

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

PETITION NO. 28/TT/2015

Coram:
Shri A.S. Bakshi, Member
Dr. M. K. Iyer, Member

Date of Hearing: 27.01.2016
Date of Order : 18.03.2016

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 Transmission Assets under Northern Region System Strengthening Scheme XII (NRSS-XII) and 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 Ltd.,
Vidyut Bhawan, Vidyut Marg,
Jaipur - 302 005.
2. Ajmer Vidyut Vitran Nigam Ltd.,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur.
3. Jaipur Vidyut Vitran Nigam Ltd.,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur.
4. Jodhpur Vidyut Vitran Nigam Ltd.,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur



5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla - 171 004.
6. Punjab State Electricity Board,
The Mall, Patiala - 147 001.
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector - 6
Panchkula (Haryana) - 134 109
8. Power Development Department,
Govt. of Jammu and Kashmir
Mini Secretariat, Jammu .
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 Ltd.,
Power Trading & Load Dispatch Group,
Cennet Building,
Adjacent to 66/11kV Pitampura - Grid Building,
Near PP Jewellers,
Pitampura, New Delhi - 110 034
14. Chandigarh Administration,
Sector - 9, Chandigarh
15. Uttarakhand Power Corporation Ltd.,
Urja Bhawan, Kanwali Road,
Dehradun
16. North Central Railway,
Allahabad
17. New Delhi Municipal Council,

The following were present:

For Petitioner: Shri M.M. Mondal, PGCIL
Shri S.K Venkatesan, PGCIL
Shri S.S. Raju, PGCIL
Smt. Sangeeta Edwards, PGCIL
Shri S.C. Taneja, PGCIL
Shri Jasbir Singh, PGCIL
Shri Rakesh Prasad, PGCIL
Shri Anshul Garg, PGCIL

For Respondents: Shri Pradeep Mishra, Advocate JVVNL
Shri Suraj Singh, Advocate JVVNL
Shri Gaurav Gupta, Advocate, Rajasthan Discoms, Jaipur

ORDER

The petition has been preferred 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 1.4.2009 to 31.3.2014 and for determination of tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") for the period from 1.4.2014 to 31.3.2019 in respect of Transmission Assets under Northern Region System Strengthening Scheme XII (NRSS-XII) (hereinafter referred to as "the transmission assets").

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

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

a) The administrative approval to the NRSS Scheme-XII was accorded by the Board of Directors of the petitioner vide letter dated 26.2.2008 for ₹26155 lakh including an IDC of ₹1775 lakh based on 3rd Quarter, 2007 price level. Various transmission assets of the System have been executed progressively from 2006 to 2008 as per the details below:-

Asset	Name of the Asset	COD	Apportioned approved cost
Asset-I	Two nos. Bays at Nalagarh Extension	1.7.2010	616.07
Asset-II	Two nos. Bays at Kota Extension	1.10.2010	524.61
Asset-III	400 kV D/C Bahadurgarh- Sonapat Line along with its associated bays at Bahadurgarh & Sonapat	1.10.2010	13579.08
Asset-IV	315 MVA ICT-II at Sonapat	1.10.2010	4332.22
Asset-V	315 MVA ICT-I at Sonapat	1.11.2010	4332.22
Asset-VI	Two nos. Bays at Bhiwadi Extension	1.2.2011	498.17
Asset-VII	125 MVAR 400 kV Bus-Reactor at Sonapat along with its associated bay	1.6.2011	2273.07
Combined Assets A: II & VI	Notional COD: 1.2.2011		1022.78
Combined Assets B: III & VII	Notional COD: 1.6.2011		15852.15
Combined Assets: IV & V	Notional COD: 1.11.2010		8664.44
Total apportioned approved cost			26155.44

b) The annual transmission charges for 2009-14 tariff period were determined vide order dated 3.10.2012 in Petition No. 342/2010 and order dated 19.11.2012 in Petition No. 19/TT/2011, based on admitted capital cost of the transmission assets and debt:equity as on 31.3.2009.

c) In addition to the above, the Commission had also allowed estimated additional capital expenditure towards balance and retention payments during 2009-14 for determination of tariff for 2009-14 tariff period, as given below:-

Name of Asset	Capital cost admitted on COD	Approved additional capital expenditure				Total capital cost	Initial spares allowed (SS/TL)
		2010-11	2011-12	2012-13			
Asset-I	191.14	60.51	30.00	10.00	291.65	7.29	
Asset-II	380.04	113.60	7.19	0.00	500.83	12.52	
Asset-III	7936.33	648.80	168.37	431.63	9205.13	51.47/51.57	
Asset-IV	2281.48	442.83	88.44		2812.75	47.72	
Asset-V		536.36	372.52	20.00			
Asset-VI	320.02	0.00	31.54	126.21	320.02	12.02	
Asset-VII	929.14	-	-	-	929.14	8.2	
Combined Asset-A (Assets II & VI)	813.66	7.19	31.54	126.21	978.60	24.54 (12.52+12.02)	
Combined Asset-B (Assets III & VII)	9682.64	-	607.20 (431.63+175.57)	35.00	10324.84	59.67/ 51.56 (51.47+8.2)	
Combined Assets IV & V	5255.37	624.80 (88.44+536.36)	1028.41	44.00	6952.58	96.92 (47.72+49.2)	
Total (I+A+B+IV& V)	15942.81	692.50	1697.15	215.21	18547.67	188.42/51.56	

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

Asset -I

(₹ in lakh)

Particulars	2010-11 (pro-rata for 9 months)	2011-12	2012-13	2013-14
Depreciation	8.83	14.17	15.23	15.49
Interest on Loan	10.54	15.93	15.86	14.76
Return on Equity	8.71	13.98	15.03	15.29
Interest on Working Capital	3.13	4.50	4.75	4.96
O & M Expenses	58.17	82.00	86.68	91.64
Total	89.37	130.59	137.55	142.14

Asset- II and Combined Asset A- II & VI

(₹ in lakh)

Particulars	Asset-II	Combined Asset A- II & VI			
	2010-11 (pro-rata for 4 months)	2010-11 (pro-rata for 2 months)	2011-12	2012-13	2013-14
Depreciation	7.82	7.25	44.57	48.74	52.09
Interest on Loan	9.04	8.33	48.85	49.59	49.00
Return on Equity	7.70	7.14	43.87	48.01	51.32
Interest on Working Capital	1.62	1.69	10.60	11.23	11.83
O & M Expenses	25.85	25.85	164.00	173.36	183.28
Total	52.03	50.27	311.90	330.94	347.52

Asset-III and Combined Asset B- III & VII

(₹ in lakh)

Particulars	Asset-III		Combined Asset B- III & VII		
	2010-11 (pro-rata for 4 months)	2011-12 (pro-rata for 2 months)	2011-12 (pro-rata for 10 months)	2012-13	2013-14
Depreciation	214.62	76.93	429.62	531.83	532.68
Interest on Loan	253.56	86.00	481.89	555.28	508.71
Return on Equity	216.61	77.66	436.42	540.55	541.46
Interest on Working Capital	18.55	6.52	40.12	49.25	49.31
O & M Expenses	128.50	45.29	275.24	349.17	369.11
Total	831.84	292.39	1663.3	2026.07	2001.28

Asset- IV and Combined Asset- IV & V

(₹ in lakh)

Particulars	Asset-IV	Combined Asset IV & V			
	2010-11 (pro-rata for 1 month)	2010-11 (pro-rata for 5 months)	2011-12	2012-13	2013-14
Depreciation	9.85	105.99	294.63	320.74	321.81
Interest on Loan	13.05	141.65	373.5	379.33	351.93
Return on Equity	11.13	121.66	335.34	363.46	364.61
Interest on Working Capital	1.28	14.76	38.69	40.95	41.69
O & M Expenses	14.31	175.43	445.14	470.56	497.48
Total	49.63	559.49	1487.31	1575.05	1577.53



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 on 29.12.2014, 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. No comments/objections have been received from the public in response to the notice in newspaper. In response to the instant petition, replies were filed by RVPNL, Respondent No. 1, AVVNL, Respondent No. 2, JVVNL, Respondent No. 3, and JDVVNL, Respondent No.4, (collectively referred to as "Rajasthan Discoms") vide a common affidavit dated 25.1.2016. The respondents have requested for prudence check of the tariff claimed by the petitioner. The petitioner has filed rejoinder to the reply of Rajasthan Discoms vide affidavit dated 18.2.2016. Suffice it to say that the requisite prudence check is an integral part of the tariff determination process. Specific concerns expressed by these respondents are addressed in the respective paras of this order.

7. The hearing in this matter was held on 27.1.2016. The petitioner was directed to submit the details of initial spares, undischarged liabilities and actual equity infused during 2009-14 and 2014-19 tariff periods. The petitioner has submitted information vide affidavit dated 18.2.2016.

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 last proviso to Regulation 7(2) of the 2009 Tariff Regulations provides that:-

“Provided also that in case of the existing projects, the capital cost admitted by the Commission prior to 1.4.2009 duly trued up by excluding un-discharged liability, if any, as on 1.4.2009 and the additional capital expenditure projected to be incurred for the respective year of the tariff period 2009-14, as may be admitted by the Commission, shall form the basis for determination of tariff”.

12. The petitioner has claimed the capital cost for the transmission assets as admitted by the Commission vide order dated 3.10.2012 and 19.11.2012.

13. The petitioner has submitted the Auditor's Certificate dated 1.9.2014 for Asset-I, III, IV, V and VII, dated 19.9.2014 for Asset-II and dated 20.12.2014 for Asset-VI, certifying the capital cost as on COD and the additional capitalization claimed thereafter. Thus, the capital cost (including excess initial spares, IDC and IEDC) has been considered as below:-

(₹ in lakh)

Name of Asset	Capital cost on COD claimed by petitioner
Asset-I	204.57
Asset-II	395.24
Asset-III	8097.64
Asset-IV	2281.48
Combined Asset-A (Assets II & VI)	744.40
Combined Asset-B (Assets III & VII)	9331.26
Combined Assets IV& V	5252.53
Total (I + A + B + IV & V)	15532.76

IDC and IEDC

14. There is time over-run of two months and six months in case of Asset-VI and Asset-VII respectively and the same was not condoned and accordingly IDC and IEDC in case of the said assets were disallowed in order dated 19.11.2012 in Petition No. 19/TT/2011. The IDC and IEDC disallowed was deducted from the capital cost of Asset-VI and Asset-VII. Details of IDC and IEDC disallowed are as shown below:-

(₹ in lakh)

Asset	Particulars	IDC	IEDC
Asset VI	Total IDC and IEDC claimed upto 31.1.2011	43.10	12.50
	Disallowed IDC and IEDC for 2 months	2.46	0.71
Asset VII	Total IDC and IEDC claimed up to 31.5.2011	70.68	34.50
	Disallowed IDC and IEDC for 6 months	10.87	5.31

15. The petitioner in the instant petition has claimed the capital cost of Asset-VI and Asset-VII as on COD after deducting IDC and IEDC of ₹3.18 lakh and ₹16.18 lakh respectively, as per order dated 19.11.2012.

16. In response to query, the petitioner has submitted, vide affidavit dated 18.2.2016, the details of IDC and IEDC discharged on cash basis up to COD and during 2009-14 tariff period. The petitioner has further submitted that the expenditure up to COD has remained unchanged with respect to IDC and entire IEDC is discharged up to COD.

17. It is observed that the IDC and IEDC component for Asset-VI, as certified by the Auditor vide certificate dated 20.12.2014, has changed to ₹38.29 lakh and ₹13.64 lakh. In case of Asset-VII, the IDC and IEDC remains unchanged. Accordingly, we have re-worked the disallowable IDC/IEDC for Asset-VI. The IDC and IEDC disallowed are as follows:-

(₹ in lakh)			
Asset	Particulars	IDC	IEDC
Asset VI	Total IDC and IEDC claimed up to 31.1.2011	38.29	13.64
	Disallowed IDC and IEDC for 2 months	2.19	0.78
Asset VII	Total IDC and IEDC claimed up to 31.5.2011	70.68	34.50
	Disallowed IDC and IEDC for 6 months	10.87	5.31

Initial Spares

18. The initial spares claimed by the petitioner in the present petition and the excess initial spares disallowed in orders dated 3.10.2012 and 19.11.2012 are as below:-

(₹ in lakh)

Asset	Initial spares claimed in the present petition	Initial spares disallowed in orders dated 3.10.2012 and 19.11.2012
Asset-I	20.72	13.43
Asset-II	32.01	14.21
Asset-III	55.64/208.71	4.17/157.14
Asset-IV	47.72	0.00
Asset-V	49.20	0.00
Asset-VI	39.49	21.05
Asset-VII	8.20	0.00

The excess initial spares were disallowed by the Commission considering the capital cost as on COD and estimated additional capital expenditure up to the end of 2009-14 tariff period. The initial spares were to be reviewed at the time of truing up considering the additional capital expenditure during the 2014-19 period.

19. The petitioner has submitted actual capital expenditure for true up of tariff during 2009-14 tariff period as per 2009 Tariff Regulations and also submitted the estimated capital expenditure for determination of tariff during 2014-19 tariff period in accordance with the 2014 Tariff Regulations. The initial spares have been worked out by considering the additional capital expenditure upto cut-off date which falls beyond 31.3.2014 period.

20. 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:

(iv) Transmission system

(a) Transmission line - 0.75%

(b) Transmission Sub-station - 2.5%

(c) Series Compensation devices and HVDC Station - 3.5%.....”

21. In response to query, the petitioner has submitted the year-wise details of initial spares discharged during 2009-14, vide affidavit dated 18.2.2016. The details of initial spares claimed and allowed for sub-station and transmission line has been shown in the table given below:-

(₹ in lakh)

Description	Capital cost as on cut-off date	IDC /IEDC disallowed	Cost for spare calculation	Proportionate initial spares claimed	Initial spares worked out as per Ceiling limits of Regulation 8 of the 2009 Tariff Regulation (S/S=2.50%, TL=0.75%)	Excess initial spares
Sub-station (including PLCC)						
Asset-I	271.30	0.00	271.30	20.72	6.43	14.29
Asset-II	448.68	0.00	448.68	32.01	10.68	21.33
Asset-III	2319.33	0.00	2319.33	55.64	58.04	0.00
Asset-IV	2919.04	0.00	2919.04	47.72	73.62	0.00
Asset-V	3847.37	0.00	3847.37	49.20	97.39	0.00
Asset-VI	504.84	2.97	501.87	39.26	11.86	27.40
Asset-VII	1052.63	16.18	1036.45	8.20	26.37	0.00
Transmission Line						
Asset-III	6970.33	0.00	6970.33	208.71	51.10	157.61

22. Further, since the petitioner has submitted the year-wise details of initial spares discharged during 2009-14, the excess initial spares worked out above, are reduced from the capital cost on COD to the extent of liability discharged up to COD. The balance excess initial spares are adjusted in the additional capital expenditure during 2009-14 period as below:-

Asset-I:

(₹ in lakh)

Initial spares discharged on cash basis (as per affidavit dated 18.2.2016)	
Exp. up to COD	15.62
Exp. during 2010-11	1.13
Exp. during 2011-12	1.99
Exp. during 2012-13	1.97

Total initial spares	20.72
Initial spares worked out	6.43
Total Excess initial spares	14.29
Disallowance up to COD	9.20
Disallowance during 2010-11	1.13
Disallowance during 2011-12	1.99
Disallowance during 2012-13	1.97

Asset-II:

(₹ in lakh)

Initial spares discharged on cash basis (as per affidavit dated 18.2.2016)	
Exp. up to COD	31.32
Exp. during 2010-11	0.11
Exp. during 2013-14	0.58
Total initial spares	32.01
Initial spares worked out	10.68
Total Excess initial spares	21.33
Disallowance up to COD	20.64
Disallowance during 2010-11	0.11
Disallowance during 2013-14	0.58

Asset-III:

(₹ in lakh)

Initial spares discharged on cash basis (as per affidavit dated 18.2.2016)	
	TL
Exp. up to COD	180.44
Exp. during 2010-11	6.16
Exp. during 2011-12	22.10
Total initial spares	208.70
Initial spares worked out	51.10
Total Excess initial spares	157.61
Disallowance up to COD	129.34
Disallowance during 2010-11	6.16
Disallowance during 2011-12	22.10

Asset-VI

(₹ in lakh)

Initial spares discharged on cash basis (as per affidavit dated 18.2.2016)	
Exp. up to COD	27.36
Exp. during 2012-13	11.43
Exp. during 2013-14	0.70
Total initial spares	39.49
Proportionate initial spares after disallowing IDC/IEDC	39.26
Initial spares worked out	11.86
Total Excess initial spares	27.40
Disallowance up to COD	15.27
Disallowance during 2012-13	11.43
Disallowance during 2013-14	0.70

23. Accordingly, we have considered the following capital cost as on COD for the purpose of computing tariff for 2009-14 tariff period:-

(₹ in lakh)

Name of Asset	Capital cost approved by the Commission			
	Capital cost on COD	IDC/IEDC disallowed	Excess initial spares on COD	Capital cost on COD after reducing IDC/IEDC and excess initial spares considered for tariff computation
Asset-I	204.57	0.00	9.20	195.37
Asset-II	395.24	0.00	20.64	374.60
Asset-III	8097.64	0.00	129.34	7968.30
Asset-IV	2281.48	0.00	0.00	2281.48
Combined Asset-A (Assets II & VI)	740.87	2.97	15.27	722.64
Combined Asset-B (Assets III & VII)	9354.98	16.18	0.00	9338.80
Combined Assets IV & V	5261.22	0.00	0.00	5261.22
Total (I + A + B + IV & V)	15561.07			15518.03

Additional Capital Expenditure

24. The petitioner has claimed additional capital expenditure for the transmission assets on account of balance and retention payment within cut-off date under Regulation 9(1) of the 2009 Tariff Regulations.

25. Clause (1), sub-clause (i) of Regulation 9 of the 2009 Tariff Regulations provides as follows:-

“Additional Capitalisation. (1) The capital expenditure incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

(i) Undischarged liabilities...;”

26. 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”

27. Rajasthan Discoms have submitted that the petitioner has nowhere clarified that the additional capital expenditure incurred were towards the original scope of work. The petitioner, in the rejoinder has submitted the details of balance and retention payments.

28. We have considered the submissions of the petitioner and the respondent with regard to the actual capital expenditure during 2009-14. The above mentioned additional capital expenditure is on account of undischarged liability towards balance and retention payments and the same has been certified by the Auditor vide Certificates dated 1.9.2014 for Asset-I, III, IV, V and VII, dated 19.9.2014 for Asset-II and dated 20.12.2014 for Asset-VI. The total capital costs of the instant transmission assets including actual additional capitalization claimed by the petitioner along with the liability

discharged corresponding to initial spares during the corresponding years are within the apportioned approved costs for the assets. Accordingly, we have allowed total capital cost including additional capitalization under Regulation 9(1)(i) of the 2009 Tariff Regulations as shown in the table below:-

(₹ in lakh)

Asset	Particulars	Appor-tioned approved cost	Admitted capital cost on COD	Actual Additional Capitalization					Total Capital Cost
				2010-11	2011-12	2012-13	2013-14	Total	
Asset-I	Approved	616.07	191.14	60.51	30.00	10.00	0.00	100.51	291.65
	Actual Allowed		195.37	13.71	24.11	23.82	0.00	61.64	257.01
Asset-II	Approved	524.61	380.04	113.60	0.00	0.00	0.00	113.60	493.64
	Actual Allowed		374.60	22.72	0.00	0.00	0.00	22.72	397.32
Asset-III	Approved	13579.08	7936.33	648.80	168.37	0.00	0.00	817.17	8753.50
	Actual Allowed		7968.30	270.45	170.92	0.00	0.00	441.37	8409.67
Asset-IV	Approved	4332.22	2281.48	442.83	0.00	0.00	0.00	442.83	2724.31
	Actual Allowed		2281.48	19.41	0.00	0.00	0.00	19.41	2300.89
Combined Asset-A (Assets II & VI)	Approved	1022.78	813.66	7.19	31.54	126.21	0.00	164.94	978.60
	Actual Allowed		722.64	41.87	54.89	66.25	27.71	190.72	913.36
Combined Asset-B (Assets III & VII)	Approved	15852.15	9682.64	0.00	607.20	35.00	0.00	642.20	10324.84
	Actual Allowed		9338.80	0.00	629.65	185.12	22.35	837.12	10175.92
Combined Assets IV & V	Approved	8664.44	5255.37	624.80	1028.41	44.00	0.00	1697.21	6952.58
	Actual Allowed		5261.22	253.17	825.71	426.31	37.09	1542.28	6803.50
Combined Asset-I, A, B, IV & V			15518.03	308.75	1534.36	701.50	87.15	2631.76	18149.79

(Approved is as per previous order)

Debt: Equity

29. 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.”

30. The debt:equity ratio considered in orders dated 3.10.2012 in Petition No. 342/2010 and 19.11.2012 in Petition No. 19/2011 as on COD has been considered as on 1.4.2009 for determination of tariff in accordance with the Regulation 12 of the 2009 Tariff Regulations. In respect of the additional capital expenditure, debt: equity ratio of 70:30 has been considered in line with the 2009 Tariff Regulations.

31. The debt: equity ratio of 70:30 for additional capital expenditure as claimed by the petitioner is in accordance with the Regulation 12 (3) of the 2009 Tariff Regulations and hence, same has been considered towards financing of the additional capital expenditure.

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

(₹ in lakh)

Asset	Capital cost as on COD		Additional capital expenditure during 2009-14		Total Cost as on 31.3.2014	
	Debt	Equity	Debt	Equity	Debt	Equity
Asset-I	136.76	58.61	43.15	18.49	179.91	77.10
%	70.00	30.00	70.00	30.00	70.00	30.00
Asset-II	262.22	112.38	15.91	6.82	278.13	119.20
%	70.00	30.00	70.00	30.00	70.00	30.00
Asset-III	5577.81	2390.49	308.96	132.41	5886.76	2522.90

Asset	Capital cost as on COD		Additional capital expenditure during 2009-14		Total Cost as on 31.3.2014	
	Debt	Equity	Debt	Equity	Debt	Equity
%	70.00	30.00	70.00	30.00	70.00	30.00
Asset-IV	1597.04	684.44	13.59	5.82	1610.63	690.27
%	70.00	30.00	70.00	30.00	70.00	30.00
Combined Asset-A (Assets II & VI)	552.89	169.75	133.50	57.22	686.39	226.96
%	76.51	23.49	70.00	30.00	75.15	24.85
Combined Asset-B (Assets III & VII)	6537.16	2801.64	585.99	251.14	7123.15	3052.78
%	70.00	30.00	70.00	30.00	70.00	30.00
Combined Assets IV & V	3682.86	1578.37	1079.59	462.68	4762.45	2041.05
%	70.00	30.00	70.00	30.00	70.00	30.00
Total (I + A + B + IV & V)	10909.67	4608.37	1842.23	789.53	12751.90	5397.89
%	70.30	29.70	70.00	30.00	70.26	29.74

Return on Equity (“ROE”)

33. 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:

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

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

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

34. 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

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

Asset-I

(₹ in lakh)

Return on Equity	2010-11 (pro-rata)	2011-12	2012-13	2013-14
Approved vide order dated 3.10.2012	8.71	13.98	15.03	15.29
Claimed by the petitioner	9.23	13.51	15.02	15.96
Allowed after truing up in this order	8.81	12.85	14.25	15.12

Asset- II and Combined Asset A- II & VI

(₹ in lakh)

Return on Equity	Asset-II	Combined Asset A- II & VI			
	2010-11 (pro-rata for 4 months)	2010-11 (pro-rata for 2 months)	2011-12	2012-13	2013-14
Approved vide order dated 3.10.2012 & 19.11.2012	7.70	7.14	43.87	48.01	51.32
Claimed by the petitioner	7.98	7.48	48.12	51.98	55.74
Allowed after truing up in this order	7.47	5.68	36.92	40.44	43.69



Asset-III and Combined Asset B- III & VII

(₹ in lakh)

Return on Equity	Asset-III		Combined Asset B- III & VII		
	2010-11 (pro-rata for 4 months)	2011-12 (pro-rata for 2 months)	2011-12 (pro-rata for 10 months)	2012-13	2013-14
Approved vide order dated 3.10.2012 & 19.11.2012	216.61	77.66	436.42	540.55	541.46
Claimed by the petitioner	234.57	83.35	467.07	584.86	597.99
Allowed after truing up in this order	235.31	80.65	467.64	584.86	598.01

Asset- IV and Combined Asset- IV & V

(₹ in lakh)

Return on Equity	Asset-IV	Combined Asset IV & V			
	2010-11 (pro-rata for 1 month)	2010-11 (pro-rata for 5 months)	2011-12	2012-13	2013-14
Approved vide order dated 3.10.2012	11.13	121.66	335.34	363.46	364.61
Claimed by the petitioner	11.32	130.27	344.56	380.95	399.16
Allowed after truing up in this order	11.09	130.37	344.56	380.95	399.17

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”)

36. 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”.

37. 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-I

(₹ in lakh)

Interest on loan	2010-11 (pro-rata)	2011-12	2012-13	2013-14
Approved vide order dated 3.10.2012	10.54	15.93	15.86	14.76
Claimed by the petitioner	10.07	13.72	14.15	13.68
Allowed after truing up in this order	9.60	13.05	13.42	12.95

Asset- II and Combined Asset A- II & VI

(₹ in lakh)

Interest on loan	Asset-II	Combined Asset A- II & VI			
	2010-11 (pro-rata for 4 months)	2010-11 (pro-rata for 2 months)	2011-12	2012-13	2013-14
Approved vide order dated 3.10.2012 & 19.11.2012	9.04	8.33	48.85	49.59	49.00
Claimed by the petitioner	8.50	7.86	48.38	48.53	47.57
Allowed after truing up in this order	7.96	8.27	50.48	50.47	49.32

Asset-III and Combined Asset B- III & VII

(₹ in lakh)

Interest on loan	Asset-III		Combined Asset B- III & VII		
	2010-11 (pro-rata for 4 months)	2011-12 (pro-rata for 2 months)	2011-12 (pro-rata for 10 months)	2012-13	2013-14
Approved vide order dated 3.10.2012 & 19.11.2012	253.56	86.00	481.89	555.28	508.71



Interest on loan	Asset-III		Combined Asset B- III & VII		
	2010-11 (pro-rata for 4 months)	2011-12 (pro-rata for 2 months)	2011-12 (pro-rata for 10 months)	2012-13	2013-14
Claimed by the petitioner	247.92	85.93	464.75	542.21	502.21
Allowed after truing up in this order	248.69	83.04	465.48	542.32	502.33

Asset- IV and Combined Asset- IV & V

(₹ in lakh)

Interest on loan	Asset-IV	Combined Asset IV & V			
	2010-11 (pro-rata for 1 month)	2010-11 (pro-rata for 5 months)	2011-12	2012-13	2013-14
Approved vide order dated 3.10.2012	13.05	141.65	373.50	379.33	351.93
Claimed by the petitioner	12.15	136.95	347.49	362.84	350.15
Allowed after truing up in this order	11.90	137.07	347.50	362.85	350.16

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

38. 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:-

Asset-I

(₹ in lakh)

Depreciation	2010-11 (pro-rata)	2011-12	2012-13	2013-14
Approved vide order dated 3.10.2012	8.83	14.17	15.23	15.49
Claimed by the petitioner	8.45	12.37	13.74	14.42
Allowed after truing up in this order	8.06	11.76	13.03	13.66

Asset- II and Combined Asset A- II & VI

(₹ in lakh)

Depreciation	Asset-II	Combined Asset A- II & VI			
	2010-11 (pro-rata for 4 months)	2010-11 (pro-rata for 2 months)	2011-12	2012-13	2013-14
Approved vide order dated 3.10.2012 & 19.11.2012	7.82	7.25	44.57	48.74	52.09
Claimed by the petitioner	7.32	6.86	44.09	47.60	50.43
Allowed after truing up in this order	6.86	6.60	42.17	45.38	47.87

Asset-III and Combined Asset B- III & VII

(₹ in lakh)

Depreciation	Asset-III		Combined Asset B- III & VII		
	2010-11 (pro-rata for 4 months)	2011-12 (pro-rata for 2 months)	2011-12 (pro-rata for 10 months)	2012-13	2013-14
Approved vide order dated 3.10.2012 & 19.11.2012	214.62	76.93	429.62	531.83	532.68
Claimed by the petitioner	209.94	74.50	414.80	519.02	524.34
Allowed after truing up in this order	210.61	72.12	415.23	519.02	524.34

Asset- IV and Combined Asset- IV & V

(₹ in lakh)

Depreciation	Asset-IV	Combined Asset IV & V			
	2010-11 (pro-rata for 1 month)	2010-11 (pro-rata for 5 months)	2011-12	2012-13	2013-14
Approved vide order dated 3.10.2012	9.85	105.99	294.63	320.74	321.81
Claimed by the petitioner	9.01	102.37	271.41	301.45	313.28
Allowed after truing up in this order	8.81	102.46	271.41	301.45	313.28



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)

39. 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-I

(₹ in lakh)

O&M Expenses	2010-11 (pro-rata)	2011-12	2012-13	2013-14
Approved vide order dated 3.10.2012	58.17	82.00	86.68	91.64
Claimed by the petitioner	58.17	82.00	86.68	91.64
Allowed after truing up in this order	58.17	82.00	86.68	91.64

Asset- II and Combined Asset A- II & VI

(₹ in lakh)

O&M Expenses	Asset-II	Combined Asset A- II & VI			
	2010-11 (pro-rata for 4 months)	2010-11 (pro-rata for 2 months)	2011-12	2012-13	2013-14
Approved vide order dated 3.10.2012 & 19.11.2012	25.85	25.85	164.00	173.36	183.28
Claimed by the petitioner	25.85	25.85	164.00	173.36	183.28
Allowed after truing up in this order	25.85	25.85	164.00	173.36	183.28

Asset-III and Combined Asset B- III & VII

(₹ in lakh)

O&M Expenses	Asset-III		Combined Asset B- III & VII		
	2010-11 (pro-rata for 4 months)	2011-12 (pro-rata for 2 months)	2011-12 (pro-rata for 10 months)	2012-13	2013-14
Approved vide order dated 3.10.2012 & 19.11.2012	128.50	45.29	275.24	349.17	369.11
Claimed by the petitioner	128.50	45.29	275.24	349.17	369.11
Allowed after truing up in this order	128.50	45.29	275.24	349.17	369.11

Asset- IV and Combined Asset- IV & V

(₹ in lakh)

O&M Expenses	Asset-IV	Combined Asset IV & V			
	2010-11 (pro-rata for 1 month)	2010-11 (pro-rata for 5 months)	2011-12	2012-13	2013-14
Approved vide order dated 3.10.2012	14.31	175.43	445.14	470.56	497.48
Claimed by the petitioner	14.31	175.43	445.14	470.56	497.48
Allowed after truing up in this order	14.31	175.43	445.14	470.56	497.48

Interest on Working Capital (IWC)

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

Asset-I

(₹ in lakh)

IWC	2010-11 (pro-rata)	2011-12	2012-13	2013-14
Approved vide order dated 3.10.2012	3.13	4.50	4.75	4.96
Claimed by the petitioner	3.13	4.41	4.69	4.93
Allowed after truing up in this order	3.10	4.38	4.65	4.89

Asset- II and Combined Asset A- II & VI

(₹ in lakh)

IWC	Asset-II	Combined Asset A- II & VI			
	2010-11 (pro-rata for 4 months)	2010-11 (pro-rata for 2 months)	2011-12	2012-13	2013-14
Approved vide order dated 3.10.2012 & 19.11.2012	1.62	1.69	10.60	11.23	11.83
Claimed by the petitioner	1.60	1.57	9.98	10.54	11.09
Allowed after truing up in this order	1.58	1.54	9.77	10.32	10.85

Asset-III and Combined Asset B- III & VII

(₹ in lakh)

IWC	Asset-III		Combined Asset B- III & VII		
	2010-11 (pro-rata for 4 months)	2011-12 (pro-rata for 2 months)	2011-12 (pro-rata for 10 months)	2012-13	2013-14
Approved vide order dated 3.10.2012 & 19.11.2012	18.55	6.52	40.12	49.25	49.31
Claimed by the petitioner	18.69	6.58	40.09	49.62	50.14
Allowed after truing up in this order	18.73	6.43	40.13	49.62	50.15

Asset- IV and Combined Asset- IV & V

(₹ in lakh)

IWC	Asset-IV	Combined Asset IV & V			
	2010-11 (pro-rata for 1 month)	2010-11 (pro-rata for 5 months)	2011-12	2012-13	2013-14
Approved vide order dated 3.10.2012	1.28	14.76	38.69	40.95	41.69
Claimed by the petitioner	1.25	14.77	37.95	40.61	42.14
Allowed after truing up in this order	1.24	14.77	37.95	40.61	42.14



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

41. 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-I

(₹ in lakh)

Particulars	2010-11	2011-12	2012-13	2013-14
Depreciation				
Opening Gross Block	195.37	209.08	233.19	257.01
Additional Capitalisation	13.71	24.11	23.82	0.00
Closing Gross Block	209.08	233.19	257.01	257.01
Average Gross Block	202.23	221.14	245.10	257.01
Rate of Depreciation	5.32	5.32	5.32	5.31
Depreciable Value	182.00	199.02	220.59	231.31
Balance Useful life of the asset	25	24	23	22
Elapsed Life	0	1	2	3
Remaining Depreciable Value	182.00	190.96	200.76	198.45
Depreciation during the year	8.06	11.76	13.03	13.66
Cumulative depreciation	8.06	19.83	32.86	46.51
Interest on Loan				
Gross Normative Loan	136.76	146.36	163.23	179.91
Cumulative Repayment upto Previous Year	0.00	8.06	19.83	32.86
Net Loan-Opening	136.76	138.29	143.41	147.05
Additions	9.60	16.88	16.67	0.00
Repayment during the year	8.06	11.76	13.03	13.66
Net Loan-Closing	138.29	143.41	147.05	133.39
Average Loan	137.53	140.85	145.23	140.22
Weighted Average Rate of Interest on Loan (%)	9.3088	9.2639	9.2388	9.2333
Interest on Loan	9.60	13.05	13.42	12.95
Return on Equity				
Opening Equity	58.61	62.72	69.96	77.10
Additions	4.11	7.23	7.15	0.00
Closing Equity	62.72	69.96	77.10	77.10
Average Equity	60.67	66.34	73.53	77.10
Return on Equity (Base Rate)	15.500	15.500	15.500	15.500
MAT rate for the respective year	19.931	20.008	20.008	20.961
Rate of Return on Equity	19.358	19.377	19.377	19.610
Return on Equity	8.81	12.85	14.25	15.12

Particulars	2010-11	2011-12	2012-13	2013-14
Interest on Working Capital				
O & M expenses	6.46	6.83	7.22	7.64
Maintenance Spares	11.63	12.30	13.00	13.75
Receivables	19.50	20.67	22.00	23.04
Total	37.60	39.81	42.23	44.42
Rate of Interest(%)	11.00	11.00	11.00	11.00
Interest	3.10	4.38	4.65	4.89
Annual Transmission Charges				
Depreciation	8.06	11.76	13.03	13.66
Interest on Loan	9.60	13.05	13.42	12.95
Return on Equity	8.81	12.85	14.25	15.12
Interest on Working Capital	3.10	4.38	4.65	4.89
O & M Expenses	58.17	82.00	86.68	91.64
Total	87.74	124.04	132.02	138.25

Asset- II and Combined Asset A- II & VI

(₹ in lakh)

Particulars	Asset-II	Combined Asset A- II & VI			
	2010-11 (pro-rata for 4 months)	2010-11 (pro-rata for 2 months)	2011-12	2012-13	2013-14
Depreciation					
Opening Gross Block	374.60	722.64	764.51	819.40	885.65
Additional Capitalisation	22.72	41.87	54.89	66.25	27.71
Closing Gross Block	397.32	764.51	819.40	885.65	913.36
Average Gross Block	385.96	743.57	791.95	852.52	899.50
Rate of Depreciation	5.33	5.33	5.32	5.32	5.32
Depreciable Value	347.37	669.22	712.76	767.27	809.55
Balance Useful life of the asset	25	25	24	23	22
Elapsed Life	0	0	1	2	3
Remaining Depreciable Value	347.37	662.36	699.30	711.64	708.55
Depreciation during the year	6.86	6.60	42.17	45.38	47.87
Cumulative depreciation	6.86	13.46	55.63	101.00	148.88
Interest on Loan					
Gross Normative Loan	262.22	552.89	582.20	620.62	667.00
Cumulative Repayment upto Previous Year	0.00	6.86	13.46	55.63	101.00
Net Loan-Opening	262.22	546.04	568.74	565.00	565.99
Additions	15.91	29.31	38.42	46.38	19.40
Repayment during the year	6.86	6.60	42.17	45.38	47.87
Net Loan-Closing	271.27	568.74	565.00	565.99	537.52
Average Loan	266.75	557.39	566.87	565.49	551.76
Weighted Average Rate of Interest on Loan (%)	8.9517	8.9021	8.9051	8.9246	8.9394
Interest on Loan	7.96	8.27	50.48	50.47	49.32



Particulars	Asset-II	Combined Asset A- II & VI			
	2010-11 (pro-rata for 4 months)	2010-11 (pro-rata for 2 months)	2011-12	2012-13	2013-14
Return on Equity					
Opening Equity	112.38	169.75	182.31	198.78	218.65
Additions	6.82	12.56	16.47	19.88	8.31
Closing Equity	119.20	182.31	198.78	218.65	226.96
Average Equity	115.79	176.03	190.54	208.71	222.81
Return on Equity (Base Rate)	15.500	15.500	15.500	15.500	15.500
MAT rate for the respective year	19.931	19.931	20.008	20.008	20.961
Rate of Return on Equity	19.358	19.358	19.377	19.377	19.610
Return on Equity	7.47	5.68	36.92	40.44	43.69
Interest on Working Capital					
O & M expenses	6.46	12.93	13.67	14.45	15.27
Maintenance Spares	11.63	23.27	24.60	26.00	27.49
Receivables	24.86	47.95	50.56	53.33	55.84
Total	42.95	84.14	88.82	93.78	98.60
Rate of Interest(%)	11.00	11.00	11.00	11.00	11.00
Interest	1.58	1.54	9.77	10.32	10.85
Annual Transmission Charges					
Depreciation	6.86	6.60	42.17	45.38	47.87
Interest on Loan	7.96	8.27	50.48	50.47	49.32
Return on Equity	7.47	5.68	36.92	40.44	43.69
Interest on Working Capital	1.58	1.54	9.77	10.32	10.85
O & M Expenses	25.85	25.85	164.00	173.36	183.28
Total	49.71	47.95	303.34	319.96	335.02

Asset-III and Combined Asset B- III & VII

(₹ in lakh)

Particulars	Asset-III	Combined Asset B- III & VII			
	2010-11 (pro-rata for 4 months)	2011-12 (pro-rata for 2 months)	2011-12 (pro-rata for 10 months)	2012-13	2013-14
Depreciation					
Opening Gross Block	7968.30	8238.75	9338.80	9968.46	10153.58
Additional Capitalisation	270.45	170.92	629.65	185.12	22.35
Closing Gross Block	8238.75	8409.66	9968.46	10153.58	10175.93
Average Gross Block	8103.52	8324.20	9653.63	10061.02	10164.75
Rate of Depreciation	5.20	5.20	5.16	5.16	5.16
Depreciable Value	7187.36	7385.97	8529.55	8896.20	8989.56
Balance Useful life of the asset	33	32	32	31	30
Elapsed Life	0	1	0	1	2
Remaining Depreciable Value	7187.36	7175.36	8246.82	8198.25	7772.59



Particulars	Asset-III	Combined Asset B- III & VII			
	2010-11 (pro-rata for 4 months)	2011-12 (pro-rata for 2 months)	2011-12 (pro-rata for 10 months)	2012-13	2013-14
Depreciation during the year	210.61	72.12	415.23	519.02	524.34
Cumulative depreciation	210.61	282.73	697.95	1216.97	1741.31
Interest on Loan					
Gross Normative Loan	5577.81	5767.12	6537.16	6977.92	7107.50
Cumulative Repayment upto Previous Year	0.00	210.61	282.73	697.95	1216.97
Net Loan-Opening	5577.81	5556.51	6254.44	6279.97	5890.53
Additions	189.32	119.64	440.76	129.58	15.65
Repayment during the year	210.61	72.12	415.23	519.02	524.34
Net Loan-Closing	5556.51	5604.04	6279.97	5890.53	5381.84
Average Loan	5567.16	5580.27	6267.20	6085.25	5636.18
Weighted Average Rate of Interest on Loan (%)	8.9343	8.9281	8.9127	8.9121	8.9125
Interest on Loan	248.69	83.04	465.48	542.32	502.33
Return on Equity					
Opening Equity	2390.49	2471.62	2801.64	2990.54	3046.07
Additions	81.14	51.28	188.90	55.54	6.71
Closing Equity	2471.62	2522.90	2990.54	3046.07	3052.78
Average Equity	2431.06	2497.26	2896.09	3018.30	3049.43
Return on Equity(Base Rate)	15.500	15.500	15.500	15.500	15.500
MAT rate for the respective year	19.931	20.008	20.008	20.008	20.961
Rate of Return on Equity	19.358	19.377	19.377	19.377	19.610
Return on Equity	235.31	80.65	467.64	584.86	598.01
Interest on Working Capital					
O & M expenses	21.42	22.64	27.52	29.10	30.76
Maintenance Spares	38.55	40.76	49.54	52.38	55.37
Receivables	280.61	287.52	332.74	340.83	340.66
Total	340.58	350.92	409.81	422.30	426.78
Rate of Interest(%)	11.00	11.00	11.75	11.75	11.75
Interest	18.73	6.43	40.13	49.62	50.15
Annual Transmission Charges					
Depreciation	210.61	72.12	415.23	519.02	524.34
Interest on Loan	248.69	83.04	465.48	542.32	502.33
Return on Equity	235.31	80.65	467.64	584.86	598.01
Interest on Working Capital	18.73	6.43	40.13	49.62	50.15
O & M Expenses	128.50	45.29	275.24	349.17	369.11
Total	841.84	287.52	1663.71	2044.99	2043.93

Asset- IV and Combined Asset- IV & V

(₹ in lakh)

Particulars	Asset-IV	Combined Asset IV & V			
	2010-11 (pro-rata for 1 month)	2010-11 (pro-rata for 5 months)	2011-12	2012-13	2013-14
Depreciation					
Opening Gross Block	2281.48	5261.22	5514.39	6340.10	6766.41
Additional Capitalisation	19.41	253.17	825.71	426.31	37.09
Closing Gross Block	2300.89	5514.39	6340.10	6766.41	6803.50
Average Gross Block	2291.19	5387.81	5927.25	6553.26	6784.96
Rate of Depreciation	4.61	4.56	4.58	4.60	4.62
Depreciable Value	1850.45	4319.98	4805.47	5368.88	5577.41
Balance Useful life of the asset	25	25	24	23	22
Elapsed Life	0	0	1	2	3
Remaining Depreciable Value	1850.45	4311.17	4694.20	4986.20	4893.28
Depreciation during the year	8.81	102.46	271.41	301.45	313.28
Cumulative depreciation	8.81	111.27	382.68	684.13	997.42
Interest on Loan					
Gross Normative Loan	1597.04	3682.86	3860.07	4438.07	4736.49
Cumulative Repayment upto Previous Year	0.00	8.81	111.27	382.68	684.13
Net Loan-Opening	1597.04	3674.05	3748.80	4055.39	4052.35
Additions	13.59	177.22	578.00	298.42	25.96
Repayment during the year	8.81	102.46	271.41	301.45	313.28
Net Loan-Closing	1601.82	3748.80	4055.39	4052.35	3765.03
Average Loan	1599.43	3711.43	3902.10	4053.87	3908.69
Weighted Average Rate of Interest on Loan (%)	8.9303	8.8637	8.9055	8.9507	8.9584
Interest on Loan	11.90	137.07	347.50	362.85	350.16
Return on Equity					
Opening Equity	684.44	1578.37	1654.32	1902.03	2029.92
Additions	5.82	75.95	247.71	127.89	11.13
Closing Equity	690.27	1654.32	1902.03	2029.92	2041.05
Average Equity	687.36	1616.34	1778.17	1965.98	2035.49
Return on Equity (Base Rate)	15.500	15.500	15.500	15.500	15.500
MAT rate for the respective year	19.931	19.931	20.008	20.008	20.961
Rate of Return on Equity	19.358	19.358	19.377	19.377	19.610
Return on Equity	11.09	130.37	344.56	380.95	399.17
Interest on Working Capital					
O & M expenses	14.31	35.09	37.10	39.21	41.46
Maintenance Spares	25.76	63.16	66.77	70.58	74.62
Receivables	94.69	224.04	241.09	259.40	267.04



	Asset-IV	Combined Asset IV & V			
Total	134.76	322.29	344.96	369.20	383.12
Rate of Interest(%)	11.00	11.00	11.00	11.00	11.00
Interest	1.24	14.77	37.95	40.61	42.14
Annual Transmission Charges					
Depreciation	8.81	102.46	271.41	301.45	313.28
Interest on Loan	11.90	137.07	347.50	362.85	350.16
Return on Equity	11.09	130.37	344.56	380.95	399.17
Interest on Working Capital	1.24	14.77	37.95	40.61	42.14
O & M Expenses	14.31	175.43	445.14	470.56	497.48
Total	47.35	560.11	1446.55	1556.42	1602.23

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

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

Combined Assets- I, A, B, IV & V

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	904.71	904.73	904.73	904.73	904.73
Interest on Loan	835.78	755.11	674.27	593.40	512.53
Return on Equity	1071.48	1071.50	1071.50	1071.50	1071.50
Interest on Working Capital	122.78	122.85	122.98	123.17	123.43
O & M Expenses	1050.79	1085.68	1121.75	1158.92	1197.41
Total	3985.54	3939.87	3895.23	3851.72	3809.60

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

Combined Assets- I, A, B, IV & V

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	87.57	90.47	93.48	96.58	99.78
Maintenance Spares	157.62	162.85	168.26	173.84	179.61
Receivables	664.26	656.65	649.21	641.95	634.93
Total	909.45	909.97	910.95	912.37	914.32
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest	122.78	122.85	122.98	123.17	123.43

Capital Cost

44. 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;”

45. The capital cost of ₹18149.79 lakh for the Combined Assets-I, A, B, IV & V 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

46. 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:”

47. 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:”

48. The petitioner has submitted, vide Auditor’s Certificates dated 19.9.2014 in Asset-II and 20.12.2014 in Asset-VI that the additional capital expenditure estimated during 2014-19 tariff period is ₹0.10 lakh in Asset-II and ₹0.66 lakh in Asset-VI on account of balance and retention payments.

49. The petitioner has submitted, vide affidavit dated 18.2.2016, the details of undischarged liability estimated during 2014-15 on account of balance and retention payment.

50. We have considered the submissions of the petitioner. The additional capital expenditure of ₹0.76 lakh in case of Combined Asset-A (Asset-II and Asset-VI) during the tariff period 2014-19 is allowed under Regulation 14(3)(v) of 2014 Tariff Regulations, subject to true up on actual basis.

Debt: Equity

51. Clause (1) and (3) of Regulation 19 of the 2014 Tariff Regulations provide 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.”

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

Combined Assets- I, A, B, IV & V

(₹ in lakh)

Funding	Capital cost as on 31.3.2014	(%)	Additional capital expenditure during 2014-19	(%)	Total Cost as on 31.3.2019	(%)
Debt	12751.90	70.26	0.53	00.00	12752.43	70.26
Equity	5397.89	29.74	0.23	00.00	5398.12	29.74
Total	220117.24	100.00	0.76	00.00	18150.55	100.00

Return on Equity (“ROE”)

53. 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.”

54. 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:-

(₹ in lakh)

Return on Equity	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	5397.89	5398.12	5398.12	5398.12	5398.12
Additions	0.23	0.00	0.00	0.00	0.00
Closing Equity	5398.12	5398.12	5398.12	5398.12	5398.12
Average Equity	5398.01	5398.12	5398.12	5398.12	5398.12
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	1058.57	1058.60	1058.60	1058.60	1058.60

Interest on Loan (“IoL”)

55. 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.”

56. 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. By considering above, the IoL has been worked out in

accordance with Regulation 26 of the 2014 Tariff Regulations. 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	12751.90	12752.43	12752.43	12752.43	12752.43
Cumulative Repayment upto Previous Year	2934.12	3835.48	4736.87	5638.26	6539.64
Net Loan-Opening	9817.78	8916.95	8015.56	7114.17	6212.79
Additions	0.53	0.00	0.00	0.00	0.00
Repayment during the year	901.37	901.39	901.39	901.39	901.39
Net Loan-Closing	8916.95	8015.56	7114.17	6212.79	5311.40
Average Loan	9367.36	8466.25	7564.87	6663.48	5762.09
Weighted Average Rate of Interest on Loan (%)	8.9377	8.9397	8.9402	8.9404	8.9408%
Interest on Loan	837.22	756.86	676.31	595.74	515.18

Depreciation

57. 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."

58. 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 transmissions assets will be completing 12 years beyond 2014-19 tariff period; hence depreciation up to 2014-19 tariff period has been calculated annually based on Straight Line Method and at rates specified in Appendix-II of the 2014 Tariff Regulations. The detailed calculations for depreciation for the transmission asset are worked out and allowed as follows:-

(₹ in lakh)

Depreciation	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	18149.79	18150.55	18150.55	18150.55	18150.55
Additional Capitalisation	0.76	0.00	0.00	0.00	0.00
Closing Gross Block	18150.55	18150.55	18150.55	18150.55	18150.55
Average Gross Block	18150.17	18150.55	18150.55	18150.55	18150.55
Rate of Depreciation	4.97%	4.97%	4.97%	4.97%	4.97%
Depreciable Value	15647.39	15647.73	15647.73	15647.73	15647.73
Balance Useful life of the asset	25	24	23	22	21
Elapsed Life	4	5	6	7	8
Remaining Depreciable Value	12713.28	11812.25	10910.86	10009.48	9108.09
Depreciation	901.37	901.39	901.39	901.39	901.39
Cumulative depreciation	3835.48	4736.87	5638.26	6539.64	7441.03

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

59. 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 have been worked out and allowed are as follows:-

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
400 kV Bays:					
No. of Bays	7	7	7	7	7
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
220 kV Bays:					
No. of Bays	14	14	14	14	14
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.1
Line: D/C Twin/Triple Conductor:					
Line Length (km)	53.4	53.4	53.4	53.4	53.4
Norms (₹ lakh/km)	0.707	0.731	0.755	0.780	0.806
Total O&M Expenses (₹ lakh)	1050.79	1085.68	1121.75	1158.92	1197.41

60. The petitioner has further submitted that the wage revision of the employees of the petitioner company is due during 2014-19 and actual impact of wage hike which will be effective 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 prayed that it will approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase. 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 asset as per prevailing norms.

Interest on Working Capital (IWC)

61. 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;”

62. The petitioner has considered the rate of interest on working capital to be 13.50%.

63. 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)

Interest on Working Capital	2014-15	2015-16	2016-17	2017-18	2018-19
O & M expenses	87.57	90.47	93.48	96.58	99.78
Maintenance Spares	157.62	162.85	168.26	173.84	179.61
Receivables	661.73	654.17	646.78	639.58	632.62
Total	906.92	907.50	908.52	910.00	912.01
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	122.43	122.51	122.65	122.85	123.12

ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	18149.79	18150.55	18150.55	18150.55	18150.55
Additional Capitalisation	0.76	0.00	0.00	0.00	0.00
Closing Gross Block	18150.55	18150.55	18150.55	18150.55	18150.55
Average Gross Block	18150.17	18150.55	18150.55	18150.55	18150.55
Rate of Depreciation	4.97	4.97	4.97	4.97	4.97
Depreciable Value	15647.39	15647.73	15647.73	15647.73	15647.73
Balance Useful life of the asset	25	24	23	22	21
Elapsed Life	4	5	6	7	8
Remaining Depreciable Value	12713.28	11812.25	10910.86	10009.48	9108.09

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	901.37	901.39	901.39	901.39	901.39
Cumulative depreciation	3835.48	4736.87	5638.26	6539.64	7441.03
Interest on Loan					
Gross Normative Loan	12751.90	12752.43	12752.43	12752.43	12752.43
Cumulative Repayment upto Previous Year	2934.12	3835.48	4736.87	5638.26	6539.64
Net Loan-Opening	9817.78	8916.95	8015.56	7114.17	6212.79
Additions	0.53	0.00	0.00	0.00	0.00
Repayment during the year	901.37	901.39	901.39	901.39	901.39
Net Loan-Closing	8916.95	8015.56	7114.17	6212.79	5311.40
Average Loan	9367.36	8466.25	7564.87	6663.48	5762.09
Weighted Average Rate of Interest on Loan	8.938	8.940	8.940	8.940	8.941
Interest	837.22	756.86	676.31	595.74	515.18
Return on Equity					
Opening Equity	5397.89	5398.12	5398.12	5398.12	5398.12
Additions	0.23	0.00	0.00	0.00	0.00
Closing Equity	5398.12	5398.12	5398.12	5398.12	5398.12
Average Equity	5398.01	5398.12	5398.12	5398.12	5398.12
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	1058.57	1058.60	1058.60	1058.60	1058.60
Interest on Working Capital					
O & M expenses	87.57	90.47	93.48	96.58	99.78
Maintenance Spares	157.62	162.85	168.26	173.84	179.61
Receivables	661.73	654.17	646.78	639.58	632.62
Total	906.92	907.50	908.52	910.00	912.01
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on working capital	122.43	122.51	122.65	122.85	123.12
Annual Transmission Charges					
Depreciation	901.37	901.39	901.39	901.39	901.39
Interest on Loan	837.22	756.86	676.31	595.74	515.18
Return on Equity	1058.57	1058.60	1058.60	1058.60	1058.60
Interest on Working Capital	122.43	122.51	122.65	122.85	123.12
O & M Expenses	1050.79	1085.68	1121.75	1158.92	1197.41
Total	3970.39	3925.03	3880.69	3837.50	3795.69

Deferred Tax Liability

65. 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. Accordingly, the petitioner is entitled to recover the deferred tax liability upto 31.3.2009 whenever the same gets materialized directly from the beneficiaries or long term transmission customers /DICs.

Filing Fee and the Publication Expenses

66. 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

67. 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

68. 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

69. 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.

70. This order disposes of Petition No.28/TT/2015.

(Dr. M.K. Iyer)
Member

(A.S. Bakshi)
Member

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

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXVIII-DOCO Drawl on 1.7.2010	9.33	143.20	0.00	143.20
BOND XXXI-ADDCAP FOR 2010-2011 ADCAP-	8.90	0.00	3.42	3.42
BOND XXXIII-ADDCAP FOR 2010-2011 ADCAP-	8.64	0.00	6.97	6.97
BOND-XXXIV-ADDCAP FOR 2011-2012 ADCAP-	8.84	0.00	18.27	18.27
BOND XXXVII-ADDCAP FOR 2012-2013 ADCAP-	9.25	0.00	18.05	18.05
Total		143.20	46.71	189.91

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

(₹ in lakh)

Particulars	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	143.20	153.59	171.86	189.91
Cumulative Repayments of Loans up to Previous Year	0.00	0.00	0.00	11.93
Net Loans Opening	143.20	153.59	171.86	177.98
Add: Drawl(s) during the Year	10.39	18.27	18.05	0.00
Less: Repayments during the year	0.00	0.00	11.93	12.22
Net Closing Loan	153.59	171.86	177.98	165.76
Average Net Loan	148.40	162.73	174.92	171.87
Rate of Interest on Loan (%)*	9.3088%	9.2639%	9.2388%	9.2333%
Interest on Loan	13.81	15.07	16.16	15.87

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

Asset- II

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXVIII-DOCO-	9.33	15.00	0.00	15.00
BOND XXIX-DOCO-	9.20	83.00	0.00	83.00
BOND XXX-DOCO-	8.80	82.00	0.00	82.00
BOND XXXI-DOCO-	8.90	77.00	0.00	77.00
BOND XXXIII-ADDCAP FOR 2010-2011 Add Cap-	8.64	0.00	23.97	23.97
BOND XXXIII-DOCO-	8.64	19.67	0.00	19.67
BOND-XXXIV-ADDCAP FOR 2011-2012 Add Cap-	8.84	0.00	9.35	9.35
BOND XXXVII-ADDCAP FOR 2012-2013 Add cap-	9.25	0.00	4.08	4.08
BOND XXXVIII-ADDCAP FOR 2012-2013 Add cap-	9.25	0.00	7.99	7.99
Total		276.67	45.39	322.06

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

(₹ in lakh)

Particulars	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	276.67	300.64	309.99	314.07
Cumulative Repayments of Loans up to Previous Year	0.00	0.00	0.00	0.00
Net Loans Opening	276.67	300.64	309.99	314.07
Add: Drawl(s) during the Year	23.97	9.35	4.08	7.99
Less: Repayments during the year	0.00	0.00	0.00	0.00
Net Closing Loan	300.64	309.99	314.07	322.06
Average Net Loan	288.66	305.32	312.03	318.07
Rate of Interest on Loan (%)*	8.9517%	8.9377%	8.9383%	8.9442%
Interest on Loan	25.84	27.29	27.89	28.45

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



Asset- III

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXVIII-DOCO-	9.33	423.00	0.00	423.00
BOND XXIX-DOCO-	9.20	786.00	0.00	786.00
BOND XXX-DOCO-	8.80	2150.00	0.00	2150.00
BOND XXXI-ADDCAP FOR 2010-2011 Add Cap-	8.90	0.00	106.91	106.91
BOND XXXI-DOCO-	8.90	2199.02	0.00	2199.02
BOND XXXIII-ADDCAP FOR 2010-2011 Add Cap-	8.64	0.00	59.90	59.90
BOND-XXXIV-ADDCAP FOR 2010-2011 Add Cap-	8.84	0.00	26.82	26.82
BOND-XXXIV-ADDCAP FOR 2011-2012 Add Cap-	0.00	0.00	540.45	540.45
BOND XXXVII-ADDCAP FOR 2012-2013 Add Cap-	0.00	0.00	100.34	100.34
BOND XXXVIII-ADDCAP FOR 2013-2014 Add Cap-	0.00	0.00	5.19	5.19
Total		5558.02	839.61	6397.63

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

(₹ in lakh)

Particulars	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	5558.02	5751.65	6292.10	6392.44
Cumulative Repayments of Loans up to Previous Year	0.00	0.00	0.00	0.00
Net Loans Opening	5558.02	5751.65	6292.10	6392.44
Add: Drawl(s) during the Year	193.63	540.45	100.34	5.19
Less: Repayments during the year	0.00	0.00	0.00	0.00
Net Closing Loan	5751.65	6292.10	6392.44	6397.63
Average Net Loan	5654.84	6021.88	6342.27	6395.04
Rate of Interest on Loan (%)*	8.9343%	8.9281%	8.9269%	8.9296%
Interest on Loan	505.22	537.64	566.17	571.05

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



Asset- IV

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXVIII-DOCO-	9.33	68.80	0.00	68.80
BOND XXIX-DOCO-	9.20	673.00	0.00	673.00
BOND XXX-DOCO-	8.80	200.00	0.00	200.00
BOND XXXI-DOCO-	8.90	50.00	0.00	50.00
BOND XXXIII-ADDCAP FOR 2010-2011 Add Cap-	8.64	0.00	19.83	19.83
BOND XXXIII-DOCO-	8.64	605.20	0.00	605.20
BOND-XXXIV-ADDCAP FOR 2010-2011 Add Cap-	8.84	0.00	61.71	61.71
BOND-XXXIV-ADDCAP FOR 2011-2012 ADCAP-	8.84	0.00	25.74	25.74
BOND-XXXV-ADDCAP FOR 2011-2012 ADCAP-	9.64	0.00	217.82	217.82
BOND XXXVII-ADDCAP FOR 2012-2013 Add Cap-	9.25	0.00	121.20	121.20
BOND XXXVIII-ADDCAP FOR 2013-2014 Add Cap-	9.25	0.00	10.39	10.39
Total		1597.00	456.69	2053.69

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

(₹ in lakh)

Particulars	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	1597.00	1678.54	1922.10	2043.30
Cumulative Repayments of Loans up to Previous Year	0.00	0.00	0.00	0.00
Net Loans Opening	1597.00	1678.54	1922.10	2043.30
Add: Drawl(s) during the Year	81.54	243.56	121.20	10.39
Less: Repayments during the year	0.00	0.00	0.00	0.00
Net Closing Loan	1678.54	1922.10	2043.30	2053.69
Average Net Loan	1637.77	1800.32	1982.70	2048.50
Rate of Interest on Loan (%)*	8.9303%	8.9695%	9.0140%	9.0216%
Interest on Loan	146.26	161.48	178.72	184.81

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



Asset- IV & V

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXVIII-DOCO-	9.33	168.80	0.00	168.80
BOND XXIX-DOCO-	9.20	773.00	0.00	773.00
BOND XXX-DOCO-	8.80	1155.00	0.00	1155.00
BOND XXXI-DOCO-	8.90	361.00	0.00	361.00
BOND XXXIII-ADDCAP FOR ADDCAP FOR 2010-2011 ADCAP-	8.64	0.00	32.16	32.16
BOND XXXIII-DOCO-	8.64	1218.93	0.00	1218.93
BOND-XXXIV-ADDCAP FOR 2010-2011 ADCAP-	8.84	0.00	151.15	151.15
BOND-XXXIV-ADDCAP FOR 2011-2012 ADCAP-	8.84	0.00	35.96	35.96
BOND-XXXV-ADDCAP FOR 2011-2012 ADCAP-	9.64	0.00	339.00	339.00
BOND XXXVI-ADDCAP FOR 2011-2012 ADCAP-	9.35	0.00	166.00	166.00
BOND XXXVII-ADDCAP FOR 2011-2012 ADCAP-	9.25	0.00	37.04	37.04
BOND XXXVII-ADDCAP FOR 2012 2013 ADCAP-	9.25	0.00	298.42	298.42
BOND XXXVIII-ADDCAP FOR 2013-2014 Add cap-	9.25	0.00	25.97	25.97
Total		3676.73	1085.70	4762.43

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

(₹ in lakh)

Particulars	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	3676.73	3860.04	4438.04	4736.46
Cumulative Repayments of Loans up to Previous Year	0.00	0.00	0.00	78.49
Net Loans Opening	3676.73	3860.04	4438.04	4657.97
Add: Drawl(s) during the Year	183.31	578.00	298.42	25.97
Less: Repayments during the year	0.00	0.00	78.49	204.82
Net Closing Loan	3860.04	4438.04	4657.97	4479.12
Average Net Loan	3768.39	4149.04	4548.01	4568.55
Rate of Interest on Loan (%)*	8.8637%	8.9055%	8.9507%	8.9584%
Interest on Loan	334.02	369.49	407.08	409.27

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



Combined Asset- A (II & VI)

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXVIII-DOCO-	9.33	15.00	0.00	15.00
BOND XXIX-DOCO-	9.20	143.00	0.00	143.00
BOND XXX-DOCO-	8.80	182.00	0.00	182.00
BOND XXXI-DOCO-	8.90	77.00	0.00	77.00
BOND XXXIII-ADDCAP FOR ADDCAP FOR 2010-2011 Add cap-	8.64	0.00	17.97	17.97
BOND XXXIII-Doco-	8.64	104.08	0.00	104.08
BOND-XXXIV-ADDCAP FOR 2010-2011 Add Cap-	8.84	0.00	21.24	21.24
BOND-XXXIV-ADDCAP FOR 2011-2012 Add Cap-	8.84	0.00	9.35	9.35
BOND XXXVII-ADDCAP FOR 2011-2012 Add Cap-	9.25	0.00	29.07	29.07
BOND XXXVII-ADDCAP FOR 2012-2013 ADDCAP FOR 2012-2013 Add Cap-	9.25	0.00	23.34	23.34
BOND XXXVIII-ADDCAP FOR 2012-2013 ADDCAP FOR 20122013 Add Cap-	9.25	0.00	31.04	31.04
BOND XXXVIII-ADDCAP FOR 2013-2014 Add Cap-	9.25	0.00	20.29	20.29
Total		521.08	152.30	673.38

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

(₹ in lakh)

Particulars	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	521.08	560.29	598.71	653.09
Cumulative Repayments of Loans up to Previous Year	0.00	0.00	0.00	13.17
Net Loans Opening	521.08	560.29	598.71	639.92
Add: Drawl(s) during the Year	39.21	38.42	54.38	20.29
Less: Repayments during the year	0.00	0.00	13.17	34.76
Net Closing Loan	560.29	598.71	639.92	625.45
Average Net Loan	540.69	579.50	619.32	632.69
Rate of Interest on Loan (%)*	8.9021%	8.9051%	8.9246%	8.9394%
Interest on Loan	48.13	51.60	55.27	56.56

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



Combined Asset- B (III & VII)

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXVIII-DOCO DRAWL ON 01-JUN-2011-	9.33	423.00	0.00	423.00
BOND XXIX-DOCO DRAWL ON 01-JUN-2011-	9.20	786.00	0.00	786.00
BOND XXX-DOCO DRAWL ON 01-JUN-2011-	8.80	2300.00	0.00	2300.00
BOND XXXI-DOCO-	8.90	2487.58	0.00	2487.58
BOND XXXIII-DOCO-	8.64	319.89	0.00	319.89
BOND-XXXIV-ADDCAP FOR ADDCAP FOR 2011-2012 ADCAP-	8.84	0.00	421.94	421.94
BOND-XXXIV-DOCO-	8.84	204.09	0.00	204.09
BOND XXXVII-ADDCAP FOR 2011-2012 Add cap-	9.25	0.00	35.42	35.42
BOND XXXVII-ADDCAP FOR 2012-2013 Add Cap-	9.25	0.00	100.34	100.34
BOND XXXVIII-ADDCAP FOR 2012-2013 Add Cap-	9.25	0.00	29.25	29.25
BOND XXXVIII-ADDCAP FOR 2013-2014 Add Cap-	9.25	0.00	15.64	15.64
Total		6520.56	602.59	7123.15

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

(₹ in lakh)

Particulars	2011-12	2012-13	2013-14
Gross Opening Loan	6520.56	6977.92	7107.51
Cumulative Repayments of Loans up to Previous Year	0.00	0.00	100.75
Net Loans Opening	6520.56	6977.92	7006.76
Add: Drawl(s) during the Year	457.36	129.59	15.64
Less: Repayments during the year	0.00	100.75	499.72
Net Closing Loan	6977.92	7006.76	6522.68
Average Net Loan	6749.24	6992.34	6764.72
Rate of Interest on Loan (%)*	8.9127%	8.9121%	8.9125%
Interest on Loan	601.54	623.16	602.91

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



DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO (2014-19)**Combined Assets –I, A, B, IV & V**

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND XXVIII-I.DOCO DRAWL ON 01-JUL-2010-	9.33	143.20	0.00	143.20
BOND XXVIII-13.DOCO-	9.33	168.80	0.00	168.80
BOND XXVIII-26.DOCO-	9.33	15.00	0.00	15.00
BOND XXVIII-31.DOCO DRAWL ON 01-JUN-2011-	9.33	423.00	0.00	423.00
BOND XXIX-14.DOCO-	9.20	773.00	0.00	773.00
BOND XXIX-27.DOCO-	9.20	143.00	0.00	143.00
BONO XXIX-32.DOCO DRAWL ON 01-JUN-2011-	9.20	786.00	0.00	786.00
BONO XXX-15.DOCO-	8.80	1155.00	0.00	1155.00
BOND XXX-28.DOCO-	8.80	182.00	0.00	182.00
BONO XXX-33.DOCO DRAWL ON 01-JUN-2011-	8.80	2300.00	0.00	2300.00
BOND XXXI-16.DOCO-	8.90	361.00	0.00	361.00
BOND XXXI-2.ADDCAP FOR 2010-2011 ADCAP-	8.90	3.42	0.00	3.42
BOND XXXI-29.DOCO-	8.90	77.00	0.00	77.00
BOND XXXI-37.DOCO-	8.90	2487.58	0.00	2487.58
BOND XXXIII-17.DOCO-	8.64	1211.43	0.00	1211.43
BOND XXXIII-19.DOCO-	8.64	98.08	0.00	98.08
BOND XXXIII-3.ADDCAP FOR 2010-2011 ADCAP-	8.64	6.97	0.00	6.97
BOND XXXIII-30.ADDCAP FOR 2010-2011 Add cap-	8.64	23.97	0.00	23.97
BOND XXXIII-38.DOCO-	8.64	319.89	0.00	319.89
BOND XXXIII-6.ADDCAP FOR 2010-2011 ADCAP-	8.64	39.67	0.00	39.67
BOND-XXXIV-20.ADDCAP FOR 2010-2011 Add Cap-	8.84	21.24	0.00	21.24
BOND-XXXIV-21.ADDCAP FOR 2011-2012 Add Cap-	8.84	9.35	0.00	9.35
BOND-XXXIV-39.DOCO-	8.84	85.58	0.00	85.58
BOND-XXXIV-4.ADDCAP FOR 2011-2012 ADCAP-	8.84	18.27	0.00	18.27
BOND-XXXIV-40.ADDCAP FOR 2011-2012 ADCAP-	8.84	540.45	0.00	540.45
BOND-XXXIV-7.ADDCAP FOR 2010-2011 ADCAP-	8.84	151.15	0.00	151.15

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND-XXXIV-8.ADDCAP FOR 2011-2012 ADCAP-	8.84	35.96	0.00	35.96
BOND-XXXV-9.ADDCAP FOR 2011-2012 ADCAP-	9.64	339.00	0.00	339.00
BOND XXXVI-10.ADDCAP FOR 2011-2012 ADCAP-	9.35	166.00	0.00	166.00
BOND XXXVII-11.ADDCAP FOR 2011-2012 ADCAP-	9.25	37.04	0.00	37.04
BOND XXXVII-12.ADDCAP FOR 2012-2013 ADCAP-	9.25	298.42	0.00	298.42
BOND XXXVII-22.ADDCAP FOR 2011-2012 Add Cap-	9.25	29.07	0.00	29.07
BOND XXXVII-24.ADDCAP FOR 2012-2013 Add Cap-	9.25	34.66	0.00	34.66
BOND XXXVII-34.ADDCAP FOR 2012-2013 Add Cap-	9.25	100.34	0.00	100.34
BOND XXXVII-41.ADDCAP FOR 2011-2012 Add cap-	9.25	35.42	0.00	35.42
BOND XXXVII-5.ADDCAP FOR 2012-2013 ADCAP-	9.25	18.05	0.00	18.05
BOND XXXVIII-18.ADDCAP FOR 2013-2014 Add cap-	9.25	25.97	0.00	25.97
BOND XXXVIII-23.ADDCAP FOR 2013-2014 Add Cap-	9.25	20.29	0.00	20.29
BOND XXXVIII-25.ADDCAP FOR 2012-2013 Add Cap-	9.25	19.72	0.00	19.72
BOND XXXVIII-35.ADDCAP FOR 2012-2013 Add Cap-	9.25	29.25	0.00	29.25
BOND XXXVIII-36.ADDCAP FOR 2013-2014 Add Cap-	9.25	15.64	0.00	15.64
Total		12748.88	0.00	12748.88

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	12748.88	12748.88	12748.88	12748.88	12748.88
Cumulative Repayments of Loans up to Previous Year	955.86	1920.89	2960.25	4010.68	5061.11
Net Loans Opening	11793.02	10827.99	9788.63	8738.20	7687.77
Add: Drawl(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments during the year	965.03	1039.36	1050.43	1050.43	1050.43
Net Closing Loan	10827.99	9788.63	8738.20	7687.77	6637.34
Average Net Loan	11310.51	10308.31	9263.42	8212.99	7162.56
Rate of Interest on Loan (%)*	8.9377%	8.9397%	8.9402%	8.9404%	8.9408%
Interest on Loan	1010.90	921.54	828.16	734.28	640.39

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