# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### **PETITION NO.561/TT/2014**

Coram:

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

Date of Hearing: 13.1.2016

Date of Order : 29.1.2016

#### 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 tariff for 2014-19 tariff block under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 of Combined Assets of transmission system associated with Rihand Stage-II in Northern Region under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999.

#### And in the Matter of:

Power Grid Corporation of India Ltd, SAUDAMINI, Plot No.-2, Sector-29, Gurgaon-122001 (Haryana)

.....Petitioner

#### Versus

- Rajasthan Rajya Vidyut Prasaran Nigam Ltd., Vidyut Bhawan, Vidyut Marg, Jaipur - 302 005.
- Ajmer Vidyut Vitran Nigam Ltd.,
   400 kV GSS Building (Ground Floor), Ajmer Road,
   Heerapura, Jaipur.
- Jaipur Vidyut Vitran Nigam Ltd.,
   400 kV GSS Building (Ground Floor), Ajmer Road,
   Heerapura, Jaipur.
- Jodhpur Vidyut Vitran Nigam Ltd.,
   400 kV GSS Building (Ground Floor), Ajmer Road,



Heerapura, Jaipur

- 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, Palika Kendra, Sansad Marg, New Delhi - 110 002

.....Respondent(s)

#### The following were present:

For Petitioner: Shri S.S. Raju, PGCIL

Shri Jasbir Singh, PGCIL Shri Rakesh Prasad, PGCIL Shri M.M. Mondal, PGCIL Shri Vivek Kumar Singh, PGCIL

Shri D.K. Karma, PGCIL Shri J Majumder, PGCIL Shri Shashi Bhushan, PGCIL Smt. Sangeeta Edwards, PGCIL

Shri S.C. Taneja, PGCIL

Shri Ved Prakash Rastogi, PGCIL Smt. Sonam Gangwar, PGCIL Shri Avinash Pavgi, PGCIL Shri Mohd. Mohsin, PGCIL

For Respondents: Shri S.K. Agarwal, Advocate, Rajasthan Discoms

Shri S.P. Das, Advocate, Rajasthan Discoms Smt. Neelam, Advocate, Rajasthan Discoms

#### **ORDER**

The petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as "the petitioner") for revision of tariff under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations") based on truing up of capital expenditure for the period 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

Combined Assets of transmission system associated with Rihand Stage-II in Northern Region(hereinafter referred to as "the transmission asset").

- 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) Investment approval for the transmission system was accorded by the Central Government in Ministry of Power under letter dated 9.12.2002 at an estimated cost of ₹104444 lakh, including IDC of ₹15749 lakh.
  - b) The annual transmission charges for 2009-14 tariff period for the transmission asset were determined vide order dated 30.5.2011 in Petition No. 319/2010 based on admitted capital cost of the transmission asset and debt:equity as on 31.3.2009. The date of commercial operation of the transmission asset has been considered as 1.11.2006 and the elements clubbed under the instant transmission asset, vide order dated 30.5.2011, are as below:-

Assets	Name of the Asset	COD
Asset-I	400 KV D/C Rihand-Allahabad, Allahabad-Mainpuri and Mainpuri-Ballabgarh transmission line with associated bays	1.6.2005
Asset-II	ICT-I at Patiala sub-station, LILO of one circuit of Nalagarh- Hissar transmission line at Kaithal, 400 KV S/C Patiala- Malerkotla transmission and ICT III at Abdullapur sub-station with associated bays	1.10.2005
Asset-III	ICT-I and II at Kaithal and 4 no 220 kV line bays at Kaithal substation	1.11.2005
Asset-IV	ICT-II at Patiala sub-station and LILO of one circuit (400 kV) of Nalagarh-Hissar transmission line at Patiala sub-station with associated bays	1.12.2005
Asset-V	315 MVA, 400/220 kV ICT-I and ICT-II along with associated bays and 4 nos 220 kV line bays at Mainpuri sub-station	1.1.2006

Assets	Name of the Asset	COD
Asset-VI	400 kV S/C Dadri-Panipat transmission line with associated bays	1.4.2006
Asset-VII	2 nos. of 220 kV bays at Abdullapur sub-station	1.11.2006

c) The transmission charges were revised vide order dated 7.2.2013 in Petition No. 305/2010. The Commission had allowed estimated additional capital expenditure amounting to ₹427.31 lakh towards balance and retention payments vide order dated 30.5.2011. Further, ₹1623.12 lakh additional expenditure and ₹1201.89 lakh de-capitalisation amount was approved towards replacement of porcelain insulators with polymer insulators vide order dated 7.2.2013, during 2009-14, for determination of tariff for 2009-14 tariff period, as shown below:-

(₹ in lakh)

Asset	Apportioned approved	Admitted cost as on	Additional capital expenditure approved vide order dated 30.5.2011 and 7.2.2013		dmitted approved vide order dated 30.5.2011 Est as on and 7.2.2013 to		Estimated total cost up
	cost	31.3.2009	Additional capital expenditure	De-capitalisation	to 31.3.2014		
Combined Asset	104443.12	90560.39	2050.43	-1201.89	91408.93		

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:-

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	4731.97	4754.00	4765.28	4765.28	4765.28
Interest on Loan	3646.46	3334.41	3003.82	2661.01	2317.88
Return on Equity	4682.60	4704.85	4716.19	4716.19	4716.19
Interest on Working Capital	408.40	410.62	412.44	414.00	416.03
O & M Expenses	2722.45	2878.33	3043.17	3217.06	3400.66
Total	16191.89	16082.21	15940.91	15773.55	15616.05

- 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 11.12.2014, 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 Respondent No. 2, AVVNL, Respondent No. 3, JVVNL and Respondent No.4, JDVVNL vide a common affidavit dated 11.1.2016. The respondents have requested to do a prudence check of the tariff claimed by the petitioner and have raised issues on several elements of transmission charges claimed by the petitioner. 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.
- 7. The hearing in this matter was held on 13.1.2016. During the hearing, the Commission had directed the petitioner to submit the rejoinder to the reply of the

respondents. The petitioner was also directed to submit the details of de-capitalisation, undischarged liabilities and actual equity infused during 2009-14 and 2014-19 tariff periods. As the petitioner has not filed the additional information and rejoinder, the case is being decided based on the information available on record.

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 upin the subsequent paragraphs.

#### **Capital Cost**

- 11. The petitioner has claimed capital cost of ₹90560.39 lakh as on 31.3.2009 in respect of the transmission asset for the purpose of tariff determination.
- 12. 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".

13. Accordingly, the capital cost of ₹90560.39 lakh admitted by the Commission as on 31.3.2009 has been considered as opening capital cost on 1.4.2009 for determination of trued up tariff in accordance with Regulation 7 of the 2009 Tariff Regulations.

#### **Additional Capital Expenditure**

14. 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"

15. The petitioner has submitted that it has actually incurred an additional capital expenditure of ₹1556.74 lakh and de-capitalisation of ₹782.17 lakh during 2009-14 towards balance and retention payments and replacement of porcelain insulators with the polymer insulators as approved by the Commission in an earlier order dated 7.2.2013 in Petition No. 305/2010, as depicted below:-

(₹ in lakh)

Admitted cost as	Additi	Capital cost as on					
on 31.3.2009	2009- 10	2010- 11	l lotal		31.3.2014		
90560.39	897.12	588.48	38.40	9.70	23.04	1556.74	91334.95
90000.39	-365.95	-416.22	0.00	0.00	0.00	-782.17	91334.95

16. The petitioner has submitted that additional expenditure during 2009-10 and 2010-11 is inclusive of the expenditure incurred towards replacement of insulators to the tune of ₹697.96 lakh and ₹445.50 lakh respectively, against which the de-capitalisation is as shown, to the tune of ₹365.95 lakh and ₹416.22 lakh. The remaining additional expenditure claimed is towards undischarged liability on account of final

payment/withheld payment due to contractual exigencies for works executed within the cut-off date.

- 17. Rajasthan Discoms have raised issues regarding the claims of the petitioner towards balance and retention payments. They have submitted that the petitioner has nowhere clarified if these payments were in discharge of normal contractual obligations and whether such payments were made for the additional expenditure from 1.4.2009 to 31.3.2014. They have further submitted that since the replacement of insulators has been claimed by the petitioner in accordance with the Commission's order dated 7.2.2013, it is not clear as to how the petitioner has incurred additional capital expenditure form 1.4.2009 when the order itself was issued on 7.2.2013. The petitioner has not submitted any rejoinder to the response of Rajasthan Discoms.
- 18. It is observed that the total additional capital expenditure during 2009-14 towards replacement of insulators is ₹1143.46 lakh and de-capitalisation is ₹782.17 lakh against the approved additional capital expenditure/de-capitalisation of ₹1623.12 lakh and ₹1201.89 lakh respectively. Further, the expenditure towards balance and retention payments is ₹413.28 lakh against approved expenditure of ₹427.31 lakh. It is further observed that the investment approval for the project "Replacement of insulators in Transmission Lines in NR" was approved on 4.9.2008, and the replacement work was already started on several lines in accordance with deliberations done with NRPC and CEA. The transmission charges approved by the Commission vide order dated 7.2.2013 were towards the expenditure incurred up to 1.4.2009 and additional capital expenditure estimated during 2009-14 period.

- 19. The petitioner, in instant petition, has claimed actual additional capitalisation and de-capitalisation in 2009-10 and 2010-11 on account of replacement of porcelain insulators, which is in line with the order dated 7.2.2013 in Petition No. 305/2010. Further, the petitioner has submitted the Auditor's Certificate dated 10.10.2014 to verify the actual additional capital expenditure incurred in 2009-10 and 2010-11 on account of replacement of porcelain insulators with polymer insulators and there is no variation in figures. Thus, additional capitalisation of ₹1143.46 lakh and de-capitalisation is ₹782.17 lakh during 2009-14 is allowed towards replacement of old porcelain insulators in accordance with Clause 2(v) of Regulation 9 of the 2009 Tariff Regulations. The expenditure towards balance and retention payments after the cut-off date on account of undischarged liabilities is being allowed under Clause (2)(viii) of Regulation 9 of the 2009 Tariff Regulations. Further, in the order dated 7.2.2013 in Petition No. 305/2010, the Commission had treated the depreciation corresponding to the de-capitalised insulator in the manner depicted below:-
  - 39. Depreciation has been worked out as per Regulation 17 of the 2009 Tariff Regulations. The transmission line wise accumulated depreciation corresponding to the de-capitalised insulators has been submitted by the petitioner vide affidavit dated 13.2.2012. These values of depreciation have been reduced from the accumulated depreciation amount of the individual transmission line assets during the years when decapitalisation was carried out.
- 20. Accordingly, the gross block of the porcelain insulators being removed has been considered towards de-capitalisation. The accumulated depreciation corresponding to the de-capitalised insulators has been reduced from the accumulated depreciation amount of the asset during the years when de-capitalisation was carried out.

21. Accordingly, the total capital cost of the transmission asset including additional capitalisation incurred during 2009-14 works out to ₹91334.95 lakh.

#### **Debt: Equity**

- 22. 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."
- 23. The debt:equity ratio admitted by the Commission vide order dated 30.5.2011 in Petition No. 319/2010 as on 31.3.2009 has been considered as on 1.4.2009 for determination of tariff in accordance with the Regulation 12 of the 2009 Tariff Regulations.
- 24. The details of the debt:equity considered for the purpose of tariff for 2009-14 tariff period is as follows:-

Funding	Capital cost as on 31.3.2009	(%)	Net Additional capital expenditure during 2009-14	(%)	Total Cost as on 31.3.2014	(%)
Debt	63835.98	70.49	542.20	70.00	64378.18	70.49
Equity	26724.41	29.51	232.37	30.00	26956.78	29.51
Total	90560.39	100.00	774.57	100.00	91334.96	100.00

#### Return on Equity ("ROE")

- 25. Clause (3), (4) and (5) of the Regulation 15 of the 2009 Tariff Regulations provide as follows:-
  - "(3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be.
  - (4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

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

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

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

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

26. 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

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



(₹ in lakh)

Return on Equity	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 7.2.2013	4682.60	4704.85	4716.19	4716.19	4716.19
Claimed by the petitioner	5005.40	5209.16	5220.40	5221.80	5285.55
Allowed after truing up in this order	5005.28	5209.24	5220.38	5221.78	5285.67

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")

- 28. 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".
- 29. 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:-

Interest on Loan	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 7.2.2013	3646.46	3334.41	3003.82	2661.01	2317.88
Claimed by the petitioner	3645.61	3325.70	2989.20	2647.64	2305.56
Allowed after truing up in this order	3645.61	3325.72	2989.18	2647.65	2305.55

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**

30. 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:-

(₹ in lakh)

Depreciation	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 7.2.2013	4731.97	4754.00	4765.28	4765.28	4765.28
Claimed by the petitioner	4741.93	4759.79	4764.74	4765.86	4766.72
Allowed after truing up in this order	4741.93	4759.80	4764.75	4765.87	4766.73

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")

31. 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:-

O&M Expenses	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 7.2.2013	2722.45	2878.33	3043.17	3217.06	3400.66
Claimed by the	2722.45	2878.33	3043.17	3217.06	3400.66

O&M Expenses	2009-10	2010-11	2011-12	2012-13	2013-14
petitioner					
Allowed after truing up in this order	2722.45	2878.33	3043.17	3217.06	3400.66

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

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

(₹ in lakh)

Interest on Working Capital	2009-10	2010-11	2011-12	2012-13	2013-14
Approved vide order dated 7.2.2013	408.40	410.62	412.44	414.00	416.03
Claimed by the petitioner	415.32	421.07	422.64	424.27	427.67
Allowed after truing up in this order	415.32	421.07	422.64	424.27	427.67

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

33. 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:-

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation					
Opening Gross Block	90560.39	91091.56	91263.82	91302.22	91311.92
Additional Capitalisation	531.17	172.26	38.40	9.70	23.04
Closing Gross Block	91091.56	91263.82	91302.22	91311.92	91334.96
Average Gross Block	90825.98	91177.69	91283.02	91307.07	91323.44
Rate of Depreciation	5.22	5.22	5.22	5.22	5.22
Depreciable Value	81348.93	81659.12	81752.49	81774.14	81788.87
Balance Useful life of the asset	31	30	29	28	27
Elapsed Life	2	3	4	5	6
Remaining Depreciable Value	65375.43	60950.04	56285.03	51541.93	46790.79



Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation during the year	4741.93	4759.80	4764.75	4765.87	4766.73
Interest on Loan					
Gross Normative Loan	63835.98	64207.80	64328.38	64355.26	64362.05
Cumulative Repayment upto Previous Year	11235.90	15977.83	20737.64	25502.38	30268.25
Net Loan-Opening	52600.08	48229.97	43590.75	38852.88	34093.80
Additions	371.82	120.58	26.88	6.79	16.13
Repayment during the year	4741.93	4759.80	4764.75	4765.87	4766.73
Net Loan-Closing	48229.97	43590.75	38852.88	34093.80	29343.20
Average Loan	50415.02	45910.36	41221.81	36473.34	31718.50
Weighted Average Rate of Interest on Loan (%)	7.2312	7.2439	7.2515	7.2591	7.2688
Interest on Loan	3645.61	3325.72	2989.18	2647.65	2305.55
Return on Equity					
Opening Equity	26724.41	26883.76	26935.44	26946.96	26949.87
Additions	159.35	51.68	11.52	2.91	6.91
Closing Equity	26883.76	26935.44	26946.96	26949.87	26956.78
Average Equity	26804.09	26909.60	26941.20	26948.41	26953.33
Return on Equity (Base Rate)	15.500	15.500	15.500	15.500	15.500
MAT rate for the respective year	16.995	19.931	20.008	20.008	20.961
Rate of Return on Equity	18.674	19.358	19.377	19.377	19.610
Return on Equity	5005.28	5209.24	5220.38	5221.78	5285.67
Interest on Working Capital					
O & M expenses	226.87	239.86	253.60	268.09	283.39
Maintenance Spares	408.37	431.75	456.48	482.56	510.10
Receivables	2755.10	2765.69	2740.02	2712.77	2697.71
Total	3390.34	3437.30	3450.09	3463.42	3491.20
Rate of Interest	12.25	12.25	12.25	12.25	12.25
Interest on Working Capital	415.32	421.07	422.64	424.27	427.67
Annual Transmission Charges					
Depreciation	4741.93	4759.80	4764.75	4765.87	4766.73
Interest on Loan	3645.61	3325.72	2989.18	2647.65	2305.55
Return on Equity	5005.28	5209.24	5220.38	5221.78	5285.67
Interest on Working Capital	415.32	421.07	422.64	424.27	427.67
O & M Expenses	2722.45	2878.33	3043.17	3217.06	3400.66
Total	16530.60	16594.16	16440.12	16276.62	16186.27

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

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



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	4769.17	4771.02	4771.02	4771.02	4771.02
Interest on Loan	1964.74	1623.48	1281.47	943.11	616.47
Return on Equity	5288.28	5290.33	5290.33	5290.33	5290.33
Interest on Working Capital	448.98	446.96	444.99	443.30	442.09
O & M Expenses	3118.08	3222.11	3328.95	3439.29	3553.50
Total	15589.25	15353.90	15116.76	14887.05	14673.41

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	259.84	268.51	277.41	286.61	296.12
Maintenance Spares	467.71	483.32	499.34	515.89	533.02
Receivables	2598.23	2559.00	2519.48	2481.19	2445.59
Total	3325.78	3310.83	3296.23	3283.70	3274.74
Rate of Interest (%)	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	448.98	446.97	445.00	443.30	442.10

#### **Capital Cost**

- 36. 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;"
- 37. The capital cost of ₹91334.96 lakh 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



- 38. 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:"
- 39. Clause 13 of Regulation 3 of the 2014 Tariff Regulations defines "cut-off" as follows:-
  - "Cut off Date" means 31<sup>st</sup> March of the year closing after two years of the year of commercial operation of whole or part of the project, and in case the whole or part of the project is declared under commercial operation in the last quarter of a year, the cut off date shall be 31<sup>st</sup> March of the year closing after three years of the year of comm<sup>er</sup>cial operation:"
- 40. The petitioner has submitted, vide Auditor's Certificate dated 10.10.2014, that the additional capital expenditure estimated during 2014-19 tariff period is ₹69.73 lakh on account of balance and retention payments.
- 41. The petitioner has submitted that the above additional capitalisation of ₹69.73 lakh is projected to be incurred during 2014-15 on account of balance and retention payment towards works which have been executed before the cut-off date and the same has been claimed under Regulation 14(3)(v) of the 2014 Tariff Regulations.

- 42. It is observed that the additional expenditure approved towards balance and retention payments during 2009-14 tariff period, vide order dated 30.5.2011, was ₹427.31 lakh. The Commission has already allowed, in the aforementioned paras, an amount to the tune of ₹413.28 lakh towards balance and retention payments on actual basis during 2009-14 period. The amount claimed during 2014-19 tariff period towards additional expenditure on account of balance and retention payments is being allowed for 2014-19 tariff period, under Regulation 14(3)(v) of 2014 Tariff Regulations, subject to true up on actual basis.
- 43. Further, the Commission is of the opinion that there should generally be no outstanding payments towards any contract pending closure after 7-8 years of commercial operation of the asset, as it results in uncertainty about the total completion cost of the asset. The petitioner must take care of such pending payments in future.

#### **Debt: Equity**

- 44. 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."

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

(₹ in lakh)

Funding	Capital cost as on 31.3.2014	(%)	Additional capital expenditure during 2014-19	(%)	Total Cost as on 31.3.2019	(%)
Debt	64378.18	70.49	48.81	70.00	64426.99	70.49
Equity	26956.78	29.51	20.92	30.00	26977.70	29.51
Total	91334.96	100.00	69.73	100.00	91404.69	100.00

#### **Return on Equity ("ROE")**

- 46. 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."

47. 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	26956.78	26977.70	26977.70	26977.70	26977.70
Additions	20.92	0.00	0.00	0.00	0.00
Closing Equity	26977.70	26977.70	26977.70	26977.70	26977.70
Average Equity	26967.24	26977.70	26977.70	26977.70	26977.70
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	5288.40	5290.45	5290.45	5290.45	5290.45

#### Interest on Loan ("loL")

- 48. 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."
- 49. 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. loL has been worked out and allowed as follows:-

(₹ in lakh)

Interest on Loan	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	64378.18	64426.99	64426.99	64426.99	64426.99
Cumulative Repayment upto Previous Year	35034.98	39804.16	44575.19	49346.21	54117.23
Net Loan-Opening	29343.20	24622.83	19851.80	15080.78	10309.76
Additions	48.81	0.00	0.00	0.00	0.00
Repayment during the year	4769.18	4771.02	4771.02	4771.02	4771.02
Net Loan-Closing	24622.83	19851.80	15080.78	10309.76	5538.74
Average Loan	26983.01	22237.32	17466.29	12695.27	7924.25
Weighted Average Rate of Interest on Loan (%)	7.2814	7.3007	7.3368	7.4288	7.7794
Interest on Loan	1964.75	1623.48	1281.46	943.11	616.46

#### **Depreciation**

- 50. 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."

51. 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 asset will be completing 12 years during 2018-19, 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	91334.96	91404.69	91404.69	91404.69	91404.69
Additional Capitalisation	69.73	0.00	0.00	0.00	0.00
Closing Gross Block	91404.69	91404.69	91404.69	91404.69	91404.69
Average Gross Block	91369.83	91404.69	91404.69	91404.69	91404.69
Rate of Depreciation	5.22	5.22	5.22	5.22	5.22
Depreciable Value	81830.61	81861.99	81861.99	81861.99	81861.99
Balance Useful life of the asset	26	25	24	23	22
Elapsed Life	7	8	9	10	11
Remaining Depreciable Value	42217.72	37479.91	32708.89	27937.87	23166.85
Depreciation	4769.18	4771.02	4771.02	4771.02	4771.02
Cumulative depreciation	44382.08	49153.10	53924.12	58695.14	63466.17

## Operation & Maintenance Expenses ("O&M Expenses")

52. Clause 3(a) of Regulation 29 of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. Rajasthan Discoms have requested to take cognizance of the 2014 Tariff Regulations while dealing with O&M Expenses. The total allowable O&M Expenses for the instant assets have been worked out as per 2014 Tariff Regulations and are allowed as follows:-

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19					
400 kV Bays:	400 kV Bays:									
No. of Bays	25	25	25	25	25					
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71					
220 kV Bays:	ı	ı	ı	ı						
No. of Bays	21	21	21	21	21					
Norms (₹ lakh/Bay)	42.21	43.61	45.06	46.55	48.10					
Transmission Line:										
S/C (Twin/Triple) (KM)	179.147	179.147	179.147	179.147	179.147					
Norms (₹ lakh/KM)	0.404	0.418	0.432	0.446	0.461					
D/C Twin/Triple conductor (KM)	921.914	921.914	921.914	921.914	921.914					
Norms (₹ lakh/KM)	0.707	0.731	0.755	0.78	0.806					
Total O&M Expenses (₹ lakh)	3118.08	3222.11	3328.95	3439.29	3553.50					

53. 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. Rajasthan Discoms have sought proper scrutiny before allowing any expected wage rise in future. 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)**



54. 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;"
- 55. 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%.
- 56. 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	259.84	268.51	277.41	286.61	296.12
Maintenance Spares	467.71	483.32	499.34	515.89	533.02
Receivables	2598.23	2559.00	2519.48	2481.19	2445.59
Total	3325.78	3310.83	3296.23	3283.70	3274.74
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	448.98	446.96	444.99	443.30	442.09

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



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

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	2017-13	2010-10	2010-17	2017-10	2010-13
Opening Gross Block	91334.96	91404.69	91404.69	91404.69	91404.69
Additional Capitalisation	69.73	0.00	0.00	0.00	0.00
Closing Gross Block	91404.69	91404.69	91404.69	91404.69	91404.69
Average Gross Block	91369.83	91404.69	91404.69	91404.69	91404.69
Rate of Depreciation	5.22	5.22	5.22	5.22	5.22
Depreciable Value	81830.61	81861.99	81861.99	81861.99	81861.99
Balance Useful life of the asset	26	25	24	23	22
Elapsed Life	7	8	9	10	11
Remaining Depreciable Value	42217.72	37479.91	32708.89	27937.87	23166.85
Depreciation	4769.18	4771.02	4771.02	4771.02	4771.02
Cumulative depreciation (incl. of AAD)	44382.08	49153.10	53924.12	58695.14	63466.17
Interest on Loan					
Gross Normative Loan	64378.18	64426.99	64426.99	64426.99	64426.99
Cumulative Repayment upto Previous Year	35034.98	39804.16	44575.19	49346.21	54117.23
Net Loan-Opening	29343.20	24622.83	19851.80	15080.78	10309.76
Additions	48.81	0.00	0.00	0.00	0.00
Repayment during the year	4769.18	4771.02	4771.02	4771.02	4771.02
Net Loan-Closing	24622.83	19851.80	15080.78	10309.76	5538.74
Average Loan	26983.01	22237.32	17466.29	12695.27	7924.25
Weighted Average Rate of Interest on Loan	7.2814	7.3007	7.3368	7.4288	7.7794
Interest	1964.75	1623.48	1281.46	943.11	616.46
Return on Equity					
Opening Equity	26956.78	26977.70	26977.70	26977.70	26977.70
Additions	20.92	0.00	0.00	0.00	0.00
Closing Equity	26977.70	26977.70	26977.70	26977.70	26977.70
Average Equity	26967.24	26977.70	26977.70	26977.70	26977.70
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	5288.40	5290.45	5290.45	5290.45	5290.45

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Working Capital					
O & M expenses	259.84	268.51	277.41	286.61	296.12
Maintenance Spares	467.71	483.32	499.34	515.89	533.02
Receivables	2598.23	2559.00	2519.48	2481.19	2445.59
Total	3325.78	3310.83	3296.23	3283.70	3274.74
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on working capital	448.98	446.96	444.99	443.30	442.09
Annual Transmission Charges					
Depreciation	4769.18	4771.02	4771.02	4771.02	4771.02
Interest on Loan	1964.75	1623.48	1281.46	943.11	616.46
Return on Equity	5288.40	5290.45	5290.45	5290.45	5290.45
Interest on Working Capital	448.98	446.96	444.99	443.30	442.09
O & M Expenses	3118.08	3222.11	3328.95	3439.29	3553.50
Total	15589.39	15354.03	15116.87	14887.17	14673.52

#### **Lease Rent Payment**

- 58. The petitioner has submitted that the forest land (about 306.15 hectares) falling in Sonbhadra, Renukoot, and Obra forest divisions has been diverted for construction of 400 kV D/C transmission line from Rihand to Allahabad. The diversion of forest land for construction of lines is governed by the conditions stipulated in the UP Govt. letters, communicating permissions for cutting trees, granting land for 30 years etc. In view of the annual payments made by the petitioner to the aforesaid forest divisions, the petitioner has sought reimbursement of lease rent paid on annual basis from 2006-07 to 2013-14.
- 59. Rajasthan Discoms have submitted that it is not clear whether the payment prior to the block of 2009-14 was included in the transmission tariff already approved. It is observed that the Commission, vide order dated 27.9.2007 in Petition No. 2/2007, had directed the petitioner to submit the details of payment towards annual lease rent as and when actually made every year. These payments have not been capitalised in the

earlier approved transmission charges. The petitioner, in the instant petition, has submitted the details of actual payments done from 2006-07 to 2013-14 towards lease rent of Sonbhadra, Renukoot, and Obra forest divisions. The petitioner was directed to submit the reasons for delay in submitting the lease rent payment details. However, the petitioner has not submitted any response to Commission's query.

60. Further, it is observed that the petitioner has submitted the details of payment made towards annual lease rent along with payment proof to support the same, as shown below:

Particulars	Annual payments done from 2006-07 to 2013-14 (₹)
Obra forest division	3130600
Renukoot forest division	1537540
Sonebhadra forest division	1387809
Total	6055949

- 61. The Commission in its order dated 27.9.2007 has dealt this issue and held that the petitioner is entitled for reimbursement of lease rent. The relevant para is extracted as under:-
  - "22. The prayer for recovery of the balance amount of Rs.42,63,973/- as reimbursement from the beneficiaries for the year 2005-06 towards lease rent has been considered. The petitioner is directed to file an affidavit with regard to details of payment towards annual lease rent as and when actually make every year."
- 62. The reimbursement of actual annual lease payments from 2006-07 to 2013-14 to the tune of ₹6055949.00 per annum is allowed to be recovered from the beneficiaries directly. The petitioner shall directly claim the payments from the beneficiaries along with the proof of payments. As regards the petitioner's prayer to recover the estimated

annual lease payment of ₹6055949.00 per annum with effect from 1.4.2014, the petitioner is directed to claim the same from the beneficiaries directly, by producing the proof of payment, as and when the payments are made.

#### **Deferred Tax Liability**

63. 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. Rajasthan Discoms have raised the issue of lack of clarity on the expenses sought. 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

64. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. Rajasthan Discoms have raised the issue of lack of clarity on the expenses sought. 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

65. Rajasthan Discoms have raised the issue of lack of clarity on the expenses sought. 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**

66. The petitioner has prayed for reimbursement of service tax if it is subjected to such tax in future. Rajasthan Discoms have requested not to allow the same. We are of the view that the petitioner's prayer is premature.

### **Sharing of Transmission Charges**

- 67. 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.
- 68. This order disposes of Petition No.561/TT/2014.

sd/- sd/-

(Dr. M.K. Iyer) (A.S. Bakshi)
Member Member

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

	1			(\ III iakii)
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
BOND-XIII - Option - I - DOCO - 01-APR-2006-	8.63	107.00	0.00	107.00
BOND - XIII - Option - I- DOCO - 01-DEC-2005-	8.63	51.00	0.00	51.00
BOND - XIII - Option - I- DOCO - 01-JAN-2006-	8.63	53.00	0.00	53.00
BOND - XIII - Option - I- DOCO - 01-JUN-2005-	8.63	4551.00	0.00	4551.00
BOND - XIII - Option - I- DOCO - 01-NOV-2005-	8.63	62.00	0.00	62.00
BOND - XIII - Option - I- DOCO - 01-OCT-2005-	8.63	300.00	0.00	300.00
BOND XIV-DOCO - 01- JUN-2005-	6.10	52.00	0.00	52.00
BOND XV-DOCO - 01- APR-2006-	6.68	1363.00	0.00	1363.00
BOND XV-DOCO - 01- DEC-2005-	6.68	660.00	0.00	660.00
BOND XV-DOCO - 01- JAN-2006-	6.68	681.00	0.00	681.00
BOND XV-DOCO - 01- JUN-2005-	6.68	17940.00	0.00	17940.00
BOND XV-DOCO - 01- NOV-2005-	6.68	798.00	0.00	798.00
BOND XV-DOCO - 01- OCT-2005-	6.68	2500.00	0.00	2500.00
BOND XVI-DOCO - 01- APR-2006-	7.10	1457.00	0.00	1457.00
BOND XVI-DOCO - 01- DEC-2005-	7.10	706.00	0.00	706.00
BOND XVI-DOCO - 01- JAN-2006-	7.10	727.00	0.00	727.00
BOND XVI-DOCO - 01- JUN-2005-	7.10	18661.00	0.00	18661.00
BOND XVI-DOCO - 01- NOV-2005-	7.10	853.00	0.00	853.00
BOND XVI-DOCO - 01- OCT-2005-	7.10	2500.00	0.00	2500.00
BOND XVII-DOCO - 01- DEC-2005-	7.39	700.00	0.00	700.00
BOND XVII-DOCO - 01-	7.39	800.00	0.00	800.00

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2009	Additions during the tariff period	Total
JAN-2006-				
BOND XVII-DOCO - 01-	7 20	275.00	0.00	275.00
JUN-2005-	7.39	375.00	0.00	375.00
BOND XVII-DOCO - 01- NOV-2005-	7.39	275.00	0.00	275.00
BOND XVII-DOCO - 01- OCT-2005-	7.39	1600.00	0.00	1600.00
BOND XVIII-ADDCAP FOR 2005 - 2006 - 09-MAR- 2006-	8.15	1998.10	0.00	1998.10
BOND XVIII-ADDCAP FOR 2005-2006 - 31-MAR-2006-	8.15	2030.79	0.00	2030.79
BOND XVIII-ADDCAP FOR 2006-2007 - 31-MAR-2007-	8.15	303.49	0.00	303.49
BOND XVIII-DOCO - 01- APR-2006-	8.15	1050.00	0.00	1050.00
BOND XVIII-DOCO - 01- NOV-2006-	8.15	223.62	0.00	223.62
BOND XIX-ADDCAP FOR 2006-2007 - 31-MAR-2007-	9.25	170.00	0.00	170.00
BOND XXII-ADDCAP FOR 2006-2007 - 31-MAR-2007-	8.68	1410.72	0.00	1410.72
BOND XXII-ADDCAP FOR 2009-2010 Loan 32-	8.68	0.00	28.28	28.28
BOND XXX-ADDCAP FOR 2009-2010 Loan 33-	8.80	0.00	325.46	325.46
BOND XXXI-ADDCAP FOR 2009-2010 Loan 34-	8.90	0.00	18.08	18.08
BOND XXXI-ADDCAP FOR 2010-2011 Loan 35-	0.00	0.00	22.92	22.92
BOND XXXIII-ADDCAP FOR 2010-2011 Loan 36-	0.00	0.00	97.66	97.66
BOND XXXIII-ADDCAP FOR 2011-2012 Loan 37-	0.00	0.00	26.88	26.88
BOND XXXIII-ADDCAP FOR 2012-2013 Loan 38-	0.00	0.00	4.92	4.92
BOND-XXXIV-ADDCAP FOR 2012-2013 Loan 39-	0.00	0.00	1.87	1.87
BOND-XXXIV-ADDCAP FOR 2013-2014 Loan 40-	0.00	0.00	16.13	16.13
Total		64958.72	542.20	65500.92

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

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Opening Loan	64958.72	65330.54	65451.12	65478.00	65484.79
Cumulative Repayments of Loans up to Previous Year	7783.41	13542.48	19435.64	25328.80	31221.96
Net Loans Opening	57175.31	51788.06	46015.48	40149.20	34262.83
Add: Drawl(s) during the Year	371.82	120.58	26.88	6.79	16.13
Less: Repayments during the year	5759.07	5893.16	5893.16	5893.16	5923.70
Net Closing Loan	51788.06	46015.48	40149.20	34262.83	28355.26
Average Net Loan	54481.69	48901.77	43082.34	37206.02	31309.05
Rate of Interest on Loan (%)*	7.2312%	7.2439%	7.2515%	7.2591%	7.2688%
Interest on Loan	3939.68	3542.41	3124.10	2700.84	2275.78

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

## Annexure – 2

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

	1			(\ III iakii)
Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND-XIII - Option - I - DOCO - 01-APR-2006-	8.63	107.00	0.00	107.00
BOND - XIII - Option - I- DOCO - 01-DEC-2005-	8.63	51.00	0.00	51.00
BOND - XIII - Option - I- DOCO - 01-JAN-2006-	8.63	53.00	0.00	53.00
BOND - XIII - Option - I- DOCO - 01-JUN-2005-	8.63	4551.00	0.00	4551.00
BOND - XIII - Option - I- DOCO - 01-NOV-2005-	8.63	62.00	0.00	62.00
BOND - XIII - Option - I- DOCO - 01-OCT-2005-	8.63	300.00	0.00	300.00
BOND XIV-DOCO - 01- JUN-2005-	6.10	52.00	0.00	52.00
BOND XV-DOCO - 01- APR-2006-	6.68	1363.00	0.00	1363.00
BOND XV-DOCO - 01- DEC-2005-	6.68	660.00	0.00	660.00
BOND XV-DOCO - 01- JAN-2006-	6.68	681.00	0.00	681.00
BOND XV-DOCO - 01- JUN-2005-	6.68	17940.00	0.00	17940.00
BOND XV-DOCO - 01- NOV-2005-	6.68	798.00	0.00	798.00
BOND XV-DOCO - 01- OCT-2005-	6.68	2500.00	0.00	2500.00
BOND XVI-DOCO - 01- APR-2006-	7.10	1457.00	0.00	1457.00
BOND XVI-DOCO - 01- DEC-2005-	7.10	706.00	0.00	706.00
BOND XVI-DOCO - 01- JAN-2006-	7.10	727.00	0.00	727.00
BOND XVI-DOCO - 01- JUN-2005-	7.10	18661.00	0.00	18661.00
BOND XVI-DOCO - 01- NOV-2005-	7.10	853.00	0.00	853.00
BOND XVI-DOCO - 01- OCT-2005-	7.10	2500.00	0.00	2500.00
BOND XVII-DOCO - 01- DEC-2005-	7.39	700.00	0.00	700.00
BOND XVII-DOCO - 01- JAN-2006-	7.39	800.00	0.00	800.00

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Total
BOND XVII-DOCO - 01- JUN-2005-	7.39	375.00	0.00	375.00
BOND XVII-DOCO - 01- NOV-2005-	7.39	275.00	0.00	275.00
BOND XVII-DOCO - 01- OCT-2005-	7.39	1600.00	0.00	1600.00
BOND XVIII-ADDCAP FOR 2005 - 2006 - 09-MAR- 2006-	8.15	1998.10	0.00	1998.10
BOND XVIII-ADDCAP FOR 2005-2006 - 31-MAR-2006-	8.15	2030.79	0.00	2030.79
BOND XVIII-ADDCAP FOR 2006-2007 - 31-MAR-2007-	8.15	303.49	0.00	303.49
BOND XVIII-DOCO - 01- APR-2006-	8.15	1050.00	0.00	1050.00
BOND XVIII-DOCO - 01- NOV-2006-	8.15	223.62	0.00	223.62
BOND XIX-ADDCAP FOR 2006-2007 - 31-MAR-2007-	9.25	170.00	0.00	170.00
BOND XXII-ADDCAP FOR 2006-2007 - 31-MAR-2007- BOND XXII-ADDCAP FOR	8.68	1410.72	0.00	1410.72
2009-2010 Loan 32- BOND XXX-ADDCAP FOR	8.68	28.28	0.00	28.28
2009-2010 Loan 33- BOND XXXI-ADDCAP FOR	8.80	325.46	0.00	325.46
2009-2010 Loan 34- BOND XXXI-ADDCAP FOR	8.90	18.08	0.00	18.08
2010-2011 Loan 35- BOND XXXIII-ADDCAP	8.90	22.92	0.00	22.92
FOR 2010-2011 Loan 36- BOND XXXIII-ADDCAP	8.64	97.66	0.00	97.66
FOR 2011-2012 Loan 37- BOND XXXIII-ADDCAP	8.64	26.88	0.00	26.88
FOR 2012-2013 Loan 38- BOND-XXXIV-ADDCAP	8.64	4.92	0.00	4.92
FOR 2012-2013 Loan 39- BOND-XXXIV-ADDCAP	8.84	1.87	0.00	1.87
FOR 2013-2014 Loan 40-	8.84	16.13	0.00	16.13
Total		65500.92	0.00	65500.92

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

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Opening Loan	65500.92	65500.92	65500.92	65500.92	65500.92
Cumulative Repayments of Loans up to Previous Year	37145.66	43081.65	49017.64	54949.30	60880.96
Net Loans Opening	28355.26	22419.27	16483.28	10551.62	4619.96
Add: Drawl(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments during the year	5935.99	5935.99	5931.66	5931.66	3014.25
Net Closing Loan	22419.27	16483.28	10551.62	4619.96	1605.71
Average Net Loan	25387.27	19451.28	13517.45	7585.79	3112.84
Rate of Interest on Loan (%)*	7.2814%	7.3007%	7.3368%	7.4288%	7.7794%
Interest on Loan	1848.56	1420.08	991.74	563.53	242.16

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