CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 31/TT/2014

Coram:

Shri Gireesh B. Pradhan, Chairperson
Shri A.K. Singhal, Member
Shri A.S. Bakshi, Member

Date of Hearing : 16.04.2015
Date of Order : 15.10.2015

In the matter of:

Approval of transmission tariff for two nos. of 63 MVAR 400 kV Line Reactor at 400 kV Balia (PG) Sub-station (Extension) (actual DOCO: 1.2.2014) under Northern Region System Strengthening Scheme-XXIV (NRSS-XXIV) in Northern Region for tariff block 2009-14 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 Limited,
"Saudamini", Plot No.2,
Sector-29, Gurgaon -122 001 **………Petitioner**

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
   Vidyut Bhawan, Vidyut Marg,
   Jaipur- 302 005

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 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 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-110 002

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 66/11kV Pitampura-3,
    Grid Building, Near PP Jewellers,
    Pitampura, New Delhi-110 034

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,
    Palika Kendra, Sansad Marg,
    New Delhi-110 002 **.....Respondents**

For petitioner : Shri S.K. Venkatesan, PGCIL
Shri M.M. Mondal, PGCIL
Ms. Sangeeta Edwards, PGCIL
Shri S.S Raju, PGCIL
Shri Upender Pande, PGCIL

For respondent : None

ORDER

This petition has been filed by Power Grid Corporation of India Limited (PGCIL) for approval of the transmission charges of two nos. of 63 MVAR 400 kV Line Reactor at 400 kV Balia (PG) Sub-station (Extension) (hereinafter referred to as “transmission asset”) under Northern Region System Strengthening Scheme-XXIV (NRSS-XXIV) in Northern Region from the date of commercial operation to 31.3.2014 for tariff block 2009-14 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations’ 2009 (hereinafter referred to as the “2009 Tariff Regulations").

2. The Investment Approval (IA) of the project was accorded by the Board of Directors of PGCIL vide memorandum ref. C/CP/NRSS-XXIV dated 21.11.2011 at an estimated cost of ₹72363 lakh including IDC of ₹4269 lakh (based on 2nd quarter, 2011 price level). The project was scheduled to be commissioned within 36 months from the date of IA by 20.11.2014 i.e. 1.12.2014. The scope of project broadly includes:-

Transmission Lines:

a) Dehradun-Abdullapur 400 kV D/C Quad Line

b) Dulhasti-Kishenpur 400 kV D/C Quad Line-single circuit strung

Sub-stations:

a) Extension of 400/220 kV Sub-station at Dehradun, Abdullapur and Kishenpur

b) Extension of Balia 400/220 kV Sub-station-2x63 MVAR, 400 kV line reactors on Barh-Balia 400 kV D/C line (one on each circuit)

Note: One spare 400 kV Bay at Dulhasti HEP switchyard of NHPC to be used for termination of the line at Dulhasti end.

3. The instant petition covers the following assets:-

(a) Two nos. of 63 MVAR 400 kV line Reactor at 400 kV at Balia (PG) Sub-station (Extension)

4. The provisional tariff was granted vide order dated 13.5.2014 under Regulation 5(4) of the 2009 Tariff Regulations subject to adjustment as provided under Regulation 5(3) of the 2009 Tariff Regulations.

5. This order has been issued after considering the petitioner's affidavits dated 7.3.2014, 27.6.2014, 29.10.2014 and 19.6.2015.

6. The transmission charges claimed by the petitioner are as follows:-

(₹ in lakh)

Particulars	**2013-14 (pro-rata)**
Depreciation	9.03
Interest on Loan	10.52
Return on Equity	10.06
Interest on working capital	0.67
O & M Expenses	-
Total	**30.28**

7. The details submitted by the petitioner in support of its claim for interest on working capital are as overleaf:-

(₹ in lakh)

Particulars	2013-14 (pro-rata)
Maintenance Spares	-
O & M Expenses	-
Receivables	30.28
Total	**30.28**
Rate of Interest	13.20%
Interest	**0.67**

8. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the Electricity Act. Punjab State Power Corporation Limited (PSPCL), Respondent No. 6 and Uttar Pradesh Power Corporation Limited (UPPCL), Respondent No. 9 have both filed replies vide separate affidavits dated 14.3.2014. The petitioner has filed rejoinder dated 19.6.2015 to the reply of UPPCL. The petitioner has not filed rejoinder to the reply of PSPCL. The respondents have raised the issue of cost over-run, COD, rate of interest, cost variation, O&M Expenses, licence fee and service tax. The objections raised by the respondents and the clarifications given by the petitioner are addressed in the relevant paragraphs of this order.

9. Having heard the representatives of the parties and perused the material on record we proceed to dispose of the petition.

Capital Cost

10. Regulation 7 of the 2009 Tariff Regulations provides 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 petitioner initially submitted the capital cost incurred and capital cost projected to be incurred as per the anticipated date of commercial operation, in the petition. PSPCL submitted that the petitioner has filed the petition on the basis of anticipated COD and the petitioner may supply copy of COD letter/certificate and inform the actual COD. Subsequently, during the pendency of the petition, the petitioner vide affidavit dated 7.3.2014 confirmed the actual COD of the instant assets to be the same as filed originally as anticipated COD i.e.1.2.2014.

12. The details of apportioned approved cost, capital cost as on the date of commercial operation and estimated additional capital expenditure incurred or projected to be incurred during 2013-14, 2014-15 and 2015-16 along with estimated completion cost for the instant asset covered in petition was submitted by the petitioner vide affidavit dated 19.6.2015, on the basis of the Auditors' certificate dated 4.6.2015. The same is considered for the purpose of computation

of tariff and the details are as hereunder:-

(₹ in lakh)

Approved apportioned cost	Expenditure as on COD	Additional capital expenditure			Estimated completion cost
		COD to 31.3.2014	2014-15	2015-16	
962.29	994.82	62.38	83.37	153.23	1293.81

Cost over-run/variation

13. The estimated completion cost of the instant asset as on 31.3.2014 exceeds the apportioned approved cost. Hence, there is cost over-run in the case of instant asset.

14. PSPCL has submitted that the cost of switchgear is ₹215.15 lakh i.e. in excess by ₹191.03 lakh, compared to approved cost of ₹24.12 lakh and as the reactors are non switchable line reactors with no circuit breaker the increase in cost of switchgear is not justified. Therefore, the overall cost escalation is not justifiable. PSPCL further submitted that the approval of the Board of the petitioner is for line reactors for Barh-Balia line which was LILO at Patna. Thus, the reactors at Balia are for Balia-Patna lines which are of shorter length than Barh-Balia. As such, the petitioner may submit the revised approval for Balia-Patna line reactors. UPPCL submitted that there is cost over-run of ₹202.07 lakh due to high cost obtained in bidding and cost of switchgear and compensating equipment have registered a rise of 791.99% and 18.36% respectively and the petitioner be directed to submit detailed reasons of the same. However, it is observed that objection raised UPPCL is on the basis of anticipated completion cost. The petitioner has submitted the revised cost in Form-5B as per management certificate on the basis of actual COD.

15. The petitioner was directed vide letter dated 24.4.2014 to submit details of additional capital expenditure during 2013-14, date for capital cost benchmarking, status of other assets covered in the approved project and to explain the difference between actual award rate and FR cost of various items e.g. switchgear, compensating equipment (reactor, SVCs etc.), control relay and protection panel, power control cable, overheads in the nature of IDC/IEDC and FC. The petitioner was also directed to clarify why the Investment Approval was issued after 20 months of reaching consensus for installation of line reactors in the 28th SCM held on 9.3.2010. As the line reactors were effectively commissioned after three and a half years of commissioning of the line, the petitioner was directed to explain the effect of the absence of line reactors on system performance with line loading details.

16. The petitioner vide affidavit dated 27.6.2014 submitted as under:-

a. Add Cap incurred in F/Y 2013-14 is on account of balance and retention payment for supply and erection of reactor and sub-station equipment.

b. The Benchmarking format shall be furnished after commissioning of all the assets in NRSS XXIV.
c. The other assets covered under the scope of the approved project are yet to be commissioned.

d. No expenditure has been incurred on miscellaneous civil works and Bus bar/conductors/insulators as the instant asset is the extension of existing 400 kV sub-station.

e. Reason of difference in actual award rate and FR Cost is due to higher bid price and IEDC/IDC are as per actual.

f. Two line reactors of 63 MVAR at Balia end were agreed in 28th Standing Committee meeting dated 9.3.2010 and subsequently in 15th TCC meeting and 16th meeting of Northern Regional Power Committee meeting dated 4.5.2010. The commissioning of the instant asset was agreed under the NRSS-XXIV project. The 400 kV D/C Quad line i.e. Dulhasti-Kishenpur, which is a part of NRSS-XXIV, was conceived and agreed to be strung on single circuit. This was the first time that such a design was to be implemented due to which the DPR took some time to be finalised and initial activities for finalisation of land in Dehradun took considerable time due to forest issue. In view of this Investment Approval was accorded on 21.11.2011.

g. The line reactor at Balia end was approved in the 28th standing committee meeting dated 9.3.2010 and it was discussed that due to change in the line length of 400 kV Barh-Balia line from 190 km to 250 km. As per detailed survey these reactors were agreed which was not envisaged earlier. It was further decided that the same will be covered under on-going transmission schemes and accordingly the commissioning of these line reactors at Balia end was covered under NRSS-XXIV and the instant asset has been commissioned accordingly.

17. We have considered the submissions of the PSPCL, UPPCL and petitioner. The petitioner has not furnished the RCE for the instant asset covered in the instant petition. Accordingly, the capital cost of the instant asset is restricted to the apportioned approved cost of ₹962.29 lakh. This approach has been upheld by the Appellate Tribunal for Electricity in its order dated 28.11.2013 in Appeal No. 165 of 2012, and subsequently the Commission, vide its order dated 18.2.2014 in Petition No. 216/TT/2012, has considered the apportioned approved cost of individual asset for restricting the capital expenditure due to cost over-run for the purpose of tariff determination. The same approach has been adopted in the present case and capital expenditure has been restricted to apportioned approved cost in respect of the instant asset. However, the capital cost in case of the instant asset shall be reviewed at the time of truing-up, subject to the petitioner filing the RCE and justification for cost over-run. Further, there is variation in cost of certain items also. As regards cost variations, though the petitioner has stated to have taken various steps to make the cost estimates realistic earlier in many other petitions, in actuality there continues to be wide variation between the FR cost and the actual cost. We are of the view that the petitioner should analyze the reasons for such huge variations and come out with the methodologies or

procedure for preparation of cost estimates which are realistic and do not vary widely from the actual expenditure. Further, the petitioner is directed to submit in future, in all petitions the project details on the basis of which FR cost estimates in respect of the asset covered in the petition were prepared and actual cost along with reasons/justification for variation, if any.

Time Over-run

18. The commissioning schedule of the project is 36 months from the date of IA i.e. 21.11.2011 and the scheduled COD works out to 20.11.2014 i.e. 1.12.2014. The instant asset was commissioned on 1.2.2014. Thus, there is no time over-run in case of instant asset.

Treatment of IDC/IEDC

19. The petitioner was directed to submit the computation of the IDC on cash basis and details of IEDC capitalised up to COD. The petitioner vide affidavit dated 19.6.2015, submitted that the amount of total IDC of ₹60.51 lakh, claimed has been discharged as on COD and there is no un-discharged liability in respect of IDC. Hence, the amount of IDC as claimed has been allowed for the transmission tariff in the instant petition. The petitioner further submitted that the total IEDC of ₹36.34 lakh claimed has been discharged as on COD and there is no un-discharged liability in respect of IEDC also. Hence, the IEDC as claimed by the petitioner has been allowed as on COD and the same has been considered for the purpose of determination of transmission tariff in the instant petition.

Initial Spares

20. The petitioner has claimed the cost of the initial spares for sub-station. It is noted that initials spares claimed by the petitioner exceed the ceiling limit specified in Regulation 8 of the 2009 Tariff Regulations. The details of initial spares claimed by the petitioner are as follows:-

(₹ in lakh)

Particulars	Capital Cost Claimed as on Cut-off date (31.3.2014)	Initial Spares Claimed as on Cut-off date	Capital Cost after adjusting IDC/IEDC as on Cut-off date (31.3.2014)	Proportionate claim of Initial Spares against the adjusted capital cost as on cut-off date (31.3.2014)	Ceiling Limit as per the 2009 Tariff Regulations,	Initial Spares	
						Allowed	Excess claimed
Sub-Station (Excluding T/L)	1057.20	45.60	1057.20	45.60	2.50%	25.94	19.66

21. The details of capital cost as on the date of commercial operation after taking into account the capitalization of IDC, IEDC and cost of initial spares is given below. The same has been considered for the purpose of determination of transmission tariff but the capital cost has been limited to the apportioned approved cost as discussed at para-17 above:-

(₹ in lakh)

Particulars	Capital cost		Excess initial spares	Capital cost	
	claimed upto COD as per auditors' certificate dated 4.6.2015	Allowed after considering IDC/IEDC as on COD		As on COD after adjusting Excess initial spares	Allowed for tariff
Freehold land	-	-	-	-	-
Leasehold land	-	-	-	-	-
Building and Civil works	-	-	-	-	-
Transmission Line	-	-	-	-	-
Sub-Station Equipments	994.82	994.82	19.66	975.16	962.29
PLCC	-	-	-	-	-
Total capital cost	**994.82**	**994.82**	**19.66**	**975.16**	**962.29**

Projected Additional Capital Expenditure

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

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

23. 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".

24. Therefore, the cut-off date for the instant assets is 31.3.2017.

25. The petitioner has submitted that the admissibility of additional capital expenditure incurred after the date of commercial operation is to be dealt in accordance with the provisions of Regulation 9 (1) of the 2009 Tariff Regulations. The additional capital expenditure incurred and projected to be incurred for the transmission assets during 2013-14, 2014-15 and 2015-16 is on account of Balance/Retention payments.

26. We have considered the submissions made by the petitioner. Though, the additional capital expenditure for 2013-14 claimed by the petitioner is within the

cut-off date, it is not allowed in terms of Regulation 9 (1) (i) of the 2009 Tariff Regulations as the total estimated completion cost of the instant asset exceeds the apportioned approved cost as discussed at para-17. Accordingly, the projected additional capital expenditure during 2013-14 has not been considered. The projected additional capital expenditure for the year 2013-14 shall be reviewed at the time of truing up on the submission of the actual additional capital expenditure along with RCE, if any. Further, the projected additional capital expenditure for the years 2014-15 and 2015-16 falls in the new tariff period 2014-19 and as such shall be dealt with as per the provisions of the 2014 Tariff Regulations.

Debt- Equity Ratio

27. 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:
> Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.
>
> **Explanation-** The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.
>
> (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."

28. The petitioner has claimed debt-equity as on date of commercial operation of the asset and additional capital expenditure in the ratio of 70:30, which is in accordance with the above said Regulation. The debt-equity ratio of 70:30 has been considered for the purpose of calculation of tariff. The debt-equity on account of restriction due to cost over-run as on COD and 31.3.2014 is same as given hereunder:-

Particulars	Amount (₹ in lakh)	% age
Debt	673.61	70.00
Equity	288.68	30.00
Total	**962.29**	**100.00**

Return on Equity

29. Regulation 15 of the 2009 Tariff Regulations provides as under:-

"15. (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.

(2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% for thermal generating stations, transmission system and run of the river generating station, and 16.5% for the storage type generating stations including pumped storage hydro generating stations and run of river generating station with pondage and shall be grossed up as per clause (3) of this regulation:

Provided that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in **Appendix-II**:

Provided further that the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever.

(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 financial year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations".

30. The petitioner's request to allow to recover the shortfall or refund the excess Annual Fixed Charges, 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, shall be settled in accordance with the provisions of Regulation 15 of the 2009 Tariff Regulations. We would like to clarify that the RoE has been computed @ 19.611% p.a based on the tax rate (MAT) for the year 2013-14 on average equity as per Regulation 15(5) of the 2009 Tariff Regulations. The details are as under:-

(₹ in lakh)

Particulars	**2013-14 (pro-rata)**
Opening Equity	288.69
Addition due to Additional Capitalization	-
Closing Equity	288.69
Average Equity	288.69
Return on Equity (Base Rate)	**15.50%**
Tax rate for the year 2013-14 (MAT)	20.96%
Rate of Return on Equity (Pre Tax)	19.611%
Return on Equity (Pre Tax)	**9.44**

31. The petitioner has submitted that additional return on equity of 0.5% for commissioning the assets within the timelines specified in Appendix-II of the 2009

Tariff Regulations has not been claimed at this stage as the other assets under the approved project are yet to be commissioned. The petitioner has submitted that the same shall be claimed at the truing-up petition, if applicable. Accordingly, additional return on equity has not been considered at present.

Interest on Loan

32. Regulation 16 of the 2009 Tariff Regulations provides as under:-

> "16. **Interest on loan capital** (1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.
>
> (2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.
>
> (3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year:
>
> (4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.
>
> (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.
>
> (7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.
>
> (8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute:

Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan."

33. In keeping with the provisions of Regulation 16 of the 2009 Tariff Regulations, the petitioner's entitlement to interest on loan has been calculated on the following basis:-

(a) Gross amount of loan, repayment of instalments and rate of interest and weighted average rate of interest on actual average loan have been considered as per the affidavit dated 19.6.2015;

(b) The yearly repayment for the tariff period 2009-14 has been considered to be equal to the depreciation allowed for that period.

(c) Weighted average rate of interest on actual average loan worked out as per (a) above is applied on the notional average loan during the year to arrive at the interest on loan.

34. The petitioner has submitted that the interest on loan has been considered on the basis of rate prevailing as on COD and the change in interest due to floating rate of interest applicable, if any, for the project needs to be claimed/ adjusted over the tariff block 2009-14. UPPCL submitted that there appears to be no cause for allowing floating rate of interest as it entails avoidable element of risk of increase in the rate of interest to which consumers may be exposed and instead the petitioner may adopt swapping of loans in the interest of consumers as provided in the 2009 Tariff Regulations. We would like to clarify that the interest on loan has been calculated on the basis of rate prevailing as on the date

of commercial operation. Any change in rate of interest subsequent to the date of commercial operation will be considered at the time of truing up.

35. Detailed calculations in support of the weighted average rates of interest have been given in the Annexure.

36. Based on the above, interest on loan has been calculated as given hereunder:-

(₹ in lakh)

Particulars	2013-14 (pro-rata)
Gross Normative Loan	673.60
Cumulative Repayment upto Previous Yr	-
Net Loan-Opening	673.60
Addition due to Additional Capitalisation	-
Repayment during the year	8.47
Net Loan-Closing	665.13
Average Loan	669.37
Weighted Avg. Rate of Interest on Loan	8.8442%
Interest	**9.87**

Depreciation

37. Regulation 17 of the 2009 Tariff Regulations provides as follows:-

"17. **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.

(3) 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.

(4) 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 up to 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."

38. The petitioner has claimed actual depreciation as a component of Annual Fixed Charges. The instant transmission asset was put under commercial operation during 2013-14. Accordingly, the instant asset will complete 12 years beyond 2013-14. Thus, depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix-III of the 2009 Tariff Regulations, as per the following details:-

(₹ in lakh)

Particulars	**2013-14 (pro-rata)**
Opening Gross Block	962.29
Additional Capital Expenditure	-
Closing Gross Block	962.29
Average Gross Block	962.29
Rate of Depreciation	5.2800%
Depreciable Value	866.06
Remaining Depreciable Value	866.06
Depreciation	**8.47**

Operation & Maintenance Expenses (O&M Expenses)

39. The petitioner has not claimed O & M expenses as the line reactors are not switchable reactors and as such no O & M expenses are allowed in the instant petition.

Interest on Working Capital

40. The petitioner is entitled to claim interest on working capital as per the 2009 Tariff Regulations. The components of the working capital and the petitioner's entitlement to interest thereon are discussed hereunder:-

(i) Receivables

As per Regulation 18(1) (c) (i) of the 2009 Tariff Regulations, receivables as a component of working capital will be equivalent to two months of fixed cost. The petitioner has claimed the receivables on the basis of 2 months of annual transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis of 2 months transmission charges.

(ii) Maintenance Spares

Regulation 18 (1) (c) (ii) of the 2009 Tariff Regulations provides for maintenance spares @ 15% per annum of the O & M Expenses as part of the working capital from 1.4.2009. No O & M expenses have been claimed, accordingly the value of maintenance spares been worked out to be NIL.

(iii) O & M Expenses

Regulation 18(1) (c) (iii) of the 2009 Tariff Regulations provides for O&M Expenses for one month to be included in the working capital. The petitioner has not claimed O&M expenses. As such, no O & M expenses have been considered in the working capital.

(iv) Rate of Interest on Working Capital

In accordance with clause (3) of Regulation 18 of the 2009 Tariff Regulations, as amended, rate of interest on working capital shall be on normative basis and shall be equal to State Bank of India Base Rate @ 13.20% (Base rate of 9.70% as on 1.4.2013 and 350 basis points) for the instant asset. The interest on working capital for the asset covered in the instant petition has been worked out accordingly.

41. Necessary computations in support of interest on working capital are given hereunder:-

(₹ in lakh)

Particulars	**2013-14 (pro-rata)**
Maintenance Spares	-
O & M Expenses	-
Receivables	28.40
Total	**28.40**
Interest	**0.62**

Transmission Charges

42. The transmission charges allowed for the instant asset are as under:-

(₹ in lakh)

Particulars	**2013-14 (Pro-rata)**
Depreciation	8.47
Interest on Loan	9.87
Return on Equity	9.44
Interest on Working Capital	0.62
O & M Expenses	-
Total	**28.40**

Filing Fee and the Publication Expenses

43. 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

44. The petitioner has submitted that in O&M norms for tariff block 2009-14, the cost associated with license fees had not been captured and the license fee may be allowed to be recovered separately from the respondents. UPPCL has raised certain objections regarding the petitioner’s request for reimbursement for licence fee. The petitioner has clarified that the licence fee is a new component of cost to the transmission licence under O&M stage of the project and has become incidental to the petitioner only from 2008-09. We would like to clarify that the petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42A (1) (b) of the 2009 Tariff Regulations.

Service Tax

45. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if it is subjected to such service tax in future. UPPCL has objected to recovery of service tax from the beneficiaries in future, as matter is pending before the Hon'ble Supreme Court. The petitioner clarified that service tax on transmission has been put on negative list w.e.f. 1.4.2012 and therefore the transmission charges, is exclusive of service tax and shall be born and additionally paid by the

respondents. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

Sharing of Transmission Charges

46. 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.

47. This order disposes of Petition No. 31/TT/2014.

sd/-	sd/-	sd/-
(A.S. Bakshi)	**(A.K. Singhal)**	**(Gireesh B. Pradhan)**
Member	**Member**	**Chairperson**

Annexure

(₹ in lakh)

	CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN	
	Details of Loan	**2013-14**
1	**Bond XXXIX**	
	Gross loan opening	29.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	29.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	29.00
	Average Loan	29.00
	Rate of Interest	9.40%
	Interest	2.73
	Rep Schedule	Bullet Payment as on 29.03.2027
2	**Bond XLIII (Add. Cap 2013-14)**	
	Gross loan opening	0.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	43.67
	Repayment during the year	0.00
	Net Loan-Closing	43.67
	Average Loan	21.84
	Rate of Interest	7.93%
	Interest	1.73
	Rep Schedule	12 annual instalments from 20.05.2017
3	**Bond XLI**	
	Gross loan opening	667.37
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	667.37
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	667.37
	Average Loan	667.37
	Rate of Interest	8.85%
	Interest	59.06
	Rep Schedule	12 annual instalments from 19.10.2016
	Total Loan	
	Gross loan opening	696.37
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	696.37
	Additions during the year	43.67
	Repayment during the year	0.00
	Net Loan-Closing	740.04
	Average Loan	718.21
	Rate of Interest	**8.8442%**
	Interest	**63.52**