CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 93/TT/2012

Coram:

Shri Gireesh B. Pradhan, Chairperson
Shri M. Deena Dayalan, Member
Shri A.K. Singhal, Member

Date of Hearing : 19.11.2013
Date of Order : 19.08.2014

In the matter of:

Approval under Regulation-86 of Central Electricity Regulatory Commission (conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Condition) Regulations, 2009 of Transmission Tariff of 420 kV, 80 MVAR, Bus Reactor at Kishenpur S/S along with bays associated with URI-2 Transmission System for tariff block 2009-14 period in Northern Region

And in the matter of:

Power Grid Corporation of India Limited
"Saudamani", Plot No.2,
Sector-29, Gurgaon -122 001 ………**Petitioner**

Vs

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

2. Ajmer Vidyut Vitran Nigam Ltd.,
   400 kV GSS Building (Ground Floor), Ajmer Road,
   Heerapura, Jaipur

3. Jaipur Vidyut Vitran Nigam Ltd.,
   400 kV GSS Building (Ground Floor), Ajmer Road,
   Heerapura, Jaipur

4. Jodhpur Vidyut Vitran Nigam Ltd.,
   400 kV GSS Building (Ground Floor), Ajmer Road,
   Heerapura, Jaipur

5. Himachal Pradesh State Electricity Board,
   Vidyut Bhawan, Kumar House Complex Building II,
   Shimla-171 004

6. Punjab State Electricity Board,
   The Mall, Patiala-147 001.

7. Haryana Power Purchase Centre,
   Shakti Bhawan, Sector-6,
   Panchkula (Haryana)-134 109

8. Power Development Department,
   Govt. of Jammu and Kashmir,
   Mini Secretariat, Jammu

9. Uttar Pradesh Power Corporation Ltd.,
   Shakti Bhawan, 14, Ashok Marg,
   Lucknow-226 001

10. Delhi Transco Ltd.,
    Shakti Sadan, Kotla Road,
    New Delhi-110 002

11. BSES Yamuna Power Ltd.,
    Shakti Kiran Building, Karkardooma,
    Delhi-110 092

12. BSES Rajdhani Power Ltd.,
    BSES Bhawan, Nehru Place,
    New Delhi

13. North Delhi Power Ltd.,
    Power Trading & Load Dispatch Group,
    Cennet Building, Adjacent to 66/11kV Pitampura-3,
    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**

For Petitioner	:	Shri B.K. Sahoo, PGCIL Shri A. M. Pavgi, PGCIL Ms. Sangeeta Edwards, PGCIL Shri S.S Raju, PGCIL
For Respondents	:	Shri R.B. Sharma, Advocate, BRPL Sanjay Srivastav, BRPL Shri Padamjit Singh, PSPCL

ORDER

This petition has been filed by Power Grid Corporation of India Limited (PGCIL) for approval of the transmission charges for of 420 kV, 80 MVAR**,** Bus Reactor at Kishenpur Sub-station along with bays associated with URI-2 Transmission System (hereinafter referred to as "transmission assets"), for the tariff block 2009-14, in terms of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations").

2. The Investment approval to the transmission project was accorded by Board of Directors of the petitioner company vide letter dated 27.10.2006 at an estimated cost of ₹23825 lakh, including IDC of ₹2085 lakh (based on 2nd Quarter, 2006 price level). Further, approval for Revised Cost Estimate (RCE) of the project has been approved vide letter dated 24.9.2012 for ₹27467 lakh, including the IDC of ₹3347 lakh (based on April, 2012 price level).

3. The scope of work covered under the scheme as per approval for RCE is as follows:-

Transmission Lines

1. Uri I- Uri II 400 kV S/C line -14 Km
2. Uri-II-Wagoora 400 kV S/C line -108 Km

Sub Stations

1. One 400 kV GIS bay at Uri I Generation Switchyard (NHPC)*
2. Extension of Wagoora-400/220 kV Sub-station
3. 80 MVAR Bus Reactor at Kishenpur 400/220 kV Sub-station (originally envisaged at Wagoora)

* Work associated with the bay is to be implemented by NHPC on behalf of PGCIL

4. The petitioner has submitted Management Certificate, dated 11.11.2013, vide affidavit dated 12.11.2013, for the expenditure based on actual date of commercial operation of the asset, i.e. 1.6.2012.

5. The instant petition covers determination of tariff based on actual expenditure incurred for the asset up to 31.3.2013 and estimated additional capital expenditure projected to be incurred during the period from 1.4.2013 to 31.3.2014 based on Management certificate dated 11.11.2012 vide affidavit dated 12.11.2013.

6. Provisional tariff in respect of the above mentioned asset was approved by the Commission vide its order dated 29.3.2012, subject to adjustment as per

Regulation 5 (4) of the 2009 Tariff Regulations.

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

(₹ in lakh)

Particulars	2012-13	2013-14
Depreciation	29.33	40.56
Interest on Loan	33.81	43.84
Return on Equity	29.13	40.29
Interest on working capital	2.12	2.87
O & M Expenses	0.00	0.00
Total	94.39	127.56

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

(₹ in lakh)

Particulars	2012-13	2013-14
Maintenance Spares	0.00	0.00
O & M Expenses	0.00	0.00
Receivables	18.88	21.26
Total	18.88	21.26
Rate of Interest	13.50%	13.50%
Interest	2.12	2.87

9. 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. Ajmer Vidyut Vitran Nigam Ltd. (AVVNL), Respondent No. 2, Jaipur Vidyut Vitran Nigam Ltd. (JVVNL), Respondent No. 3, and, Jodhpur Vidyut Vitran Nigam Ltd (Jd. VVNL), Respondent No. 4, have filed their respective replies vide affidavits dated 3.5.2012. Punjab State Power Corporation Limited. (PSPCL), Respondent No. 6, has filed reply vide affidavit dated 18.11.2013. Uttar Pradesh Power Corporation Ltd. (UPPCL), Respondent No. 9, has filed its reply

vide affidavit dated 28.11.2013 and BSES Rajdhani Power Ltd (BRPL), Respondent No. 12, has filed its reply vide affidavit dated 28.11.2013. The Rejoinders to the replies of UPPCL, and BRPL, have been filed by the petitioner vide affidavits dated 15.1.2014 and 20.1.2014 respectively. PGCIL has also filed rejoinder to the replies of AVVNL, and PSPCL vide separate affidavits dated 22.1.2014. The objections raised by the respondents in their replies and the clarifications given by the petitioner in its rejoinder are addressed in the relevant paragraphs of this order.

10. We have heard the representatives of the parties present at the hearing and have perused the material on record. We proceed to dispose of the petition. While doing so, the submissions of the respondent shall be duly taken note of.

Capital cost

11. Regulation 7 of the 2009 Tariff Regulations so far as relevant 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."

12. Apportioned approved cost, actual expenditure incurred as on date of commercial operation and additional capital expenditure incurred/projected to be incurred for the period from 1.6.2012 (date of commercial operation) to 31.3.2014 for the asset covered in the petition is as per details given hereunder:-

(₹ in lakh)

Apportioned / approved cost	Expenditure up to DOCO (1.6.2012)	Projected expenditure from 1.6.2012 to 31.3.2013	Projected expenditure 2013-14	Total estimated completion cost
894.23	656.46	20.19	183.23	859.88

Time over-run

13. As per the investment approval dated 27.10.2006, the asset was to be commissioned within 48 months from the date of issue of first letter of award (14.5.2007), i.e. by 1.6.2011. The asset has been commissioned on 1.6.2012, after a delay of 12 months.

14. The petitioner has submitted vide affidavit dated 8.8.2013 that the delay in the commissioning of Bus Reactor was due to change in location. Bus Reactor was initially to be commissioned at Wagoora Sub-station. A new Sub-station at New Wanpoh along with the LILO Kishenpur- Wagoora 400 kV D/C line at New Wanpoh was in the meanwhile agreed under NRSS-XVI in the 23rd Standing Committee meeting of Northern Region transmission planning held on 16.2.2008. The Line length of Kishenpur -Wagoora is 185 km and 50 MVAR line reactors is existing on each circuit of Kishenpur- Wagoora 400kV D/C line at Wagoora end. After LILO, the line length of New Wanpoh-Wagoora line section would become around 65 km. The reactive compensation under URI-II and NRSS-XVI was reviewed and 80 MVAR Bus Reactor at Wagoora was shifted to Kishenpur. Thus, the scheme was amended in coordination with CEA, for installation of Bus Reactor at Kishenpur. The Board of Directors of PGCIL on 24.9.2012 accorded approval for Revised Cost Estimate of URI-II HEP Transmission system. Accordingly, the scheme was amended for installation of Bus Reactor at Kishenpur.

15. The petitioner has further submitted that, after change of scheme, the main contractor was asked to install Bus Reactor at Kishenpur. Since the installation of Bus Reactor at Kishenpur was beyond the original scope of award, after a lot of persuasion, contractor agreed for supplying material to Kishenpur but at an abnormally high rate for execution of work at Kishenpur. A lot of discussion was held for settlement of rates but no resolution was reached. In view of this it was

decided to carry out the work through open tender. The petitioner finally awarded the works through open tender to other party at the rate lower than rates quoted by the main contractor. Through this process cost is saved but this tendering process took its time and this led to delay in the commissioning of Bus Reactor at Kishenpur. The delay was beyond the control of the petitioner, and may be condoned.

16 AVVNL, JVVNL, Jd.VVNL, PSPCL, UPPCL and BRPL have raised the issue of time over-run on account of shifting of 80 MVAR Reactor from Wagoora to Kishenpur Sub-station and asked for minutes of the meeting of CEA Standing Committee, wherein decision was to relocate the Bus Reactor at Kishenpur. The petitioner has clarified that scope of work under the Revised Cost Estimate (RCE) includes location of bus reactor at Kishenpur (originally envisaged at Wagoora).

17 We have considered the submissions of the petitioner. The reason for delay submitted by the petitioner is not convincing. The petitioner has claimed that delay occurred due to change in location of bus reactor from Wagoora to Kishenpur for which main vendor did not agree. The original contractor, M/S Tata Projects Ltd., who was to supply and execute the works at Wagoora, did not agree to execute the work at Kishenpur. It only agreed to supply reactor at Kishenpur but asked abnormally high rate for its erection at Kishenpur. The work was for supply and commissioning of reactor at Wagoora but the vendor only

supplied the reactor at Kishenpur, which is at a shorter distance than Wagoora. No details of recovery from the original vendor, if any, on account of non-installation/commissioning of the reactor and transporting the same for a shorter distance, due to change in location are available. The petitioner has claimed to have saved money by doing so as the rates of other supplier were less than the rates of the original vendor. The petitioner has not submitted any documentary evidence in support of its pursuing with main contractor for supply and erection of 80 MVAR Bus Reactor at Kishenpur sub-station, date of deciding to carry out the work through open tender and time taken in the tendering process for erection of reactor at Kishenpur. In view of this, delay of 12 months is not being condoned at this stage. We, however, direct the petitioner to provide necessary documentation in support of its claim, and also the details of Liquidated Damages/ recovery from the original supplier, if any, at the time of truing up for condonation of delay.

Cost over-run

18. As per the petition, total estimated completion cost of the asset is ₹835.80 lakh against total apportioned FR cost of ₹1333.47 lakh. The reason for less completion cost has been given as low tender cost/ low actual expenses. Thus there is no cost over-run in spite of substantial delay. BRPL and PSPCL have raised the issue of over estimation of FR cost.

19. The petitioner has submitted vide affidavit dated 8.8.2013 that the estimates are prepared by the petitioner as per well defined procedures. 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 lowest possible market prices for required product/services is obtained by providing equal opportunity to all eligible firms, and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders are lower as compared to the cost estimate depending upon prevailing market conditions. Further, it is submitted that the reduction in cost is mainly due to actual awarded cost and actual value of IEDC & IDC.

20. We observe that the cost estimates of the petitioner are not realistic. The petitioner is directed to adopt a prudent procedure while estimating the cost of different elements of the transmission projects.

Treatment of IDC and IEDC

21. Details of IEDC/IDC disallowed for the delay period are as below:-

(₹ in lakh)

As per Management Certificate dated 11.11.2013	**IEDC**	**IDC**	**TOTAL**
IEDC/IDC upto 31.03.2012 (58 months)	13.68	103.48	117.16
IEDC/IDC for the period 1.4.2012 to 31.5.2012 (2 months)	0.63	5.77	6.40
Total IDC and IEDC Claimed for the total period of Completion (60 Months)	**14.31**	**109.25**	**123.56**
Detail of IEDC/IDC disallowed for 12 months			
Pro Rata IEDC/IDC disallowed (10 months)	2.36	17.84	20.20
IEDC/IDC for the period 1.4.2012 to 31.5.2012 (2 months)	0.63	5.77	6.40
Total disallowed (12 months)	**2.36**	**17.84**	**26.60**

22. Accordingly, capital cost up to date of commercial operations of the Asset has been considered for the purpose of tariff, after deducting IEDC & IDC, but before adjustment of initial spares, is as per details given overleaf:-

(₹ in lakh)

Capital cost considered for the purpose of tariff before adjustment of IEDC/IDC & initial spares, if any, as on DOCO	IEDC/IDC disallowed	Capital Cost considered for the purpose of tariff after adjustment of IEDC/IDC but before initial spares, if any, as on DOCO
656.46	26.60	629.86

Treatment of initial spares

23. The petitioner has claimed vide management certificated dated 11.11.2011 initial spares of ₹11.58 lakh (1.35%) against total estimated completion cost of ₹859.88 lakh for Sub-station, which is within the normative limit of 2.5% specified under 2009 Tariff Regulations, and hence the same is allowed.

Projected 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. 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".

26. As per the above definition, cut-off date in respect of the transmission asset covered in the instant petition is 31.3.2015.

27. The petitioner has claimed additional capital expenditure as under:-

(₹ in lakh)

Year	**Work / Equipment proposed to be added after COD up to cut-off date (31.3.2014)**	**Additional capital expenditure**	**Justification/Purpose**
2012-13	Sub-station	20.19	Balance & Retention payment
	Total	**20.19**	
2013-14	Sub-station	183.23	Balance & Retention payment
	Total	**183.23**	

28. AVVNL, JVVNL and Jd.VVNL and UPPCL have submitted that additional capital expenditure has been claimed for balance and retention payments for which detailed break-up of additional capital expenditure may be submitted.

29. The petitioner has clarified that the additional capital expenditure is towards balance and retention payments for which the work under the scope of this project for the asset is already completed.

30. The additional capital expenditure claimed is for balance and retention payment and is within cut-off date. We allow the additional capital expenditure as claimed by the petitioner. We direct the petitioner to submit a list of deferred liabilities at the time of truing up.

Debt- equity ratio

31. 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."

32. Details of debt-equity in respect of the asset as on the date of commercial operation are given hereunder:-

(₹ in lakh)

Capital cost as on date of commercial operation		
Particulars	**Amount**	**%**
Debt	440.90	70.00
Equity	188.96	30.00
Total	**629.86**	**100.00**

33. Detail of debt-equity ratio of asset as on 31.3.2014 is as per details given hereunder:-

(₹ in lakh)

Capital cost as on 31.3.2014		
Particulars	**Amount**	**%**
Debt	583.30	70.00
Equity	249.98	30.00
Total	**833.28**	**100.00**

<u>Return on equity</u>

34. 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".

35. Based on the above, the return on equity considered is as follows:-

(₹ in lakh)

Particulars	**2012-13**	**2013-14**
Opening equity	188.96	195.02
Addition due to additional capital expenditure	6.06	54.97
Closing equity	195.02	249.98
Average equity	191.99	222.50
Return on equity (Base Rate)	**15.50%**	**15.50%**
Tax rate for the year 2008-09 (MAT)	11.33%	11.33%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%
Return on Equity (Pre Tax)	**27.97**	**38.90**

36. Return on equity has been calculated as per Regulation 15 of the 2009 Tariff Regulations with pre-tax return on equity of 17.481%. 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 Mimimum 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.

Interest on loan

37. 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."

38. 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 on actual loans have been considered as per the petition.

(b) The yearly repayment during the tariff period 2009-14 shall be deemed 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.

39. The interest on loan has been calculated on the basis of prevaliling rate available 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.

40. Detailed calculations in support of the weighted average rates of interest have been given in Annexure to this order.

41. Based on the above, interest on loan has been calculated are given overleaf:-

(₹ in lakh)

Particulars	2012-13	2013-14
Gross Normative Loan	440.90	455.04
Cumulative Repayment upto previous year	0.00	28.16
Net Loan-Opening	440.90	426.88
Addition due to additional capital expenditure	14.13	128.26
Repayment during the year	28.16	39.16
Net Loan-Closing	426.88	515.98
Average Loan	433.89	471.43
Weighted Average Rate of Interest on Loan	8.9788%	8.9796%
Interest	32.47	42.33

Depreciation

42. Regulation 17 of the 2009 Tariff Regulations provides as under:-

"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."

43. The asset in the instant petition was commissioned on 1.6.2012 and will complete 12 years beyond 2013-14 and thus depreciation has been calculated annually, based on Straight Line Method and at rates specified in Appendix-III to the 2009 Tariff Regulations. Accordingly, depreciation has been worked out on the basis of capital expenditure as on the date of commercial operation and additional capital expenditure incurred/ projected to be incurred thereafter, wherein depreciation for the first year has been calculated on *pro-rata* basis for the part of year.

44. Based on the above, the following depreciation has been considered:-

(₹ in lakh)

Particulars	2012-13	2013-14
Opening Gross Block	629.86	650.05
Addition due to Projected Additional Capitalisation	20.19	183.23
Closing Gross Block	650.05	833.28
Average Gross Block	639.96	741.67
Rate of Depreciation	5.2800%	5.2800%
Depreciable Value	575.96	667.50
Remaining Depreciable Value	575.96	639.34
Depreciation	28.16	39.16
Cumulative Depreciation	28.16	67.32

Operation & maintenance expenses

45. The petitioner has not claimed operation and maintenance expenses.

Interest on working capital

46. 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' fixed cost. The petitioner has claimed the receivables on the basis of 2 months' annual transmission charges. In the tariff being allowed, receivables have been worked out on the basis of 2 months' transmission charges.

(ii) Rate of interest on working capital

As per Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2011 dated 21.6.2010, State Bank of India Base Rate plus 350 bps as on 1.4.2012 (13.50%) has been considered for as rate of interest on working capital for the asset.

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

(₹ in lakh)

Particulars	**2012-13**	**2013-14**
Maintenance Spares	0.00	0.00
O & M Expenses	0.00	0.00
Receivables	18.13	20.53
Total	18.13	20.53
Rate of Interest	13.50%	13.50%
Interest	**2.04**	**2.77**

Transmission charges

48. The transmission charges being allowed for the assets are summarized hereunder:-

(₹ in lakh)

Particulars	2012-13	2013-14
Depreciation	28.16	39.16
Interest on Loan	32.47	42.33
Return on Equity	27.97	38.90
Interest on Working Capital	2.04	2.77
O & M Expenses	0.00	0.00
Total	90.63	123.16

Filing fee and the publication expenses

49. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. BRPL has submitted that the claim of the petitioner for filing fee and publication expenses is liable to be rejected in view of the order of the Commission dated 11.9.2008 in Petition No. 129 of 2005. The petitioner has clarified that reimbursement of expenditure has been claimed in terms of Regulation 42 of 2009 Tariff Regulations. In accordance with the

Commission's order dated 11.1.2010 in Petition No. 109/2009, the petitioner shall be entitled to recover the filing fee directly from the beneficiaries on *pro-rata* basis. The petitioner shall also be entitled for reimbursement of the publication expenses in connection with the present petition, directly from the beneficiaries on *pro-rata* basis.

Licence fee

50. 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. BRPL and UPPCL have submitted that the petitioner's request for reimbursement for licence fee should be rejected as license fee is the eligibility fee of a licence holder and it is the onus of the petitioner. The petitioner has clarified that the licence fee has been 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.

51. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42 A (1) (b) of the 2009 Tariff Regulations.

Service tax

52. 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. The BRPL and UPPCL have objected to recovery of service tax from the beneficiaries in future as CBEC has exempted

service tax on transmission. The petitioner has clarified that if notifications regarding granting of exemption to transmission service are withdrawn at a later date, the beneficiaries shall have to share the service tax paid by the petitioner. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

Sharing of Transmission Charges

53. 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.

54. This order disposes of Petition No. 93/TT/2012.

Sd/-	Sd/-	Sd/-
(A.K. Singhal) **Member**	**(M. Deena Dayalan)** **Member**	**(Gireesh B. Pradhan)** **Chairperson**

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

(₹ in lakh)

	Details of Loan	2012-13	2013-14
1	**Bond XXXI**		
	Gross loan opening	25.00	**25.00**
	Cumulative Repayment upto DOCO/previous year	0.00	**0.00**
	Net Loan-Opening	25.00	25.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	2.08
	Net Loan-Closing	25.00	22.92
	Average Loan	25.00	23.96
	Rate of Interest	8.90%	8.90%
	Interest	2.23	2.13
	Rep Schedule	12 annual installments from 25.02.2014	
2	**Bond XXVIII**		
	Gross loan opening	50.00	**50.00**
	Cumulative Repayment upto DOCO/previous year	0.00	**4.17**
	Net Loan-Opening	50.00	45.83
	Additions during the year	0.00	0.00
	Repayment during the year	4.17	4.17
	Net Loan-Closing	45.83	41.67
	Average Loan	47.92	43.75
	Rate of Interest	9.33%	9.33%
	Interest	4.47	4.08
	Rep Schedule	12 annual installments from 15.12.2012	
3	**Bond XXIX**		
	Gross loan opening	50.00	**50.00**
	Cumulative Repayment upto DOCO/previous year	0.00	**4.17**
	Net Loan-Opening	50.00	45.83
	Additions during the year	0.00	0.00
	Repayment during the year	4.17	4.17
	Net Loan-Closing	45.83	41.67
	Average Loan	47.92	43.75
	Rate of Interest	9.20%	9.20%
	Interest	4.41	4.03
	Rep Schedule	12 annual installments from 12.03.2013	
4	**Bond XXXIV**		

	Gross loan opening	234.00	**234.00**
	Cumulative Repayment upto DOCO/previous year	0.00	**0.00**
	Net Loan-Opening	234.00	234.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	234.00	234.00
	Average Loan	234.00	234.00
	Rate of Interest	8.84%	8.84%
	Interest	20.69	20.69
	Rep Schedule	12 annual installments from 21.10.2014	
5	**Bond XXXVII**		
	Gross loan opening	**50.52**	**50.52**
	Cumulative Repayment upto DOCO/previous year	**0.00**	**0.00**
	Net Loan-Opening	50.52	50.52
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	50.52	50.52
	Average Loan	50.52	50.52
	Rate of Interest	9.25%	9.25%
	Interest	4.67	4.67
	Rep Schedule	12 annual installments from 26.12.2015.	
6	**Bond XXX**		
	Gross loan opening	50.00	**50.00**
	Cumulative Repayment upto DOCO/previous year	0.00	**0.00**
	Net Loan-Opening	50.00	50.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	4.17
	Net Loan-Closing	50.00	45.83
	Average Loan	50.00	47.92
	Rate of Interest	8.80%	8.80%
	Interest	4.40	4.22
	Rep Schedule	12 annual installments from 29.09.2013	
7	**Bond XL**		
	Gross loan opening	0.00	**14.13**
	Cumulative Repayment upto DOCO/previous year	0.00	**0.00**
	Net Loan-Opening	0.00	14.13
	Additions during the year	14.13	0.00

	Repayment during the year	0.00	0.00
	Net Loan-Closing	14.13	14.13
	Average Loan	7.07	14.13
	Rate of Interest	9.30%	9.30%
	Interest	0.66	1.31
	Rep Schedule	12 annual installments from 28.06.2016	
	Total Loan		
	Gross loan opening	459.52	473.65
	Cumulative Repayment upto DOCO/previous year	0.00	8.33
	Net Loan-Opening	459.52	465.32
	Additions during the year	14.13	0.00
	Repayment during the year	8.33	14.58
	Net Loan-Closing	465.32	450.73
	Average Loan	462.42	458.03
	Rate of Interest	**8.9788%**	**8.9796%**
	Interest	41.52	41.13