

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

PETITION NO. 34/TT/2013

Coram:

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

**Date of Hearing: 27.01.2016
Date of Order : 09.03.2016**

In the matter of:

Determination of transmission tariff for 2009-14 block in respect of LILO of both circuits of 400 kV D/C Kishenpur Wagoora T/L along with bays at New Wanpoh & 1 No. 315 MVA, 400/220kV ICT-I along with associated bays at New Wanpoh and 03 No. 220 kV Line Bays associated with NRSS- XVI of Northern Region under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999, and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009.

And in the Matter of:

Power Grid Corporation of India Ltd,
'Saudamini', Plot No-2,
Sector-29, Gurgaon-122 001 (Haryana)

.....Petitioner

Versus

1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd.,
Vidyut Bhawan, Vidyut Marg,
Jaipur - 302005.
2. Ajmer Vidyut Vitran Nigam Ltd.,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur.
3. Jaipur Vidyut Vitran Nigam Ltd.,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur.
4. Jodhpur Vidyut Vitran Nigam Ltd.,



- 400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur
5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla - 171 004.
 6. Punjab State Electricity Board,
The Mall, Patiala - 147 001.
 7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector - 6
Panchkula (Haryana) - 134 109
 8. Power Development Department,
Govt. of Jammu and Kashmir
Mini Secretariat, Jammu.
 9. Uttar Pradesh Power Corporation Ltd.,
Shakti Bhawan, 14, Ashok Marg,
Lucknow - 226 001.
 10. Delhi Transco Ltd.,
Shakti Sadan, Kotla Road,
New Delhi - 110 002
 11. BSES Yamuna Power Ltd.,
Shakti Kiran Building, Karkardooma,
Delhi – 110 092.
 12. BSES Rajdhani Power Ltd.,
BSES Bhawan, Nehru Place,
New Delhi.
 13. North Delhi Power Ltd.,
Power Trading & Load Dispatch Group,
Cennet Building,
Adjacent to 66/11kV Pitampura - ,
Grid Building, Near PP Jewellers,
Pitampura, New Delhi - 110 034
 14. Chandigarh Administration,
Sector - 9, Chandigarh
 15. Uttarakhand Power Corporation Ltd.,
Urja Bhawan, Kanwali Road,
Dehradun
 16. North Central Railway,



Allahabad

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

.....Respondents

The following were present:

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

For Respondents: None

ORDER

The petition has been preferred by Power Grid Corporation of India Limited ("the petitioner") for determination of tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations") for the period from COD to 31.3.2014 in respect of LILO of both circuits of 400kV D/C Kishenpur Wagoora T/L along with bays at New Wanpoh & 1 No. 315 MVA, 400/220 kV ICT-I along with associated bays at New Wanpoh and 03 No. 220 kV Line Bays associated with NRSS-XVI of 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 project was accorded by the Board of Directors of POWERGRID vide Memorandum



Ref. C/CP/NRSS-XVI dated 6.7.2010 for ₹75264 lakh including an IDC of ₹6331 lakh based on 1st Quarter, 2010 price level.

b) The scope of work covered under the project broadly includes following transmission lines and sub-stations:-

Transmission Lines:

- **LILO of both circuits of Kishenpur-Wagoora 400 kV D/C line at New Wanpoh- 8 km**
- Kishenpur-New Wanpoh 400 kV Line- 132 km (125 km D/C + 7 km M/C in Pir Panjal Mountain Range)

Sub-stations:

- **New 2x315 MVA, (7X105 MVA single phase units considered), 400/220 kV New Wanpoh Substation**
- Extension of 400/220 kV Kishenpur Substation

Reactive Compensation:

- 1X125 MVAR Bus Reactor at New Wanpoh

c) As per the investment approval, the project was scheduled to be commissioned within 36 months from the date of Investment Approval. The date of Investment Approval was 6.7.2010 and accordingly the schedule date of completion of work was 6.7.2013.

d) The petitioner initially claimed the transmission tariff for the instant transmission assets with an anticipated COD of 1.3.2013, based on estimated capital expenditure incurred up to the anticipated date of commercial operation and estimated additional capital expenditure projected

to be incurred from anticipated date of commercial operation to 31.3.2014, vide affidavit dated 9.1.2013.

The petitioner, vide affidavit dated 11.12.2015, has submitted actual date of commercial operation of the instant transmission asset was 1.10.2013. The petitioner has submitted the revised Auditor Certificates, vide affidavit dated 22.1.2016 and 18.2.2016, as per revised date of commercial operation and also revised tariff forms pertaining to these assets. The asset covered in the instant petition is LILO of both circuits of 400 kV D/C Kishenpur Wagoora T/L along with bays at New Wanpoh & 1 No. 315 MVA, 400/220 kV ICT-I along with associated bays at New Wanpoh and 03 No. 220 kV Line Bays associated with NRSS XVI of Northern Region

e) The petitioner has submitted, vide affidavit dated 18.2.2016, the inspection certificate of the instant asset issued by the Chief Electrical Inspector, J&K Government.

f) The petitioner has served the petition on 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 newspapers.

g) Ajmer Vidyut Vitran Nigam Ltd. (AVVNL), Respondent No. 2, Jaipur Vidyut Vitran Nigam Ltd. (JVVNL), Respondent No. 3, and Jodhpur Vidyut Vitran Nigam Ltd. (JdVVNL), Respondent No. 4, (collectively referred to as "Rajasthan Discoms") have filed reply to the petition vide a common affidavit dated 13.4.2013. Rajasthan Discoms have raised certain objections

regarding the anticipated COD of the transmission asset, estimated additional capital expenditure, interest rates for loan computations, and the O&M charges. The petitioner has not submitted any rejoinder to the reply filed by Rajasthan Discoms. The petitioner has submitted the actual COD, Auditor Certificates, revised tariff forms and other details for the instant transmission asset vide affidavits dated 11.12.2015, 22.1.2016 and 18.2.2016.

h) The hearing in this matter was held on 27.1.2016. Having heard the representatives of the parties and perused the records we proceed to dispose of the petition. While doing so, we also take care of the submissions of the respondents in their replies and address them in the relevant paragraphs.

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

4. The transmission charges claimed by the petitioner based on the actual date of commercial operation are as below:-

(₹ in lakh)

Particulars	2013-14
Depreciation	242.85
Interest on Loan	323.12
Return on Equity	307.91
Interest on Working Capital	33.53
O & M Expenses	257.00
Total	1164.41

Capital Cost

5. Regulation 7 of the 2009 Tariff Regulations provides that:-

“(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”

6. The details of apportioned approved cost, capital cost as on the date of commercial operation, and additional capital expenditure incurred for the assets covered in the instant petition, claimed by the petitioner, are summarized below:-

(₹ in lakh)			
Apportioned approved cost as per FR	Actual cost incurred as on COD*	Additional capital expenditure during 2013-14	Total completion cost up to 31.3.2014
17122.19	10110.63	714.45	10825.08

*inclusive of initial spares discharged up to COD

7. The petitioner has claimed an incidental expenditure during construction (IEDC) and interest during construction (IDC) of ₹223.44 lakh and ₹890.14 lakh respectively as on date of commercial operation. The petitioner has submitted the details of IDC discharged up to COD and from COD to 31.3.2014. The petitioner has also submitted the year wise details of liability discharged corresponding to initial spares. The admissible capital cost of the transmission asset as on COD is worked out in the subsequent paragraphs after the treatment of initial spares and IEDC & IDC amount.

Cost Variation

8. The completion cost of the transmission assets up to 31.3.2014 is within the apportioned approved cost. There is a cost variation in certain elements. The petitioner, vide affidavit dated 16.7.2013, has submitted the increase in cost of roads and drainage is due to the construction of bridge and approach road at New Wanpoh Sub-station required for transportation/ construction which was a new development not envisaged earlier at the time of FR. Revised cost of the construction work was ₹344.85 lakh against the approved cost of ₹135 lakh as per FR. The initial spares are claimed as per actual in line with the 2009 Tariff Regulations. Further, the petitioner has submitted that the cost estimates were prepared as per well defined procedures for cost estimate. The cost estimate is broad indicative cost worked out generally on the basis of average unit rates of recently awarded contracts. For procurement, open competitive bidding route is followed and by providing equal opportunity to all eligible firms, lowest possible market prices for required products/services is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may vary as compared to the cost estimate depending upon prevailing market conditions. Further, it is submitted that the cost estimate is on the basis of 1st quarter 2010 price level, where the contract date is 3rd quarter 2010 price level.

9. We have considered the submissions made by the petitioner regarding cost variation in case of the instant transmission assets. There is over-estimation of the cost of the assets. It is noticed that the cost estimates of the petitioner are differing from actual expenditure. We are of the view that the petitioner should adopt a



prudent procedure to make cost estimates of different elements of the transmission projects more realistic.

Time over-run

10. As per investment approval, the project is to be commissioned within 36 months from the date of investment approval. The date of investment approval is 6.7.2010 and accordingly the schedule date of commercial operation works out to be 6.7.2013. The transmission asset was put under commercial operation on 1.10.2013 after a time over-run of around 3 months in commissioning.

11. The petitioner has submitted the reasons for delay in commissioning of the transmission asset. The petitioner has submitted that the time over-run is mainly on account of delay in acquiring land due to late approval by J & K Government. This was further aggravated by the disturbance caused by various factors such as weather disturbance, militant attacks, security threats, shutdown, encounters etc.

Delay in acquiring land due to late approval by J & K Government

12. The petitioner has submitted that the proposal for land acquisition, after carrying out the joint survey alongwith J&K Revenue Department in Damjan near Qazikund on NHAI, was put up before the Deputy Commissioner, J&K Government before the Investment Approval, vide letter dated 19.3.2008 with a request to issue the necessary instructions to the concerned authority. In absence of any initiative by the Government of J&K, the petitioner again requested the concerned authorities, vide letter dated 24.7.2008, to initiate land acquisition proceedings as required under Jammu and Kashmir Land Acquisition Act.

13. The concerned authorities called for objections from the interested persons and concerned department. In response to the notification, certain objections were received. The office of the Deputy Speaker, Legislative Assembly, J&K, gave permission to establish Grid station vide letter dated 5.3.2010. The whole process of seeking objections and resolving them took considerable time and finally land was awarded by the Additional Deputy Commissioner on 19.9.2012.

Delay due to disturbance caused by various factors such as weather disturbance, militant attacks, security threats, shutdown, encounters

14. The petitioner has submitted that the construction of the project was further delayed due to other reasons pertaining to local issues. The petitioner has submitted that the instant transmission assets were to be commissioned at New Wanpoh Sub-station which is a remote location in the Kashmir Valley. The militant activities and disturbances lead to intermittent stoppage of work and slowing down the pace of work. It also affected the transportation of men and material and the fear among the workers slowed down the progress of work.

15. The militant activities were intensified from May, 2012 till September, 2013 (16 months), which severely hampered the execution of the work. A majority of the work force (skilled/semi-skilled) deployed in the project belonged to other parts of the country and in view of the threat perception, they had to be de-mobilized from the site during critical situations and re-mobilized after return of normalcy in the Valley. The frequent demobilization/mobilization of work force affected the progress of work. Further, the frequent disturbances in weather also contributed towards delay. The petitioner tried to accelerate the pace by deploying more resources in the available time stretches so that delay period is shortened to the extent possible and the instant asset is commissioned expeditiously.



16. We have considered the reasons and documents submitted by the petitioner regarding time over-run. We have also gone through the detailed chronology of events in the process of land acquisition submitted by the petitioner. It is observed that the process of acquisition of land commenced prior to the Investment Approval. Further, the petitioner has approached the Deputy Commissioner, J&K Government, vide letter dated 19.3.2008 with the proposal for land acquisition. After follow up by the petitioner with the concerned authorities as evidenced by letter dated 24.7.2008, no objection statement was issued by the office of the Deputy Speaker, Legislative Assembly, J&K vide letter dated 5.3.2010. Subsequently, the land was awarded by the Additional Deputy Commissioner vide letter dated 19.9.2012. The petitioner, vide affidavit dated 11.12.2015, has submitted information in support of justification of delay in land acquisition. The delay in obtaining permission of land acquisition is controllable in nature, however, it is observed that the delay in this case is on account of processing by Government agencies, which is not directly attributable to the petitioner. It is further observed that disturbance caused due to increased militant activities, curfew situations and severe snowfall and rains during 2012-13 period were the additional factors responsible for the time over-run. We are of the view that the time over-run of 3 months in commissioning of the transmission asset is beyond the control of the petitioner and therefore it is condoned. Accordingly, IDC and IEDC for 3 months are capitalized.

Interest During Construction

17. The petitioner was directed to submit the details of IDC on cash basis paid up to COD. The petitioner has submitted the details of IDC discharged on cash



basis up to COD and thereafter on 11.12.2015. The details of IDC discharged up to COD and thereafter, as submitted by the petitioner, are as below:-

(₹ in lakh)

IDC discharged on cash basis	
IDC discharged up to COD 1.10.2013	614.91
Accrual IDC up to COD (discharged during 2013-14)	216.31
Accrual IDC up to COD (discharged during 2014-15)	58.92
Total IDC	890.14

The petitioner has further clarified that the accrued IDC discharged during 2013-14 is not included in the additional capital expenditure certified by the Auditor's Certificate dated 11.8.2014.

18. Based on the above submissions of the petitioner, IDC of ₹614.91 lakh up to COD is capitalised and ₹216.31 lakh has been considered as part of the additional capital expenditure during 2013-14.

Incidental Expenditure During Construction

19. The petitioner has claimed IEDC of ₹223.44 lakh as on COD. As discussed in para 17, the delay in the commissioning of the transmission assets is condoned and accordingly, the claim of IEDC has been considered in the capital cost of COD.

Initial Spares

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

Transmission line	0.75%
Sub-station	2.50%



21. The petitioner has claimed the initial spare of ₹243.20 lakh pertaining to sub-station and submitted Auditor's certificate dated 11.8.2014 in support of the claim. The petitioner has further submitted the details of liability discharged corresponding to the initial spares vide affidavit dated 18.2.2016 and has used the same in the claim of capital cost as on COD for the transmission assets. The petitioner has submitted the year-wise liability discharged in respect of the initial spares, as tabulated below:-

(₹ in lakh)

Liabilities discharged in respect of initial spares	Sub-Station
Up to COD and included in Auditor Certificate up to COD	4.84
Estimated for 2014-15 (Add Cap)	29.47
Estimated for 2015-16 (Add Cap)	208.89
Total	243.20

22. The cut off date in accordance with the 2009 Tariff Regulations falls beyond the 31.3.2014 which is not subjected to the scope of the 2009 Tariff Regulations. The capital cost and tariff for 2014-19 tariff period is yet to be determined by the Commission. Therefore, the admissible initial spares have been worked out by considering the capital cost upto 31.3.2014. Details of the excess initial spares up to 31.3.2014, worked out are as under:

(₹ in lakh)

Particulars	Formula	Asset
Capital cost as on cut-off date claimed by the petitioner	(a)	6717.26
Capital Cost restricted up to 31.3.2014 (including restriction of IDC)	(b)	5636.80
Initial Spares claimed (up to 31.3.2014)	(c)	4.84
Ceiling limit as per Regulation 8 of 2009 regulations	(e)	2.50%

Initial spares worked out	$(f) = ((b-) * e) / (100\% - e)$	144.41
Excess initial spares claimed up to 31.3.2014	(g)=(c)-(f)	0.00

The excess initial spares during 2014-19 period will be excluded from the capital cost and additional capitalization included by the petitioner.

23. Accordingly, the admitted capital cost on COD is as below:

(₹ in lakh)

Capital Cost	As per petitioner's claim	IDC discharged after COD up to 31.3.2014	As on COD 1.10.2013*
Land – Freehold	0.00	0.00	0.00
Land – Leasehold	2966.16	80.74	2885.42
Building Civil Works & Colony	539.86	14.70	525.16
Transmission Line	4627.61	125.97	4501.64
Sub Station	1757.51	47.84	1709.67
PLCC	219.49	5.97	213.52
Total	10110.63	275.23	9835.40

*incl. IDC= ₹614.91 lakh (₹890.14 lakh - ₹275.23 lakh), IEDC= ₹223.44 lakh
, initial spares = ₹4.84 lakh

Additional Capital Expenditure

24. Clause (1) of Regulation 9 of the 2009 Tariff Regulations provides as under:-

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

- (i) Undischarged liabilities;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital Spares within the original scope of work, subject to the provisions of Regulation 8;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
- (v) Change in Law:”

25. Further, clause (11) of Regulation 3 of the 2009 Tariff Regulations defines ‘cut-off’ date as under:-

“cut-off date” means 31st March of the year closing after 2 years of the year of commercial operation of the project, and in case the project is declared under

commercial operation in the last quarter of the year, the cut-off date shall be 31st March of the year closing after 3 years of the year of commercial operation”.

As per the above definition, the cut-off date in respect of the transmission assets is 31.3.2016.

26. The petitioner has claimed additional capital expenditure of ₹714.45 lakh for the period from COD to 31.3.2014. The additional capital expenditure claimed is towards balance and retention payments. Rajasthan Discoms have requested the petitioner to confirm if all the works included in the scope of work have been completed. In response to query of the Commission regarding balance and retention payments, the petitioner has submitted the details of all such payments done from COD to 31.3.2014.

27. The additional capital expenditure claimed is within the cut-off date and is on account of Balance/Retention payments, hence the same is allowed as mentioned below:-

(₹ in lakh)

Approved apportioned cost	Capital Cost as on COD	Additional Capital expenditure during 2013-14	Capital cost as on 31.3.2014
1208.74	9835.40	930.76 (714.45+275.23)	10766.16

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

Debt: Equity

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

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

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

.....

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

(3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”

30. The debt:equity ratio of 70:30 has been considered as on the date of commercial operation for determination of tariff in accordance with the Regulation 12 of the 2009 Tariff Regulations. The details of the debt:equity considered for the purpose of tariff for 2009-14 tariff period is as follows:-

(₹ in lakh)

Funding	Claimed		Admissible	
	As on COD	%	As on COD	%
Debt	7077.44	70.00	6884.78	70.00
Equity	3033.18	30.00	2950.62	30.00
Total	10110.63	100.00	9835.40	100.00

30. The normative debt:equity ratio of 70:30 has been considered for the estimated additional capitalization in accordance with the 2009 Tariff Regulations as under:-

(₹ in lakh)

Funding	As on COD	%	Additional capital expenditure during 2009-14	%	As on 31.3.2014	(%)
Debt	6884.78	70.00	651.53	70.00	7536.31	70.00
Equity	2950.62	30.00	279.23	30.00	3229.85	30.00
Total	9835.40	100.00	930.76	100.00	10766.16	100.00

Return on Equity (“ROE”)

31. 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:

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

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

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

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

32. Regulation 15 of the 2009 Tariff Regulations provides for grossing up of ROE with the actual tax rate for the purpose of ROE. The petitioner has prayed that it may be allowed to recover the shortfall or refund the excess due to change in MAT rate. The petitioner has submitted the MAT rate applicable during the various years of 2009-14 tariff period.

(₹ in lakh)

Return on Equity	2013-14 (pro-rata)
Opening Equity	2950.62
Additions	279.23
Closing Equity	3229.85
Average Equity	3090.23
Return on Equity (Base Rate) (%)	15.500
MAT Rate for respective year (%)	20.961
Rate of Return on Equity (%)	19.610
Return on Equity	303.00

Interest on Loan (“IoL”)

33. Clause (5) and (6) of Regulation 16 of the 2009 Tariff Regulations provide the methodology for working out weighted average rate of IoL as under:

“(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project:

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.”

34. The Rajasthan Discoms have requested that the actual rate of interest as on COD or at the time of filing the petition should be considered. The weighted average rate of IoL has been considered on the basis of actual loan portfolio and the rate of interest submitted by the petitioner. The IoL has been worked out in accordance with Regulation 16 of the 2009 Tariff Regulations. The details of weighted average rate of interest for 2009-14 tariff period are placed at Annexure-1 and the IoL has been worked out and allowed as follows:-

(₹ in lakh)

Interest on Loan	2013-14 (pro-rata)
Gross Normative Loan	6884.78
Cumulative Repayment upto Previous Year	0.00
Net Loan-Opening	6884.78
Additions	651.53
Repayment during the year	238.99
Net Loan-Closing	7297.32
Average Loan	7091.05
Weighted Average Rate of Interest on Loan (%)	8.9679
Interest on Loan	317.96

Depreciation

35. The depreciation has been worked out as per the methodology provided in the Regulation 17 of the 2009 Tariff Regulations provided as under

“Depreciation.

(1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.

(2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset. Provided that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site:

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciable value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff.

Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-III** 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 date of commercial operation shall be spread over the balance useful life of the assets.

(5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2009 from the gross depreciable value of the assets.

(6) 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.”

36. The depreciation has been worked out and allowed as follows:-

(₹ in lakh)

Depreciation	2013-14 (pro-rata)
Opening Gross Block	9835.40
Additional Capitalization	930.76
Closing Gross Block	10766.16

Depreciation	2013-14 (pro-rata)
Average Gross Block	10300.78
Freehold Land (Av. Cost)	4.64
Rate of Depreciation (%)	9270.70
Elapsed life	0
Balance Useful life of the asset	30
Remaining Depreciable Value	418.84
Depreciation during the year	238.99

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

37. Clause (g) of Regulation 19 of the 2009 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. Normative O&M Expenses in respect of the transmission assets covered in the instant petition are as under:-

Particulars	2013-14 (pro-rata)
(₹ in lakh)	
220 kV Bays:	
No. of Bays	4
Norms (₹ lakh/Bay)	45.82
400 kV Bays:	
No. of Bays	5
Norms (₹ lakh/Bay)	65.46
Transmission Line:	
D/C (Twin/Triple) (km)	4.376
Norms (₹ lakh/km)	0.78
Total O&M Expenses (₹ lakh)	257.00

38. The petitioner has submitted that O&M expenses for the period 2009-14 was arrived at on the basis of normalized actual O&M expenses during the period 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking has also been considered while calculating the O&M Expenses for the tariff period 2009-14. The petitioner has further submitted that it would approach the Commission for additional manpower cost on account of wage revision (if any) during the tariff block 2009-14 for claiming in the

tariff. The Rajasthan Discoms have submitted that higher O&M charges have been claimed by the petitioner than that prescribed by the Tariff Regulations.

39. While specifying the norms for the O & M Expenses, the Commission has in the 2009 Tariff Regulations, given effect to impact of pay revision by factoring 50% on account of pay revision of the employees of PSUs after extensive consultations with the stakeholders, as one time compensation for employee cost. We do not see any reason why the admissible amount is inadequate to meet the requirement of the employee cost. In this order, we have allowed O&M Expenses as per the existing norms.

Interest on Working Capital (“IWC”)

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

(₹ in lakh)	
Interest on Working Capital	2013-14 (pro-rata)
O & M expenses	42.83
Maintenance Spares	77.10
Receivables	383.39
Total	503.33
Rate of Interest (%)	13.20
Interest on Working Capital	33.22

APPROVED ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD

41. Based on the foregoing, the annual fixed charges for the transmission assets for the 2009-14 tariff period is summarised below:-

(₹ in lakh)	
Particulars	2013-14 (pro-rata)
Depreciation	
Opening Gross Block	9835.40
Additional Capitalisation	930.76

Closing Gross Block	10766.16
Average Gross Block	10300.78
Rate of Depreciation	4.64
Depreciable Value	9270.70
Balance Useful life of the asset	30
Elapsed Life	0
Remaining Depreciable Value	418.84
Depreciation during the year	238.99
Cumulative depreciation (incl. of AAD)	238.99
Interest on Loan	
Gross Normative Loan	6884.78
Cumulative Repayment upto Previous Year	0.00
Net Loan-Opening	6884.78
Additions	651.53
Repayment during the year	238.99
Net Loan-Closing	7297.32
Average Loan	7091.05
Weighted Average Rate of Interest on Loan (%)	8.9679
Interest on Loan	317.96
Return on Equity	
Opening Equity	2950.62
Additions	279.23
Closing Equity	3229.85
Average Equity	3090.23
Return on Equity (Base Rate)	15.500
MAT rate for the respective year	20.961
Rate of Return on Equity	19.610
Return on Equity	303.00
Interest on Working Capital	
O & M expenses	42.83
Maintenance Spares	77.10
Receivables	383.39
Total	503.33
Rate of Interest	13.20
Interest on Working Capital	33.22
Annual Transmission Charges	
Depreciation	238.99
Interest on Loan	317.96
Return on Equity	303.00
Interest on Working Capital	33.22
O & M Expenses	257.00
Total	1150.18

Filing Fee and the Publication Expenses

42. 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 42 of the 2009 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

43. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42A (1) (b) of the 2009 Tariff Regulations for 2009-14 tariff period. The petitioner shall also be entitled for recovery of RLDC fee & charges in accordance with Regulations 42A (1) (a) of the 2009 Tariff Regulations for 2009-14 tariff period.

Service Tax

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

Sharing of Transmission Charges

45. 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.

46. This order disposes of Petition No. 34/TT/2013.

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

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



CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST

(₹ in lakh)

Particulars	Interest Rate (%)	Loan deployed as on COD	Additions during the tariff period	Total
BOND XXXI-DOCO-	8.90	450.00	0.00	450.00
BOND XXXIII-DOCO DRAWL ON 01-OCT-2013-	8.64	200.00	0.00	200.00
BOND-XXXIV-DOCO DRAWL ON 01-OCT-2013-	8.84	600.00	0.00	600.00
BOND-XXXV-DOCO DRAWL ON 01-OCT-2013-	9.64	150.00	0.00	150.00
BOND XXXVI-DOCO DRAWL ON 01-OCT-2013-	9.35	500.00	0.00	500.00
BOND XXXVII-DOCO DRAWL ON 01-OCT-2013-	9.25	500.00	0.00	500.00
BOND XXXVIII-DOCO DRAWL ON 01-OCT-2013-	9.25	500.00	0.00	500.00
BOND XXXIX-DOCO DRAWL ON 01-OCT-2013-	9.40	425.00	0.00	425.00
BOND XL-DOCO DRAWL ON 01-OCT-2013-	9.30	875.00	0.00	875.00
BOND - XLI-DOCO DRAWL ON 01-OCT-2013-	8.85	400.00	0.00	400.00
BOND - XLII-DOCO-	8.80	550.00	0.00	550.00
BOND - XLIII-ADDCAP FOR 2013-2014 ADDCAP-	7.93	0.00	398.56	398.56
BOND - XLIV-ADDCAP FOR 2013-2014 ADDCAP-	8.70	0.00	101.56	101.56
BOND - XLIV-DOCO-	8.70	1927.44	0.00	1927.44
Total		7077.44	500.12	7577.56

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

(₹ in lakh)

Particulars	2013-14
Gross Opening Loan	7077.44
Cumulative Repayments of Loans upto Previous Year	0.00
Net Loans Opening	7077.44
Add: Draw(s) during the Year	500.12
Less: Repayments of Loan during the year	37.50
Net Closing Loan	7540.06
Average Net Loan	7308.75
Rate of Interest on Loan (%)	8.9679%
Interest on Loan	655.44