petition it has been claimed for and accordingly, the permissible initial spares has been calculated on the basis of value of individual asset as on cut-off date. The cut off date of the Asset B is 31.3.2015, falls beyond the 31.3.2014. The additional capital expenditure for 2014-15 as allowed in accordance with the 2014 Tariff Regulations has been considered to work out the tariff.

18. In view of this, the admissible initial spares for Asset-B has been reviewed as under:-

Asset-B

(₹ in lakh)		
Particulars	Logical Formula	Substation: Amount
Capital cost as on cut- off date	(a)	1531.03
Capital Cost after deducting excess IDC	(b)	1531.03
Initial Spares claimed*	(c)	65.46
Proportionate Initial Spares claimed after deducting IDC	(d) = (c)/(a) * (b)	65.46
Ceiling limit as per Regulation 8 of 2009 regulations	(e)	2.50%
Initial spares worked out	(f)= ((b-d)*e)/(100%-e)	37.58



Excess initial spares claimed	(g)=(d)-(f)	27.88
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19. Accordingly, the capital cost as on COD for tariff computation of 2009-14 tariff period is considered as below:-

Particulars	(` in lakh)	
	Asset-A	Asset-B
Capital cost as on COD	1642.90	1202.96
Excess initial spares	0.00	27.88
Capital cost as on COD considered for tariff determination	1642.90	1175.08

Additional Capital Expenditure

20. 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...”

21. Regulation 9(1) of the 2009 Regulations provides that:-

“(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;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, subject to the provisions of regulation 8;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
- (v) Change in law:

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

22. The petitioner has submitted that it has incurred actual additional capital expenditure for Asset-A and Asset-B during 2012-13 and 2013-14 period on account of



balance and retention payments as certified vide Auditor's Certificates dated 19.9.2014 and 23.8.14 respectively, as depicted below:-

Asset-A

(₹ in lakh)

Approved Cost	Actual Cost as on COD	Approved / Claimed	Additional Capital Expenditure			Total cost as on 31.3.2014
			2012-13	2013-14	Total	
2573.44	1611.21	Approved in order dated 27.1.2014	519.17	0.00	519.17	2130.38
	1642.90	Claimed by the Petitioner	136.85	123.52	260.37	1903.27

Asset-B

Approved Cost	Actual Cost as on COD	Approved / Claimed	Additional Capital Expenditure			Total cost as on 31.3.2014
			2012-13	2013-14	Total	
2337.56	1200.03	Approved in order dated 24.6.2013	1134.60	0.00	1134.60	2334.63
	1202.96	Claimed by the Petitioner	214.83	0.00	214.83	1417.79

23. The petitioner has claimed actual additional capital expenditure before the cut-off date under Regulation 9(1)(i) of the 2009 Tariff Regulations. The above mentioned additional capital expenditure is towards balance and retention payments and the same has been certified vide Auditor's certificates dated 19.9.2014 and 23.8.14 for Asset-A and Asset-B respectively. The respondents, Rajathan Discoms, have submitted that the petitioner has not provided the RCE as directed by the Commission.

24. We have considered the submissions of the petitioner and the respondents with regard to the capital expenditure during 2009-14. The Commission, in its order dated



24.6.2013 in petition 71/TT/2013, had restricted additional capital expenditure for Asset-B to ₹1134.60 lakh against the petitioner's claim of additional capital expenditure of ₹1293.56, as estimated completion cost exceeded apportioned approved cost, and had directed the petitioner to file RCE at the time of truing up. However, based on the actual capital expenditure incurred as per the Auditor's Certificates for both the assets, it is observed that the completion cost of both the assets as on 31.3.2014 is within the apportioned approved cost of the respective assets and there is no need of RCE for Asset-B. Thus, the additional capital expenditure allowed for Asset-A and Asset-B for the purpose of revision of tariff in accordance under Regulation 9(1)(i) read with Regulation 6 of the 2009 Tariff Regulations is as under:-

(₹ in lakh)

Name of Asset	Apportioned approved cost		Capital cost as on COD	Additional capital expenditure			Capital cost as on 31.3.2014
				2012-13	2013-14	Total	
Asset-A	2573.44	Approved in order dated 27.1.2014	1611.21	519.17	0.00	519.17	2130.38
		Claimed by the Petitioner	1642.90	136.85	123.52	260.37	1903.27
		Allowed in this Order	1642.90	136.85	123.52	260.37	1903.27
Asset-B	2337.56	Approved in order dated 24.6.2013	1200.03	1134.60	0.00	1134.60	2334.63
		Claimed by the Petitioner	1202.96	214.83	0.00	214.83	1417.79
		Allowed in this Order	1175.08	214.83	0.00	214.83	1389.91

Debt: Equity

25. 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.”

26. The debt: equity ratio considered by the Commission vide order dated 27.1.2014 in Petition No. 196/TT/2012 and order dated 24.6.2013 in petition 71/TT/2013 as on COD for Asset A & Asset B is in line with the Regulation 12 of the 2009 Tariff Regulations.

27. The actual debt: equity ratio for additional capital expenditure as claimed by the petitioner is in accordance with the Regulation 12(1) and Regulation 12 (3) of the 2009 Tariff Regulations and hence, same has been considered towards financing of the additional capital expenditure.

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

For Asset A

Funding	Capital cost as on COD	(%)	Additional capital expenditure during 2009-14	(%)	Total Cost as on 31.3.2014	(%)
Debt	1150.03	70.00	182.26	70.00	1332.29	70.00
Equity	492.87	30.00	78.11	30.00	570.98	30.00
Total	1642.90	100.00	260.37	100.00	1903.27	100.00

For Assets B



Funding	Capital cost as on COD	(%)	Additional capital expenditure during 2009-14	(%)	Total Cost as on 31.3.2014	(%)
Debt	822.56	70.00	150.38	70.00	972.94	70.00
Equity	352.52	30.00	64.45	30.00	416.97	30.00
Total	1175.08	100.00	214.83	100.00	1389.91	100.00

Return on Equity (“ROE”)

29. Clause (3), (4) and (5) of the Regulation 15 of the 2009 Tariff Regulations provide that,

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

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

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.”

30. 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 (%)
2012-13	20.008	19.377
2013-14	20.961	19.610



31. The ROE as trued up and allowed is as follows:-

For Asset A

	(₹in lakh)	
Return on Equity	2012-13	2013-14
Approved in order dated 27.1.2014	98.11	111.72
Claimed by the petitioner	99.48	108.34
Allowed after trued up in this order	99.48	108.34

For Asset B

	(₹in lakh)	
Return on Equity	2012-13	2013-14
Approved in order dated 24.6.2013	92.68	122.44
Claimed by the petitioner	76.17	83.41
Allowed after trued up in this order	74.55	81.77

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”)

32. 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”.

33. 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:-

For Asset A

(₹ in lakh)		
Interest on Loan	2012-13	2013-14
Approved in order dated 27.1.2014	113.79	120.69
Claimed by the petitioner	104.35	104.33
Allowed after trued up in this order	104.35	104.33

For Asset B

(₹ in lakh)		
Interest on Loan	2012-13	2013-14
Approved in order dated 24.6.2013	113.69	141.28
Claimed by the petitioner	84.11	84.26
Allowed after trued up in this order	82.32	82.61

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

34. The depreciation has been worked out as per the methodology provided in the Regulation 17 of the 2009 Tariff Regulations. The depreciation allowed is as follows:-

For Asset A

(₹ in lakh)		
Depreciation	2012-13	2013-14
Approved in order dated 27.1.2014	98.78	112.48
Claimed by the petitioner	90.36	97.23
Allowed after trued up in this order	90.36	97.23

For Asset B

(₹ in lakh)		
Depreciation	2012-13	2013-14
Approved in order dated 24.6.2013	93.42	123.38
Claimed by the petitioner	69.29	74.96
Allowed after trued up in this order	67.81	73.48



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”)

35. 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:-

For Asset A

	(₹in lakh)	
O&M Expenses	2012-13	2013-14
Approved in order dated 27.1.2014	11.48	12.13
Claimed by the petitioner	11.48	12.13
Allowed after trued up in this order	11.48	12.13

For Asset B

	(₹in lakh)	
O&M Expenses	2012-13	2013-14
Approved in order dated 24.6.2013	191.94	202.92
Claimed by the petitioner	191.94	202.92
Allowed after trued up in this order	5.16	65.46

Interest on Working Capital (IWC)

36. The IWC has been worked out as per the methodology provided in the Regulation 18 of the 2009 Tariff Regulations and allowed as under:-

For Asset A

	(₹in lakh)	
Interest on Working Capital	2012-13	2013-14
Approved in order dated 27.1.2014	7.79	8.61
Claimed by the petitioner	7.41	7.80
Allowed after trued up in this order	7.41	7.80



For Asset B

(₹ in lakh)

Interest on Working Capital	2012-13	2013-14
Approved in order dated 24.6.2013	17.50	20.12
Claimed by the petitioner	15.89	16.80
Allowed after trued up in this order	15.78	16.69

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

37. 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:-

For Asset A:

(₹ in lakh)

Particulars	2012-13	2013-14
Depreciation		
Opening Gross Block	1642.90	1779.75
Additional Capitalisation	136.85	123.52
Closing Gross Block	1779.75	1903.27
Average Gross Block	1711.33	1841.51
Rate of Depreciation (%)	5.28	5.28
Depreciable Value	1540.19	1718.94
Balance Useful life of the asset	35.00	34.00
Elapsed `` Life	0.00	1.00
Remaining Depreciable Value	1540.19	1567.00
Depreciation during the year	90.36	97.23
Cumulative depreciation	90.36	187.59
Interest on Loan		
Gross Normative Loan	1150.03	1245.83
Cumulative Repayment upto Previous Year	0.00	90.36
Net Loan-Opening	1150.03	1155.47
Additions	95.80	86.46
Repayment during the year	90.36	97.23
Net Loan-Closing	1155.47	1144.70
Average Loan	1152.75	1150.08
Weighted Average Rate of Interest on Loan (%)	9.0520	9.0718



Particulars	2012-13	2013-14
Interest on Loan	104.35	104.33
Return on Equity		
Opening Equity	492.87	533.93
Additions	41.06	37.06
Closing Equity	533.93	570.98
Average Equity	513.40	552.45
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	99.48	108.34
Interest on Working Capital		
O & M expenses	0.96	1.01
Maintenance Spares	1.72	1.82
Receivables	52.18	54.97
Total	54.86	57.81
Rate of Interest (%)	13.50	13.50
Interest	7.41	7.80
Annual Transmission Charges		
Depreciation	90.36	97.23
Interest on Loan	104.35	104.33
Return on Equity	99.48	108.34
Interest on Working Capital	7.41	7.80
O & M Expenses	11.48	12.13
Total	313.08	329.84

For Asset B:

Particulars	2012-13	2013-14
Depreciation		
Opening Gross Block	1175.08	1389.91
Additional Capitalisation	214.83	0.00
Closing Gross Block	1389.91	1389.91
Average Gross Block	1282.49	1389.91
Rate of Depreciation (%)	5.29	5.29
Depreciable Value	1154.24	1347.59
Balance Useful life of the asset	24.00	23.00
Elapsed Life	1.00	2.00
Remaining Depreciable Value	1154.24	1183.11
Depreciation during the year	67.81	73.48
Cumulative depreciation (incl. of AAD)	67.81	141.29
Interest on Loan		
Gross Normative Loan	822.56	972.94
Cumulative Repayment upto Previous Year	0.00	67.81
Net Loan-Opening	822.56	905.13



Particulars	2012-13	2013-14
Additions	150.38	0.00
Repayment during the year	67.81	73.48
Net Loan-Closing	905.13	831.65
Average Loan	863.84	868.39
Weighted Average Rate of Interest on Loan (%)	9.5300	9.5136
Interest on Loan	82.32	82.61
Return on Equity		
Opening Equity	352.52	416.97
Additions	64.45	0.00
Closing Equity	416.97	416.97
Average Equity	384.75	416.97
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	74.55	81.77
Interest on Working Capital		
O & M expenses	16.00	16.91
Maintenance Spares	28.79	30.44
Receivables	72.07	76.25
Total	116.85	123.59
Rate of Interest (%)	13.50	13.50
Interest on Working Capital	15.78	16.69
Annual Transmission Charges		
Depreciation	67.81	73.48
Interest on Loan	82.32	82.61
Return on Equity	74.55	81.77
Interest on Working Capital	15.78	16.69
O & M Expenses	191.94	202.92
Total	432.40	457.47

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

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

Asset-A

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	102.54	104.59	104.59	104.59	104.59
Interest on Loan	101.86	95.02	85.54	76.05	66.55
Return on Equity	114.25	116.54	116.54	116.54	116.54
Interest on Working Capital	7.94	7.9	7.71	7.51	7.31
O & M Expenses	10.96	11.33	11.7	12.09	12.49
Total	337.55	335.38	326.08	316.78	307.48



Asset-B

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	77.95	80.96	80.96	80.96	80.96
Interest on Loan	80.78	76.99	69.27	61.57	53.87
Return on Equity	86.74	90.07	90.07	90.07	90.07
Interest on Working Capital	15.98	16.38	16.55	16.74	16.94
O & M Expenses	186.93	193.13	199.55	206.16	213.01
Total	448.38	457.53	456.40	455.50	454.85

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

Asset-A

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	0.91	0.94	0.98	1.01	1.04
Maintenance Spares	1.64	1.7	1.76	1.81	1.87
Receivables	56.26	55.9	54.35	52.8	51.25
Total	58.81	58.54	57.09	55.62	54.16
Rate of Interest (%)	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	7.94	7.90	7.71	7.51	7.31

Asset-B

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	15.58	16.09	16.63	17.18	17.75
Maintenance Spares	28.04	28.97	29.93	30.92	31.95
Receivables	74.73	76.26	76.07	75.92	75.81
Total	118.53	121.32	122.63	124.02	125.51
Rate of Interest (%)	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	15.98	16.38	16.55	16.74	16.94

Capital Cost

40. 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;”

41. The capital cost of ₹1903.27 lakh for Asset-A and ₹1389.91 lakh for Asset-B worked out by the Commission as on 31.3.2014 has been considered as opening capital cost as on 1.4.2014 for determination of tariff in accordance with Regulation 9 of the 2014 Tariff Regulations.

Additional Capital Expenditure

42. Clause (1) of Regulation 14 of the 2014 Tariff Regulations provides as under:-

“(1) The capital expenditure, in respect of a new project or an existing project, incurred or projected to be incurred on the following counts within the original scope of work, after date of commercial operation and up to the cut-off date, may be admitted by the Commission, subject to prudence check:

- (i) Undischarged liabilities recognized to be payable at a future date;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law; and
- (v) Change in law or compliance of any existing law”

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

“Cut - off Date” means 31st 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 31st March of the year closing after three years of the year of commercial operation.”



44. The cut-off date for both Asset-A and Asset-B works out to be 31.3.2015. The petitioner has claimed additional capital expenditure of ₹77.67 lakh for Asset-A and ₹113.24 lakh for Asset-B for 2014-19 tariff period under Regulation 14(1)(i). We have considered the submissions of the petitioner with regard to the projected capital expenditure during 2014-19. The claimed Additional capital expenditure is towards balance and retention payments for works executed before the cut-off date and the same has been certified vide Auditor's vide Certificates dated 19.9.2014 and 23.8.14. Further, the total completion cost as on 31.3.2019 is within the apportioned approved cost of the assets. Thus, the same is allowed for the purpose of revision of tariff in accordance with Regulation 14(1)(i) of the 2014 Tariff Regulations, subject to true-up on actual basis.

45. Accordingly, the capital cost including the additional capital expenditure during 2014-19 tariff period is as below:

(₹ in lakh)

Name of Asset	Apportioned approved cost	Capital cost as on 1.4.2014	Additional capital expenditure			Capital cost as on 31.3.2019
			2014-15	2015-19	Total	
Asset-A	2573.44	1903.27	77.67	0.00	77.67	1980.94
Asset-B	2337.56	1389.91	113.24	0.00	113.24	1503.15

Debt: Equity

46. 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.”

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

Asset-A

(₹ in lakh)

Funding	Capital cost as on 31.3.2014	(%)	Additional capital expenditure during 2014-19	(%)	Total Cost as on 31.3.2019	(%)
Debt	1332.29	70.00	54.37	70.00	1386.66	70.00
Equity	570.98	30.00	23.30	30.00	594.28	30.00
Total	1903.27	100.00	77.67	100.00	1980.94	100.00

Asset-B

(₹ in lakh)

Funding	Capital cost as on 31.3.2014	(%)	Additional capital expenditure during 2014-19	(%)	Total Cost as on 31.3.2019	(%)
Debt	972.94	70.00	79.27	70.00	1052.20	70.00
Equity	416.97	30.00	33.97	30.00	450.94	30.00
Total	1389.91	100.00	113.24	100.00	1503.15	100.00

Return on Equity (“ROE”)

48. 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.”

49. 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 has been worked out and allowed as follows:-

Asset-A

(₹ in lakh)

Return on Equity	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	570.98	594.28	594.28	594.28	594.28
Additions	23.30	0.00	0.00	0.00	0.00
Closing Equity	594.28	594.28	594.28	594.28	594.28
Average Equity	582.63	594.28	594.28	594.28	594.28
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	114.26	116.54	116.54	116.54	116.54

Asset-B

(₹ in lakh)

Return on Equity	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	416.97	450.94	450.94	450.94	450.94
Additions	33.97	0.00	0.00	0.00	0.00
Closing Equity	450.94	450.94	450.94	450.94	450.94



Return on Equity	2014-15	2015-16	2016-17	2017-18	2018-19
Average Equity	433.96	450.94	450.94	450.94	450.94
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	85.10	88.43	88.43	88.43	88.43

Interest on Loan (“IoL”)

50. Clause 5 and Clause 6 of Regulation 26 of the 2014 Tariff Regulations provides that:-

“(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.”

51. 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:-



Asset - A

(₹ in lakh)

Interest on Loan	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	1332.29	1386.66	1386.66	1386.66	1386.66
Cumulative Repayment upto Previous Year	187.59	290.13	394.73	499.32	603.91
Net Loan-Opening	1144.70	1096.53	991.93	887.34	782.74
Additions	54.37	0.00	0.00	0.00	0.00
Repayment during the year	102.54	104.59	104.59	104.59	104.59
Net Loan-Closing	1096.53	991.93	887.34	782.74	678.15
Average Loan	1120.61	1044.23	939.63	835.04	730.45
Weighted Average Rate of Interest on Loan (%)	9.0892%	9.0997%	9.1037%	9.1068%	9.1108%
Interest on Loan	101.85	95.02	85.54	76.05	66.55

Asset - B

(₹ in lakh)

Interest on Loan	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	972.94	1052.20	1052.20	1052.20	1052.20
Cumulative Repayment upto Previous Year	141.29	217.77	297.26	376.74	456.23
Net Loan-Opening	831.65	834.43	754.95	675.46	595.98
Additions	79.27	0.00	0.00	0.00	0.00
Repayment during the year	76.48	79.48	79.48	79.48	79.48
Net Loan-Closing	834.43	754.95	675.46	595.98	516.49
Average Loan	833.04	794.69	715.20	635.72	556.23
Weighted Average Rate of Interest on Loan (%)	9.5163%	9.5164%	9.5147%	9.5148%	9.5148%
Interest on Loan	79.27	75.63	68.05	60.49	52.92

Depreciation

52. Clause (2), (5) and (6) of Regulation 27 of the 2014 Tariff Regulations provide that:-



"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."

53. 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:-

Asset-A

(₹ in lakh)

Depreciation	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	1903.27	1980.94	1980.94	1980.94	1980.94
Additional Capitalisation	77.67	0.00	0.00	0.00	0.00
Closing Gross Block	1980.94	1980.94	1980.94	1980.94	1980.94
Average Gross Block	1942.11	1980.94	1980.94	1980.94	1980.94
Rate of Depreciation (%)	5.28%	5.28%	5.28%	5.28%	5.28%
Depreciable Value	1803.48	1817.80	1782.85	1782.85	1782.85
Balance Useful life	33.00	32.00	31.00	30.00	29.00
Elapsed Life	2.00	3.00	4.00	5.00	6.00
Remaining Depreciable Value	1560.30	1492.71	1388.12	1283.53	1178.93
Depreciation	102.54	104.59	104.59	104.59	104.59
Cumulative depreciation	290.13	394.73	499.32	603.91	708.51

Asset-B

(₹ in lakh)

Depreciation	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	1389.91	1503.15	1503.15	1503.15	1503.15
Additional Capitalisation	113.24	0.00	0.00	0.00	0.00
Closing Gross Block	1503.15	1503.15	1503.15	1503.15	1503.15



Depreciation	2014-15	2015-16	2016-17	2017-18	2018-19
Average Gross Block	1446.53	1503.15	1503.15	1503.15	1503.15
Rate of Depreciation (%)	5.29%	5.29%	5.29%	5.29%	5.29%
Depreciable Value	1301.88	1403.79	1352.83	1352.83	1352.83
Balance Useful life	22.00	21.00	20.00	19.00	18.00
Elapsed Life	3.00	4.00	5.00	6.00	7.00
Remaining Depreciable Value	1160.59	1135.06	1055.58	976.09	896.61
Depreciation	76.48	79.48	79.48	79.48	79.48
Cumulative depreciation	217.77	297.26	376.74	456.23	535.71

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

54. 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.

55. 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.

56. 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:-



Asset-A

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
DC Twin Conductor:					
Line Length	15.498	15.498	15.498	15.498	15.498
Norms (₹ lakh/km)	0.707	0.731	0.755	0.78	0.806
Total O&M Expenses (₹ lakh)	10.96	11.33	11.70	12.09	12.49

Asset-B

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
400 kV Bays:					
No. of Bays	1	1	1	1	1
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
220 kV Bays:					
No. of Bays	3	3	3	3	3
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.1
Total O&M Expenses (₹ lakh)	186.93	193.13	199.55	206.16	213.01

Interest on Working Capital ("IWC")

57. 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;"



58. 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%.

59. 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:-

Asset-A

(₹ in lakh)

Interest on Working Capital	2014-15	2015-16	2016-17	2017-18	2018-19
O & M expenses	0.91	0.94	0.98	1.01	1.04
Maintenance Spares	1.64	1.70	1.76	1.81	1.87
Receivables	56.26	55.90	54.35	52.80	51.25
Total	58.82	58.54	57.08	55.62	54.16
Rate of Interest (%)	0.14	0.14	0.14	0.14	0.14
Interest on Working Capital	7.94	7.90	7.71	7.51	7.31

Asset-B

(₹ in lakh)

Interest on Working Capital	2014-15	2015-16	2016-17	2017-18	2018-19
O & M expenses	15.58	16.09	16.63	17.18	17.75
Maintenance Spares	28.04	28.97	29.93	30.92	31.95
Receivables	73.94	75.49	75.33	75.20	75.12
Total	117.56	120.55	121.89	123.31	124.82
Rate of Interest (%)	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on Working Capital	15.87	16.27	16.46	16.65	16.85

ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD

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

Asset-A

(₹ in lakh)



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	1903.27	1980.94	1980.94	1980.94	1980.94
Additional Capitalisation	77.67	0.00	0.00	0.00	0.00
Closing Gross Block	1980.94	1980.94	1980.94	1980.94	1980.94
Average Gross Block	1942.11	1980.94	1980.94	1980.94	1980.94
Rate of Depreciation (%)	5.28	5.28	5.28	5.28	5.28
Depreciable Value	1803.48	1817.80	1782.85	1782.85	1782.85
Balance Useful life of the asset	33.00	32.00	31.00	30.00	29.00
Elapsed Life	2.00	3.00	4.00	5.00	6.00
Remaining Depreciable Value	1560.30	1492.71	1388.12	1283.53	1178.93
Depreciation during the year	102.54	104.59	104.59	104.59	104.59
Cumulative Depreciation	290.13	394.73	499.32	603.91	708.51
Interest on Loan					
Gross Normative Loan	1332.29	1386.66	1386.66	1386.66	1386.66
Cumulative Repayment upto Previous Year	187.59	290.13	394.73	499.32	603.91
Net Loan-Opening	1144.70	1096.53	991.93	887.34	782.74
Additions	54.37	0.00	0.00	0.00	0.00
Repayment during the year	102.54	104.59	104.59	104.59	104.59
Net Loan-Closing	1096.53	991.93	887.34	782.74	678.15
Average Loan	1120.61	1044.23	939.63	835.04	730.45
Weighted Average Rate of Interest on Loan (%)	9.0892	9.0997	9.1037	9.1068	9.1108
Interest on Loan	101.85	95.02	85.54	76.05	66.55
Return on Equity					
Opening Equity	570.98	594.28	594.28	594.28	594.28
Additions	23.30	0.00	0.00	0.00	0.00
Closing Equity	594.28	594.28	594.28	594.28	594.28
Average Equity	582.63	594.28	594.28	594.28	594.28
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	114.26	116.54	116.54	116.54	116.54
Interest on Working Capital					
O & M expenses	0.91	0.94	0.98	1.01	1.04
Maintenance Spares	1.64	1.70	1.76	1.81	1.87
Receivables	56.26	55.90	54.35	52.80	51.25
Total	58.82	58.54	57.08	55.62	54.16
Rate of Interest	13.50%	13.50%	13.50%	13.50%	13.50%
Interest on Working Capital	7.94	7.90	7.71	7.51	7.31
Annual Transmission Charges					
Depreciation	102.54	104.59	104.59	104.59	104.59
Interest on Loan	101.85	95.02	85.54	76.05	66.55
Return on Equity	114.26	116.54	116.54	116.54	116.54
Interest on Working Capital	7.94	7.90	7.71	7.51	7.31



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	10.96	11.33	11.70	12.09	12.49
Total	337.55	335.39	326.08	316.78	307.49

Asset-B

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	1389.91	1503.15	1503.15	1503.15	1503.15
Additional Capitalisation	113.24	0.00	0.00	0.00	0.00
Closing Gross Block	1503.15	1503.15	1503.15	1503.15	1503.15
Average Gross Block	1446.53	1503.15	1503.15	1503.15	1503.15
Rate of Depreciation (%)	5.29	5.29	5.29	5.29	5.29
Depreciable Value	1301.88	1403.79	1352.83	1352.83	1352.83
Balance Useful life of the asset	22.00	21.00	20.00	19.00	18.00
Elapsed Life	3.00	4.00	5.00	6.00	7.00
Remaining Depreciable Value	1160.59	1135.06	1055.58	976.09	896.61
Depreciation during the year	76.48	79.48	79.48	79.48	79.48
Cumulative Depreciation	217.77	297.26	376.74	456.23	535.71
Interest on Loan					
Gross Normative Loan	972.94	1052.20	1052.20	1052.20	1052.20
Cumulative Repayment upto Previous Year	141.29	217.77	297.26	376.74	456.23
Net Loan-Opening	831.65	834.43	754.95	675.46	595.98
Additions	79.27	0.00	0.00	0.00	0.00
Repayment during the year	76.48	79.48	79.48	79.48	79.48
Net Loan-Closing	834.43	754.95	675.46	595.98	516.49
Average Loan	833.04	794.69	715.20	635.72	556.23
Weighted Average Rate of Interest on Loan (%)	9.5163	9.5164	9.5147	9.5148	9.5148
Interest on Loan	79.27	75.63	68.05	60.49	52.92
Return on Equity					
Opening Equity	416.97	450.94	450.94	450.94	450.94
Additions	33.97	0.00	0.00	0.00	0.00
Closing Equity	450.94	450.94	450.94	450.94	450.94
Average Equity	433.96	450.94	450.94	450.94	450.94
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	85.10	88.43	88.43	88.43	88.43
Interest on Working Capital					
O & M expenses	15.58	16.09	16.63	17.18	17.75
Maintenance Spares	28.04	28.97	29.93	30.92	31.95
Receivables	73.94	75.49	75.33	75.20	75.12



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Total	117.56	120.55	121.89	123.31	124.82
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	15.87	16.27	16.46	16.65	16.85
Annual Transmission Charges					
Depreciation	76.48	79.48	79.48	79.48	79.48
Interest on Loan	79.27	75.63	68.05	60.49	52.92
Return on Equity	85.10	88.43	88.43	88.43	88.43
Interest on Working Capital	15.87	16.27	16.46	16.65	16.85
O & M Expenses	186.93	193.13	199.55	206.16	213.01
Total	443.66	452.95	451.97	451.21	450.70

61. 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. The deferred tax liability shall be dealt as per Regulations 49 of the 2014 Tariff Regulations, as amended. Since the COD is beyond 2009, the petitioner's prayer is not maintainable in this case.

Filing Fee and the Publication Expenses

62. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. 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

63. 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 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

64. The petitioner has prayed for reimbursement of service tax if it is subjected to such tax in future. We are of the view that the petitioner's prayer is premature.

Sharing of Transmission Charges

65. 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.

66. This order disposes of Petition No.4/TT/2015.

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

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



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

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
BOND XXXIII DOCO DRAWL ON 01-APR-2012-	8.64	200.00	0.00	200.00
BOND XXXII-DOCO DRAWL ON 01-APR-2012-	8.84	300.00	0.00	300.00
BOND-XXXIV-DOCO DRAWL ON 01-APR-2012-	8.84	300.00	0.00	300.00
BOND-XXXV-DOCO	9.64	322.18	0.00	322.18
BOND XXXVI-DOCO DRAWL ON 01-APR-2012	9.35	27.85	0.00	27.85
BOND XL-ADDCAP FOR 2012-2013 252-	9.30	0.00	95.80	95.80
BOND XL-ADDCAP FOR 2013-2014 2522-	9.30	0.00	86.46	86.46
Total		1150.03	182.26	1332.29

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

(₹ in lakh)

Particulars	2012-13	2013-14
Gross Opening Loan	1150.03	1245.83
Cumulative Repayments of Loans upto Previous Year	0.00	0.00
Net Loans Opening	1150.03	1245.83
Add: Draw(s) during the Year	95.80	86.46
Less: Repayments of Loan during the year	0.00	25.00
Net Closing Loan	1245.83	1307.29
Average Net Loan	1197.93	1276.56
Rate of Interest on Loan* (%)	9.0520%	9.0718%
Interest on Loan	108.44	115.81

*Petitioner, in the tariff computation submitted with the petition, has considered rate of interest on loan upto two decimal points.



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

Asset- B

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
BOND XXXIII DOCO DRAWL ON 01-APR-2012-	8.64	10.00	0.00	10.00
BOND XXXII-DOCO DRAWL ON 01-APR-2012-	8.84	36.00	0.00	36.00
BOND-XXXIV-DOCO DRAWL ON 01-APR-2012-	8.84	10.00	0.00	10.00
BOND-XXXV-DOCO DRAWL ON 01-APR-2012-	9.64	700.00	0.00	700.00
BOND XXXVI-DOCO DRAWL ON 01-APR-2012	9.35	50.00	0.00	50.00
BOND XXXVII-DOCO DRAWL ON 01-APR-2012	9.25	36.07	0.00	36.07
BOND XL-ADDCAP FOR 2012-2013 252-	9.30	0.00	150.38	150.38
Total		842.07	150.38	992.45

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

(₹ in lakh)

Particulars	2012-13	2013-14
Gross Opening Loan	842.07	992.45
Cumulative Repayments of Loans upto Previous Year	0.00	0.00
Net Loans Opening	842.07	992.45
Add: Draw(s) during the Year	150.38	0.00
Less: Repayments of Loan during the year	0.00	3.00
Net Closing Loan	992.45	989.45
Average Net Loan	917.26	990.95
Rate of Interest on Loan* (%)	9.5300%	9.5136%
Interest on Loan	87.41	94.27

*Petitioner, in the tariff computation submitted with the petition, has considered rate of interest on loan upto two decimal points.



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

(₹in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND XXXIII DOCO DRAWL ON 01-APR-2012-	8.64	200.00	0.00	200.00
BOND XXXII-DOCO DRAWL ON 01-APR-2012-	8.84	300.00	0.00	300.00
BOND-XXXIV-DOCO DRAWL ON 01-APR-2012-	8.84	300.00	0.00	300.00
BOND-XXXV-DOCO	9.64	322.18	0.00	322.18
BOND XXXVI-DOCO DRAWL ON 01-APR-2012	9.35	27.85	0.00	27.85
BOND XL-ADDCAP FOR 2012-2013 252-	9.30	95.80	0.00	95.80
BOND XL-ADDCAP FOR 2013-2014 2522-	9.30	86.46	0.00	86.46
Total		1332.29	0.00	1332.29

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	1332.29	1332.29	1332.29	1332.29	1332.29
Cumulative Repayments of Loans up to Previous Year	25.00	91.67	185.20	295.78	406.36
Net Loans Opening	1307.29	1240.62	1147.09	1036.51	925.93
Add: Drawl(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments during the year	66.67	93.53	110.58	110.58	110.58
Net Closing Loan	1240.62	1147.09	1036.51	925.93	815.35
Average Net Loan	1273.96	1193.86	1091.80	981.22	870.64
Rate of Interest on Loan (%)	9.0892%	9.0997%	9.1037%	9.1068%	9.1108%
Interest on Loan	115.79	108.64	99.39	89.36	79.32



Asset-B

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND XXXIII DOCO DRAWL ON 01-APR-2012-	8.64	10.00	0.00	10.00
BOND XXXII-DOCO DRAWL ON 01-APR-2012-	8.84	36.00	0.00	36.00
BOND-XXXIV-DOCO DRAWL ON 01-APR-2012-	8.84	10.00	0.00	10.00
BOND-XXXV-DOCO DRAWL ON 01-APR-2012-	9.64	700.00	0.00	700.00
BOND XXXVI-DOCO DRAWL ON 01-APR-2012	9.35	50.00	0.00	50.00
BOND XXXVII-DOCO DRAWL ON 01-APR-2012	9.25	36.07	0.00	36.07
BOND XL-ADDCAP FOR 2012-2013 252-	9.30	150.38	0.00	150.38
Total		992.45	0.00	992.45

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	992.45	992.45	992.45	992.45	992.45
Cumulative Repayments of Loans up to Previous Year	3.00	7.66	73.66	155.52	237.38
Net Loans Opening	989.45	984.79	918.79	836.93	755.07
Add: Drawl(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments during the year	4.66	66.00	81.86	81.86	81.86
Net Closing Loan	984.79	918.79	836.93	755.07	673.21
Average Net Loan	987.12	951.79	877.86	796.00	714.14
Rate of Interest on Loan (%)	9.5163%	9.5164%	9.5147%	9.5148%	9.5148%
Interest on Loan	93.94	90.58	83.53	75.74	67.95

