

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

PETITION NO.489/TT/2014

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

Date of Hearing :08.02.2016
Date of Order :19.02.2016

In the Matter of:

Truing up of transmission tariff for 2009-14 tariff block under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 and determination of transmission tariff for 2014-19 tariff block Region under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2014 for 125 MVAR Bus Reactor at Roorkee S/S under Northern Region System Strengthening Scheme XXI (NRSS-XXI) (DOCO 01.02.2013) in Northern Region and Regulation-86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999

And in the Matter of:

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

.....Petitioner

Versus

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
Vidyut Bhawan, Vidyut Marg, Jaipur - 302005
2. Ajmer Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura, Jaipur
3. Jaipur Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura, Jaipur
4. Jodhpur Vidyut Vitran Nigam Limited,
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 Power Corporation Limited,
Thermal Shed TIA,
Near 22 Phatak, Patiala-147001
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula, Haryana - 134109
8. Power Development Department,
Govt. Of Jammu & Kashmir,
Mini Secretariat, Jammu
9. Uttar Pradesh Power Corporation Limited,
(Formerly Uttar Pradesh State Electricity Board),
Shakti Bhawan, 14, Ashok Marg,
Lucknow - 226 001
10. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi-110002
11. BSES Yamuna Power Limited,
BSES Bhawan, Nehru Place , New Delhi.
12. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place, New Delhi
13. North Delhi Power Limited,
Power Trading & Load Dispatch Group Cennet Building,
Adjacent To 66/11 kV Pitampura-3,
Grid Building, Near PP Jewellers Pitampura,
New Delhi - 110034
14. Chandigarh Administration,
Sector -9, Chandigarh
15. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road, Dehradun
16. North Central Railway,
Allahabad
17. New Delhi Municipal Council,



The following were present:

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

For Respondents: None

ORDER

The petition has been preferred by Power Grid Corporation of India Limited (hereinafter referred to as “the petitioner”), a transmission licensee, for revision of tariff under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as “the 2009 Tariff Regulations”) based on truing up of capital expenditure for the period from COD (1.2.2013) 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 125 MVAR Bus Reactor at Roorkee S/S under Northern Region System Strengthening Scheme XXI (NRSS-XXI) 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) The administrative approval and expenditure sanction to the transmission project was accorded by the petitioner's Board of Directors vide letter dated 26 August, 2010 for ₹167757.00 lakh including an IDC of ₹12198.00 lakh based on 1st Quarter, 2010 price level.

b) The COD of the transmission asset is 1.2.2013. The Commission vide its order dated 2.7.2014 in Petition No. 97/TT/2013 had considered the admitted capital cost of ₹477.15 lakh and debt:equity ratio as on COD as under:-

As on COD	Amount (₹ in lakh)	Percentage (%)
Debt	334.01	70.00
Equity	143.15	30.00
Capital Cost	477.15	100.00

c) The Commission had allowed the additional capital expenditure of ₹18.00 lakh in 2012-13 and ₹447.27 lakh in 2013-14 in its order in Petition No. 97/TT/2013.

d) While allowing the capital cost as on COD, the Commission had disallowed the excess initial spares of ₹447.27 lakh based on capital cost upto cut off date and as per ceiling limit specified by the Commission.

e) The item-wise cost variation was allowed on the ground that it is not within the petitioner's control.

f) The issue of time over run dealt by the Commission in its order in Petition No. 97/TT/2013. The Commission in its order observed that as per the investment approval dated 26.8.2010, the project was scheduled to be commissioned within 32 months from the date of investment approval. The scheduled commissioning

works out to be 1.5.2013. The asset was actually commissioned on 1.2.2013. Thus, there is no time over-run in the instant case

g) The Commission determined the tariff for the transmission asset for tariff period 2009-14, based on admitted capital cost of ₹477.15 lakh as on COD and estimated additional capital expenditure of ₹18.00 lakh in 2012-13 and ₹447.27 lakh in 2013-14 in its order in Petition No. 97/TT/2013 as given below:-

(₹ in lakh)

Particulars	2012-13 (pro-rata)	2013-14
Depreciation	4.24	37.71
Interest on Loan	5.11	43.48
Return on Equity	4.25	37.7
Interest on Working Capital	0.88	6.35
O & M Expenses	10.32	65.46
Total	24.8	190.7

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

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

6. The petitioner has served the petition to the respondents and notice of this application has been published in the newspaper in accordance with Section 64 of the

Electricity Act 2003. No comments/objections have been received from the public in response to the notice in newspaper. Rajasthan Rajya Vidyut Prasaran Nigam Limited (RRVNL), Ajmer Vidyut Vitran Nigam Limited, (AVVNL) Jaipur Vidyut Vitran Nigam Limited (JVVNL) and Jodhpur Vidyut Vitran Nigam Limited (Jd.VVNL), Respondents Nos. 1, 2, 3 and 4, collectively referred to Rajasthan Discoms have filed the reply vide affidavit dated 9.12.2014. The hearing in this matter was held on 8.2.2016. The Commission had directed the petitioner to furnish an undertaking on affidavit depicting the actual equity infused during the 2009-14 and 2014-19 tariff period, details of un-discharged liabilities and amount of the balance and retention payment yet to be made along with the details of the contract for which payment has been retained through its letter dated 8.2.2016. The petitioner in response to the Commission's queries has submitted its reply vide affidavit dated 13.2.2014. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

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

7. 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”.

8. 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.

9. The tariff for 2009-14 tariff period has been trued up based on actual capital cost and additional capital expenditure during 2009-14 tariff period. Rajasthan Discoms



submitted that the petitioner has claimed higher tariff vis-à-vis that approved tariff and has requested to thoroughly scrutinise the various components of tariff such as O&M Expenses, Interest on Working Capital, etc. Suffice it to say, the capital cost is to be allowed after prudence check in accordance with 2009 Tariff Regulations.

Capital Cost

10. The petitioner has claimed final capital cost of ₹521.26 lakh as on COD in respect of the transmission asset for the purpose of tariff determination.

2. Clause (1) and (2) of the Regulation 7 of the 2009 Tariff Regulations specifies as follows:-

“(1) Capital cost for a project shall include:-

(a) The expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan – (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the fund deployed, up to the date of commercial operation of the project, as admitted by the Commission, after prudence check.

(b) capitalised initial spares subject to the ceiling rates specified in regulation 8; and

(c) additional capital expenditure determined under regulation 9:

Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost.

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

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

Provided further that in cases where benchmark norms have not been specified, prudence check may include scrutiny of the reasonableness of the capital expenditure, financing plan, interest during construction, use of efficient technology, cost over-run

and time over-run, and such other matters as may be considered appropriate by the Commission for determination of tariff.”

11. The Commission has already dealt the issue of time over run and cost variation in its order in petition 97/TT/2013, the IDC, IEDC and cost variation allowed based on actual expenditure incurred. The initial spares disallowed have been revised based on actual capital expenditure upto cutoff date submitted by the petitioner in this petition.

12. The actual capital cost of ₹521.26 lakh as on COD as certified by Auditor Certificate dated 19.9.2014 and after deduction of excess initial spares calculated in the subsequent paragraphs below, has been considered as opening capital cost on COD for true up tariff in accordance with Regulation 7 of the 2009 Tariff Regulations.

Initial Spares

13. The petitioner has submitted that the amount of actual initial spares is ₹46.87 lakh. However, the petitioner has not deducted any excess initial spares for the transmission asset. The petitioner has submitted that since the transmission asset is only a part of the project and major portion of this project is yet to be commissioned, hence the initial spares are claimed as per actual without any restrictions. We have considered the submissions of the petitioner and the admissible initial spares has been worked out in accordance with 2009 Tariff Regulations as follows:-

Particulars	Formula	Amount in (₹ in lakh)	
		Sub Station	Transmission Line
Capital cost as on cut off date	(a)	854.46	-
Capital Cost after deducting excess IDC	(b)	854.46	-
Initial Spares claimed (upto 31.3.2014)	(c)	46.87	-

Particulars	Formula	Amount in (₹ in lakh)	
		Sub Station	Transmission Line
Proportionate Initial Spares claimed after deducting IDC	$(d) = (c)/(a) * (b)$	46.87	-
Ceiling limit as per Regulation 8 of 2009 regulations	(e)	2.50%	-
Initial spares worked out	$(f) = ((b-d)*e)/(100\%-e)$	20.71	-
Excess initial spares claimed	$(g)=(d)-(f)$	26.16	-

14. The cut-off date in accordance with 2009 Tariff Regulations falls on 31.3.2016. The additional capital expenditure from 1.4.2014 to 31.3.2016 has been considered in accordance with 2014 Tariff Regulations. Therefore, the admissible initial spares have been worked out by considering the capital cost upto 31.3.2016. The details of the allowed initial spares are as under:-

Asset	Capital cost upto cut-off date (sub-station)	Cost of the initial spares for sub-station	
		Allowed	Disallowed
		Approved in order 97/TT/2013 dated 2.7.2014	965.73
Claimed by the petitioner	854.46	46.87	0
Allowed in this order	854.46	20.71	26.16

Additional Capital Expenditure

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

“The Commission shall carry out triuing 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”

16. The petitioner has submitted that actual additional capital expenditure of ₹127.66 lakh in 2012-13 and ₹81.56 lakh in 2013-14 has been incurred on account of balance and retention payments towards sub-station as depicted below:-

Capital Cost as on COD	Additional Capital Expenditure during 2009-14			Capital Cost as 31.3.2014
	2012-13	2013-14	Total	
521.26	127.66	81.56	209.22	730.48

(₹ in lakh)

17. The petitioner has submitted the Auditor's Certificate dated 19.9.2014 certifying the actual capital cost incurred towards additional capitalization. The petitioner's claim of additional capital expenditure during 2009-14 tariff period is within the cut-off date under Regulation 9(1)(i) of 2009 Tariff Regulations.

18. We have considered the submissions of the petitioner with regard to the actual capital expenditure during 2009-14 tariff period. The capital addition of ₹127.66 lakh in 2012-13 and ₹81.56 lakh in 2013-14 is based on actual capital expenditure incurred as per the Auditor Certificate dated 19.9.2014, and is within the original scope of work and also within the approved cost of the assets. The additional capital expenditure of ₹127.66 lakh in 2012-13 and ₹81.56 lakh in 2013-14 towards balance retention payments is before the cutoff date and the same is allowed under Regulation 9 (2) (i) of 2009 Tariff Regulations for the purpose of revision of tariff in accordance with Regulation 6 of the 2009 Tariff Regulations. The capital cost approved in earlier and worked out for the purpose of true up are given as under:-

(₹ in lakh)

Particulars	Capital cost upto COD	Additional Capital Expenditure			Total capital cost as on 31.3.2014
		2012-13	2013-14	Total add cap	
Approved in order dated 2.1.2013	477.15	18.00	447.27	465.27	942.42
Claimed by the petitioner	521.26	127.66	81.56	209.22	730.48
Allowed in this order	495.10	127.66	81.56	209.22	704.32

19. 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.

Debt: Equity

20. 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.”

21. The admitted debt:equity ratio of 70.00:30.00 as on COD was considered by the Commission in order dated 2.7.2014 in Petition No. 97/TT/2013 in line with the Regulation 12 of the 2009 Tariff Regulations. The petitioner has claimed normative debt: equity ratio of 70:30 for additional capitalization in line with the 2009 Tariff Regulations and same has been considered to work out the tariff.



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

(₹ in lakh)

Funding	Capital cost as on COD (1.2.2013)	(%)	Additional capital expenditure during 2009-14	(%)	Total Cost as on 31.3.2014	(%)
Debt	346.57	70.00	146.45	70.00	493.02	70.00
Equity	148.53	30.00	62.77	30.00	211.30	30.00
Total	495.10	100.00	209.22	100.00	704.32	100.00

Return on Equity (“ROE”)

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

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

24. 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%

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

Return on Equity	₹ in lakh	
	2012-13 (pro-rata)	2013-14
As approved vide Order dated 2.7.2014	4.25	37.70
Claimed by the petitioner	5.67	40.58
Allowed after true up in this order	5.42	39.04

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 reduction of capital cost due to disallowance of excess initial spares.

Interest on Loan (“IoL”)

25. 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”.

26. 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 is placed in Annexure-1. The IoL worked out is as follows:-

Interest on Loan	(₹ in lakh)	
	2012-13 (pro-rata)	2013-14
As approved vide Order dated 2.7.2014	5.11	43.48
Claimed by the petitioner	6.34	42.91
Allowed after true up in this order	6.06	41.29

The difference in the approved IoL and that allowed after true 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 and adjustment of capital cost due to initial spares.

Depreciation

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:-

Depreciation	(₹ in lakh)	
	2012-13 (pro-rata)	2013-14
As approved vide Order dated 2.7.2014	4.24	37.71
Claimed by the petitioner	5.11	36.18
Allowed after true up in this order	4.88	34.80

The difference in the approved depreciation and that allowed after true up is on account of change gross block during the 2009-14 tariff period due to adjustment of capital cost on account of excess initial spares.

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

27. 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:-

(₹ in lakh)

O&M Expenses	2012-13 (pro-rata)	2013-14
As approved vide Order dated 2.7.2014	10.32	65.46
Claimed by the petitioner	10.32	65.46
Allowed after true up in this order	10.32	65.46

Interest on Working Capital (IWC)

28. 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	2012-13 (pro-rata)	2013-14
As approved vide Order dated 2.7.2014	0.88	6.35
Claimed by the petitioner	0.97	6.37
Allowed after true up in this order	0.95	6.27

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

29. 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:-

(₹ in lakh)

Particulars	2012-13 (pro-rata)	2013-14
Depreciation		
Opening Gross Block	495.10	622.76
Additional Capitalisation	127.66	81.56
Closing Gross Block	622.76	704.32
Average Gross Block	558.93	663.54
Rate of Depreciation (%)	5.24	5.24
Depreciable Value	503.03	654.63
Balance useful life of the asset	25.00	24.00
Elapsed life	0.00	1.00
Remaining Depreciable Value	503.03	592.30
Depreciation during the year	4.88	34.80
Cumulative depreciation (incl. of AAD)	4.88	39.68
Interest on Loan		
Gross Normative Loan	346.57	435.93
Cumulative Repayments upto Previous Year	0.00	4.88
Net Loan-Opening	346.57	431.05
Additions	89.36	57.09
Repayment during the year	4.88	34.80
Net Loan-Closing	431.05	453.34
Average Loan	388.81	442.20
Weighted Average Rate of Interest on Loan (%)	9.3531	9.3371
Interest on Loan	6.06	41.29
Return on Equity		
Opening Equity	148.53	186.83
Additions	38.30	24.47
Closing Equity	186.83	211.30
Average Equity	167.68	199.06
Return on Equity (Base Rate) (%)	15.500	15.500
MAT Rate for respective year (%)	20.008	20.961
Rate of Return on Equity (%)	19.377	19.610
Return on Equity	5.42	39.04
Interest on Working Capital		
O & M Expenses	0.86	5.46
Maintenance Spares	1.55	9.82
Receivables	4.60	31.14
Total Working Capital	7.01	46.42
Rate of Interest (%)	13.50	13.50
Interest of working capital	0.95	6.27
Annual Transmission Charges		

Particulars	2012-13 (pro-rata)	2013-14
Depreciation	4.88	34.80
Interest on Loan	6.06	41.29
Return on Equity	5.42	39.04
Interest on Working Capital	0.95	6.27
O & M Expenses	10.32	65.46
Total	27.62	186.85

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	41.61	44.88	44.88	44.88	44.88
Interest on Loan	45.98	46.00	41.82	37.63	33.44
Return on Equity	46.62	50.27	50.27	50.27	50.27
Interest on Working Capital	6.42	6.69	6.71	6.73	6.76
O & M Expenses	60.30	62.30	64.37	66.51	68.71
Total	200.93	210.14	208.05	206.02	204.06

31. 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	5.03	5.19	5.36	5.54	5.73
Maintenance Spares	9.05	9.35	9.66	9.98	10.31
Receivables	33.49	35.02	34.68	34.34	34.01
Total working capital	47.57	49.56	49.70	49.86	50.05
Rate of Interest	13.50	13.50	13.50	13.50	13.50
Interest of working capital	6.42	6.69	6.71	6.73	6.76

Capital Cost

32. 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;”

33. The capital cost of ₹704.32 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

34. 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.”

35. 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.”

36. The petitioner has claimed additional capital expenditure of ₹123.98 lakh for 2014-15 on account of balance and retention payments.

37. The Commission had directed the petitioner to submit an undertaking depicting the un-discharged liabilities, if any to be recovered in future respect of the assets covered in the instant petition. The petitioner in response to the Commission's direction has submitted the detailed break-up of the balance and retention payments to be made in 2014-15 vide affidavit dated 13.2.2016.

38. We have considered the submissions of the petitioner with regard to the projected capital expenditure during 2014-19. The claimed additional capital expenditure is towards balance and retention payments for works executed before the cut-off date and the same has been certified by the Auditor vide Certificate dated 19.9.2014. Further, the total capital expenditure during 2014-19 is within the limits of the approved apportioned cost. Thus, the same is allowed for the purpose of revision of tariff in accordance with Regulation 14(1) of the 2014 Tariff Regulations as mentioned below, subject to true-up on actual basis:-

(₹ in lakh)

Capital cost as on 1.4.2014	Additional capital expenditure		Capital cost as 31.3.2019
	2014-15	Total	
704.32	123.98	123.98	828.30

Debt: Equity

39. 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.”

40. The petitioner has considered the debt:equity ratio of 70.00:30.00 as on 31.3.2014, which is in line with the 2014 Tariff Regulations. The details of the debt:equity considered for the purpose of tariff for 2014-19 tariff period is as follows:-

(₹ in lakh)

Funding	Total Cost as on 31.3.2014	(%)	Additional capital expenditure during 2014-19	(%)	Total Cost as on 31.3.2019	(%)
Debt	493.02	70.00	86.79	70.00	579.81	70.00
Equity	211.30	30.00	37.19	30.00	248.49	30.00
Total	704.32	100.00	123.98	100.00	828.30	100.00

Return on Equity (“ROE”)

41. 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.”

42. 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	211.30	248.49	248.49	248.49	248.49
Additions	37.19	0.00	0.00	0.00	0.00
Closing Equity	248.49	248.49	248.49	248.49	248.49
Average Equity	229.89	248.49	248.49	248.49	248.49
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	45.08	48.73	48.73	48.73	48.73

Interest on Loan (“IoL”)

43. 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.”

44. 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 and the IoL 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	493.02	579.81	579.81	579.81	579.81
Cumulative Repayment upto Previous Year	39.68	79.90	123.40	166.90	210.40
Net Loan-Opening	453.34	499.91	456.41	412.91	369.41
Additions	86.79	0.00	0.00	0.00	0.00
Repayment during the year	40.22	43.50	43.50	43.50	43.50
Net Loan-Closing	499.91	456.41	412.91	369.41	325.91
Average Loan	476.63	478.16	434.66	391.16	347.66
Weighted Average Rate of Interest on Loan (%)	9.3338	9.3353	9.3362	9.3363	9.3364
Interest on Loan	44.49	44.64	40.58	36.52	32.46

Depreciation

45. 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.”

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

(₹ in lakh)

Depreciation	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	704.32	828.30	828.30	828.30	828.30
Additional Capitalization	123.98	0.00	0.00	0.00	0.00
Closing Gross Block	828.30	828.30	828.30	828.30	828.30
Average Gross Block	766.31	828.30	828.30	828.30	828.30
Freehold Land (Av. Cost)	0.00	0.00	0.00	0.00	0.00
Rate of Depreciation (%)	5.25	5.25	5.25	5.25	5.25
Elapsed life	2	3	4	5	6
Balance Useful life of the asset	23	22	21	20	19
Remaining Depreciable Value	650.00	665.57	622.07	578.57	535.07
Depreciation during the year	40.22	43.50	43.50	43.50	43.50
Cumulative depreciation	79.90	123.40	166.90	210.40	253.89

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

47. Clause 3(a) of Regulation 29 of the 2014 Tariff Regulations specify 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	1	1	1	1	1
Norms (₹ lakh/Bay)	60.30	62.30	64.37	66.51	68.71
Total O&M Expenses (₹ lakh)	60.30	62.30	64.37	66.51	68.71

48. 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 submitted that the 2014 Tariff Regulations have been framed after detailed discussion and consultation and thus the sanctity of the regulations should be maintained and any request by the petitioner for revision of O&M norms should not be entertained. 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”)

49. 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;”

50. 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%.

51. 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	5.03	5.19	5.36	5.54	5.73
Maintenance Spares	9.05	9.35	9.66	9.98	10.31
Receivables	32.74	34.29	33.97	33.65	33.34
Total	46.81	48.83	48.98	49.17	49.38
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	6.32	6.59	6.61	6.64	6.67

ANNUAL FIXED CHARGES FOR THE 2014-19 TARIFF PERIOD

52. 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	704.32	828.30	828.30	828.30	828.30
Additional Capitalisation	123.98	0.00	0.00	0.00	0.00
Closing Gross Block	828.30	828.30	828.30	828.30	828.30
Average Gross Block	766.31	828.30	828.30	828.30	828.30
Rate of Depreciation (%)	5.25	5.25	5.25	5.25	5.25
Depreciable Value	726.38	801.26	745.47	745.47	745.47
Balance useful life of the asset	23.00	22.00	21.00	20.00	19.00
Elapsed life	2.00	3.00	4.00	5.00	6.00

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Remaining Depreciable Value	650.00	665.57	622.07	578.57	535.07
Depreciation during the year	40.22	43.50	43.50	43.50	43.50
Cumulative depreciation	79.90	123.40	166.90	210.40	253.89
Interest on Loan					
Gross Normative Loan	493.02	579.81	579.81	579.81	579.81
Cumulative Repayments upto Previous Year	39.68	79.90	123.40	166.90	210.40
Net Loan-Opening	453.34	499.91	456.41	412.91	369.41
Additions	86.79	0.00	0.00	0.00	0.00
Repayment during the year	40.22	43.50	43.50	43.50	43.50
Net Loan-Closing	499.91	456.41	412.91	369.41	325.91
Average Loan	476.63	478.16	434.66	391.16	347.66
Weighted Average Rate of Interest on Loan (%)	9.3338	9.3353	9.3362	9.3363	9.3364
Interest on Loan	44.49	44.64	40.58	36.52	32.46
Return on Equity					
Opening Equity	211.30	248.49	248.49	248.49	248.49
Additions	37.19	0.00	0.00	0.00	0.00
Closing Equity	248.49	248.49	248.49	248.49	248.49
Average Equity	229.89	248.49	248.49	248.49	248.49
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	45.08	48.73	48.73	48.73	48.73
Interest on Working Capital					
O & M Expenses	5.03	5.19	5.36	5.54	5.73
Maintenance Spares	9.05	9.35	9.66	9.98	10.31
Receivables	32.74	34.29	33.97	33.65	33.34
Total Working Capital	46.81	48.83	48.98	49.17	49.38
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest of working capital	6.32	6.59	6.61	6.64	6.67
Annual Transmission Charges					
Depreciation	40.22	43.50	43.50	43.50	43.50
Interest on Loan	44.49	44.64	40.58	36.52	32.46
Return on Equity	45.08	48.73	48.73	48.73	48.73
Interest on Working Capital	6.32	6.59	6.61	6.64	6.67
O & M Expenses	60.30	62.30	64.37	66.51	68.71
Total	196.41	205.76	203.79	201.90	200.06



53. 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. However, the COD of the asset is after 2009, hence the claim of the petitioner is not maintainable.

Filing Fee and the Publication Expenses

54. 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

55. 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

56. The petitioner has prayed for reimbursement of service tax if it is subjected to such tax in future. Rajasthan Discoms submitted that the petitioner's claim is on presumption basis and should not be allowed. We are of the view that the petitioner's prayer is premature.

Sharing of Transmission Charges

57. 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.

58. This order disposes of Petition No.489/TT/2014.

Sd/-

(Dr. M.K. Iyer)
Member

Sd/-

(A.S. Bakshi)
Member

Annexure – 1

DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2009-14

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Repayment	Total
BOND XXXIV-DOCO-DRAWL-1-FEB-2013	8.84	17.00	0.00	0.00	17.00
BOND XXXV-DOCO-DRAWL-1-FEB-2013	9.64	3.00	0.00	0.00	3.00
BOND XXXVI-DOCO-DRAWL-1-FEB-2013	9.35	8.00	0.00	0.00	8.00
BOND XXXVII-DOCO-DRAWL-1-FEB-2013	9.25	29.00	0.00	0.00	29.00
BOND XXXVIII-DOCO-DRAWL-1-FEB-2013	9.25	8.00	0.00	0.00	8.00
BOND XXXIX-DOCO-DRAWL-1-FEB-2013	9.40	24.00	0.00	0.00	24.00
SBI (21.3.2012) - DOCO _ DRAWL	10.29	24.00	0.00	0.00	24.00
BOND XL-ADDCAP FOR 2013-14 ADD CAP FOR 2012-13 LOAN-1	9.30	0.00	89.36	0.00	89.36
BOND XL-ADDCAP FOR 2013-14 ADD CAP FOR 2012-13 LOAN-2	9.30	0.00	57.09	0.00	57.09
BOND XL-DOCO-DRAWL on 1-FEB-2013 (Changed)	9.30	251.88	0.00	0.00	251.88
Total		364.88	146.45	0.00	511.33

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

(₹ in lakh)

Particulars	2012-13	2013-14
Gross Opening Loan	364.88	454.24
Cumulative Repayments of Loans upto Previous Year	0.00	0.00
Net Loans Opening	364.88	454.24
Add: Draw(s) during the Year	89.36	57.09
Less: Repayments of Loan during the year	0.00	0.00
Net Closing Loan	454.24	511.33
Average Net Loan	409.56	482.79
Rate of Interest on Loan (%)	9.353%	9.337%
Interest on Loan	38.31	45.08



Annexure – 2

DETAILS OF LOAN BASED ON ACTUAL LOAN PORTFOLIO FOR 2014-19

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on 1.4.2014	Additions during the tariff period	Repayment	Total
BOND XXXIV-DOCO-DRAWL-1-FEB-2013	8.84	17.00	0.00	7.10	17.00
BOND XXXV-DOCO-DRAWL-1-FEB-2013	9.64	3.00	0.00	1.00	3.00
BOND XXXVI-DOCO-DRAWL-1-FEB-2013	9.35	8.00	0.00	1.59	8.00
BOND XXXVII-DOCO-DRAWL-1-FEB-2013	9.25	29.00	0.00	9.68	29.00
BOND XXXVIII-DOCO-DRAWL-1-FEB-2013	9.25	8.00	0.00	0.00	8.00
BOND XXXIX-DOCO-DRAWL-1-FEB-2013	9.40	24.00	0.00	0.00	24.00
SBI (21.3.2012) - DOCO _ DRAWL	10.25	24.00	0.00	6.54	24.00
BOND XL-ADDCAP FOR 2013-14 ADD CAP FOR 2012-13 LOAN-1	9.30	89.36	0.00	22.35	89.36
BOND XL-ADDCAP FOR 2013-14 ADD CAP FOR 2012-13 LOAN-2	9.30	57.09	0.00	14.28	57.09
BOND XL-DOCO-DRAWL on 1-FEB-2013 (Changed)	9.30	251.88	0.00	62.97	251.88
Total		511.33	0.00	125.51	511.33

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	511.33	511.33	511.33	511.33	511.33
Cumulative Repayments of Loans upto Previous Year	0.00	1.42	5.51	45.51	85.51
Net Loans Opening	511.33	509.91	505.82	465.82	425.82
Add: Draw(s) during the Year	0.00	0.00	0.00	0.00	0.00
Less: Repayments of Loan during the year	1.42	4.09	40.00	40.00	40.00
Net Closing Loan	509.91	505.82	465.82	425.82	385.82
Average Net Loan	510.62	507.87	485.82	445.82	405.82
Rate of Interest on Loan (%)	9.334%	9.335%	9.336%	9.336%	9.336%
Interest on Loan	47.66	47.41	45.36	41.62	37.89

