

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 196/TT/2012

Coram:

**Shri V.S. Verma, Member
Shri M. Deena Dayalan, Member**

**Date of Hearing : 30.07.2013
Date of Order : 27.01.2014**

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 Conditions of Tariff) Regulations, 2009 for determination of transmission tariff from date of commercial date of commercial operation to 31.3.2014 for 15.5 Km Loop in portion of the line section to provide arrangement for evacuating ROSA power out of the LILLO of both ckts. of 400 kV D/C Bareilly-Lucknow line under Northern Regional Transmission Strengthening Scheme in Northern Region for tariff block 2009-14.

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. UP 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.

18. ROSA Power Supply Company Ltd.,
P. O. Rosar Kothi,
Dist. Shahjahanpur (U.P.)

....Respondents

For petitioner : Shri S.S Raju, PGCIL
Shri U. K. Tyagi, PGCIL
Shri M.M. Mondal, PGCIL

For respondent : Shri Padamjit Singh, PSPCL
Shri R. B. Sharma, BRPL

ORDER

The petition has been filed by Power Grid Corporation of India Limited (PGCIL) seeking approval of the transmission charges from date of commercial operation to 31.3.2014 for 15.5 km Loop in portion of the line section to provide arrangement for evacuating ROSA power out of the LILO of both ckts of 400 kV D/C Bareilly-Lucknow line under Northern Regional Transmission Strengthening Scheme in Northern Region for tariff block 2009-14 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations").

2. The investment approval for the scheme was accorded by the Board of Directors of the petitioner, vide letter dated 17.3.2010 for ₹96558 lakh, including Interest During Construction (IDC) of ₹7003 lakh based on 2nd Quarter, 2006 price level. The scope of works covered under the scheme broadly includes:-



Transmission Line

- i) Bhiwadi- Jind 400 kV D/C line
- ii) LILO of both circuits of 400 D/C Balia-Lucknow line at Sohawal
- iii) LILO of both circuits of 400 kV D/C Dehradun-Bagpat line (Quad) at Saharanpur
- iv) LILO of both circuits of 400 kV D/C Lucknow-Bareilly (POWERGRID) line (Quad) at Shahjahanpur
- v) LILO of both circuits of 400 kV D/C Agra-Jaipur line (Quad) at Jaipur (South).

Sub-station

- i) New 2x315 MVA, 400/220 kV Sub-station at Sohawal
- ii) New 2x315 MVA, 400/220 kV Sub-station at Shahjahanpur.
- iii) New 2x315 MVA, 400/220 kV Sub-station at Saharanpur
- iv) New 2x315 MVA, 400/220 kV Sub-station at Jind
- v) New 2x500 MVA, 400/220 kV Sub-station at Jaipur (South)
- vi) Extension of Bhiwadi 400/220 kV Sub-station -1x315 MVA 400/220 kV transformers.
- vii) Extension of Gurgaon 400/220 kV Gas Insulated Sub-station.
- viii) Extension of Bhiwani 765/400/220 kV Sub-station
- ix) Extension of Jaipur (Bassi) 400/220 kV Sub-station.
- x) Extension of Bareilly 400/220 kV Sub-station.

3. The scheduled, initial anticipated and actual dates of commercial operation of the respective asset are as follows:-

Name of the Asset	Scheduled commissioning as per Investment Approval	Date of commercial operation
15.5 Km Loop in portion of the line section to provide arrangement for evacuating ROSA power out of the LILO of both Ckts. of 400 kV D/C Bareilly- Lucknow Line ("hereinafter referred to as the transmission asset")	1.12.2012	1.4.12



4. The petitioner, vide affidavit dated 18.11.2013, submitted the management certificates and tariff forms as per actual date of commercial operation i.e. 1.4.2012 for asset covered in the instant petition i.e. 15.5 km Loop in portion of the line section to provide arrangement for evacuating ROSA power out of the LILO of both Circuits of 400 kV D/C Bareilly-Lucknow Line.

5. 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	98.78	112.48
Interest on Loan	113.79	120.69
Return on Equity	101.27	115.32
Interest on working capital	7.86	8.69
O & M Expenses	11.48	12.13
Total	333.18	369.31

6. 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	1.72	1.82
O & M Expenses	0.96	1.01
Receivables	55.53	61.55
Total	58.21	64.38
Rate of Interest	13.5%	13.5%
Interest	7.86	8.69

7. 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. The Respondent No. 2, Ajmer Vidyut Vitran Nigam Ltd (AVVNL), Respondent No. 3, Jaipur Vidyut Vitran Nigam Ltd (JVVNL) and Respondent No.



4, Jodhpur Vidyut Vitran Nigam Ltd (Jd.VVNL) have filed a combined reply vide affidavit dated 23.5.2013, Respondent No. 6, Punjab State Power Corporation Limited (PSPCL), has filed its reply vide affidavit dated 1.8.2013 and Respondent No. 12, BSES Rajdhani Power Ltd (BRPL), has filed its reply vide affidavit dated 26.7.2013. The petitioner has filed separate rejoinders to the reply of JVVNL, AVVNL, Jd.VVNL, vide affidavits dated 29.7.2013. Further, the petitioner has filed separate rejoinders to the replies filed by PSPCL and BRPL, vide affidavits dated 30.9.2013. The objections raised by the respondents in their reply and the clarifications given by the petitioner in its rejoinder are addressed in the relevant paragraphs of this order.

8. Having heard the representatives of the parties and perused the material on records, we proceed to dispose of the petition.

9. The respondents have raised certain issues regarding the date of commercial operation and we would like to deal with it before we dwell on other issues. AVVNL, JVVNL and Jd.VVNL submitted that the petitioner should explain why the petitioner has filed the instant petition on 24.7.2012 while the instant asset was put under commercial operation on 1.4.2012. PSPCL has submitted that the date of commercial operation certificate does not certify about trial operation and regular service.

10. The petitioner, in response to PSPCL's comments has clarified that AC transmission element are such that once successfully test charged the elements are immediately available for transmission of power @100% of its rated capacity.



Power flow through any AC element is dependent on grid condition and demand and supply situation of the grid which is beyond the control of Power Grid. In transmission system generally transmission element are static while in service and no rotating is involved. In case of AC transmission elements no additional input is required for transmission of Power at rated capacity. As the 2009 Tariff Regulations does not define trial run in case of transmission element, successful test charging is considered as completion of trial run.

11. This issue of trial operation has already been considered by the Commission in Petition No.96/TT/2011, wherein it has been clarified that in the absence of any definition of 'trial operation' of transmission element in the 2009 Tariff Regulations, the successful test charging is considered as trial operation. Accordingly, successful test charging by the petitioner in the instant case is also considered as trial operation. It is, however, noticed that even though the work of the transmission asset was completed on 12.3.2012 and the asset was put under commercial operation with effect from 1.4.2012, the petitioner has issued the letter declaring the trial operation only on 13.6.2012. In our view, this is not a healthy practice and the petitioner should ensure that all the respondents are informed about the commercial operation of the asset before or immediately on commercial operation of the asset.

Capital cost

12. 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.”

13. Details of the capital cost submitted by the petitioner, vide affidavit dated 18.11.2013 and Management Certificate dated 4.7.2012, as on date of commercial operation and estimated additional capital expenditure projected to be incurred for the asset are given hereunder:-

(₹ in lakh)

Apportioned approved cost	Expenditure up to date of commercial operation	Projected expenditure from 1.4.2012 to 31.3.2013	Total estimated completion cost
2573.44	1611.21	519.17	2130.38



The petitioner has not claimed initial spares for the asset covered in the petition. Therefore, capital cost amounting to ₹1611.21 lakh has been considered as capital cost as on date of commercial operation.

Cost over-run

14. PSPCL has submitted that the present system is incomplete and it is not as per the Investment Approval. PSPCL has further submitted that the apportioned approved cost of ₹2617.02 lakh is for both the circuits whereas the petition is for only LILO of one circuit and the petitioner should confirm whether the amount of ₹2617.02 lakh is for LILO of both the circuits or LILO of one circuit. The petitioner has clarified that the apportioned approved cost of ₹2617.02 lakh is for 15.5 km. section of the Loop-in portion of LILO of both circuits of 400 kV D/C Bareilly-Lucknow line to provide arrangement for evacuating ROSA Power under Northern Regional Transmission Strengthening Scheme.

15. BRPL has submitted that as against the apportioned cost of ₹2617 lakh, the estimated completion cost is expected to be ₹2153 lakh resulting into a large savings to the tune of 22% to the petitioner. There was huge over-estimation while approving the cost estimates and accordingly the cost over-run cannot be determined. The petitioner has clarified that estimates are prepared by the petitioner 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 market price for required product/services is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against



tender are lower as compared to the cost estimate depending upon prevailing market conditions.

16. As pointed out by BRPL the estimated completion cost is lesser than the apportioned approved cost in the instant case. The cost estimates of the petitioner are not realistic not only in this petition but also in some other petitions. In our view the petitioner should adopt a prudent procedure to make cost estimates of different elements of the transmission projects more realistic.

Projected additional capital expenditure

17. 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.”

18. 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”.



19. As per the above definition, cut-off date in respect of the transmission asset covered in the instant petition is 31.3.2014.

20. AVVNL, JVVNL and Jd.VVNL have submitted that the petitioner has claimed additional capital expenditure after date of commercial operation towards balance & retention payment and the petitioner should confirm that physically all the work has been completed and the final completed cost would be within the cost indicated. In response, the petitioner has clarified that the completed cost has already been given in the Management Certificate which has been submitted vide affidavit dated 18.11.2013 and completion cost is within the approved cost.

21. The additional capitalization claimed by the petitioner under Regulation 9 (1) of the 2009 Tariff Regulations is as follows:-

(₹ in lakh)

Year	Work/Equipment proposed to be added after Date of commercial operation up to cut-of date	Amount capitalized and proposed to be capitalized	Justification as per purpose
Date of commercial operation to 31.3.2013	Building and other civil works	-	Balance and Retention Payment
	Transmission Line	519.17	

22. The petitioner has claimed projected additional capital expenditure amounting to ₹519.17 lakh for the year 2012-2013 against balance and retention payment. Additional capital expenditure claimed falls within the cut-off date and as such it is allowed and has been considered for the purpose of tariff calculation. However, the petitioner is directed to submit a list of deferred



liabilities and balance work deferred for execution at the time of truing up for the purpose of prudence check by the Commission.

Debt- equity ratio

23. 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.”

24. Details of debt-equity in respect of the assets as on dates of commercial operation are given hereunder:-

(₹ in lakh)

As on date of commercial operation i.e. 1.4.2012		
	Amount	%
Debt	1127.85	70.00
Equity	483.36	30.00
Total	1611.21	100.00

25. Detail of debt-equity ratio of assets as on 31.3.2014 is as follows:-

(₹ in lakh)

As on 31.3.2014		
	Amount	%
Debt	1491.27	70.00
Equity	639.11	30.00
Total	2130.38	100.00

Return on equity

26. 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".

Additional return on equity

27. The petitioner has submitted that the project scope was scheduled to be commissioned within 32 months from the date of Investment Approval and accordingly the scheduled completion works out to 1.12.2012 and the asset was commissioned on 1.4.2012. The petitioner has further claimed additional return on equity of 0.5% under the first proviso to Regulation 15(2) of the 2009 Tariff Regulations for completion of the instant asset within the time frame specified in the Appendix-II to the 2009 Tariff Regulations. AVVNL, JVVNL, Jd. VVNL, PSPCL and BRPL have all requested to disallow the petitioner's prayer for additional return on equity of 0.5% as all the assets covered in the project have not been commissioned as per the timeline specified in the Appendix-II to the 2009 Tariff Regulations. The petitioner, in its rejoinder, has clarified that the petitioner has claimed additional ROE only for those assets (elements) which are commissioned within the qualifying time. As per the Regulation 15(2) of the 2009 Tariff Regulations, the additional return of 0.5% shall be allowed if such elements are completed within the time line specified in Appendix-II to the 2009 Tariff Regulations. Further, the petitioner has submitted that the though investment approval is for the whole project, the tariff petition is approved for the individual element/system as the case may be as per Regulation 4(1) and 4(2) of the 2009 Tariff Regulations. The additional ROE is being claimed for those assets which are commissioned within the qualifying time only.



28. We have considered the submissions of the petitioner and the respondents. We are of the considered view that for grant of additional return on equity under first proviso to Regulation 15(2) read with Appendix II of 2009 Tariff Regulations, all the elements of the transmission systems need to be completed within the time schedule specified in Appendix II of the said Regulations. This view has been upheld by the Tribunal in its judgment dated 10.5.2012 in Appeal No. 155/2011. The relevant observations of the Tribunal are extracted as under:-

"16. Now, the thrust of the of the argument of the learned counsel for the appellant lies in reading the definition of the word 'project' and that of the 'transmission system' together in order that, according to the learned counsel, there is no difficulty in accepting the proposition that even when one element or a unit or a line or a group of lines are completed the generator or the transmission licensee would be entitled to the additional return on equity of 0.05% as per regulation no 15 (2) of the Central Electricity Regulatory Commission Tariff Regulations, 2009 and the efficacy of the Note 1 to the Appendix II to the said regulation 15(2) will have no effect. It is submitted that if the definition of the word 'project' and the definition of the words 'transmission system' are not read together then the very purpose of the scheme of the Act becomes otiose and gets defeated. After having read the relevant provisions of the Act and those of the Regulations as were referred to us it appears to us that the argument of the learned counsel for the appellant is difficult to accept for the primary reason that the import of the word 'project' as appearing in section 2(31) of the Act comprises both generation and transmission because the Regulations, 2009 is meant for both. Definitely, the import of the word 'transmission system' as occurring in section 2(40) of the Act has been incorporated in to the definition of the word 'project' because transmission system is also a project as a generation is also a project and the transmission system means a line or a group of lines with or without associated sub-station, and it also includes equipment associated with transmission lines and sub-stations. In fact, over emphasis on reading the two words together do not lead us anywhere. A transmission system may be in a case of a particular project a line or any number of groups of lines and they again may be with or without associated sub-station, and inclusively the transmission system may comprise equipment associated with transmission lines and sub-stations. Now, having seen the scope of the work or project it appears that this transmission project consisted of laying down a 400 kV D/C line and two extension works of the two existing substations and one reactive compensation on proposed Kanpur- Ballabgarh 400 kV D/C line. This is the transmission project that was required to be completed within the time frame. In this scenario the definition of the word 'project' as we find in section 2(31) of the Act does not really render any assistance to the appellant, for having read the regulation 15(2) together with the Appendix II as also the note 1 to the said regulation no 15 (2) of the Tariff Regulations, 2009 it does not appear that completion of a part of the project does entitle the appellant to claim for additional return on equity of 0.5%.

The words “ **up to the date of commercial operation of the units or block or element of transmission project as applicable**” as occurring in Appendix II of the regulation 15(2) of the Regulations, 2009 has no magical charm in it. The argument of the learned counsel for the appellant that the impugned order of the Commission has the effect of substituting the words ‘transmission project as a whole’ in the place of the expression ‘element of transmission project’ can hardly be agreed to because the definition of the word ‘transmission system’ is a comprehensive one and the completion in time schedule may relate to, in case of any particular project, units, or block or element of transmission project as may be applicable to such project. The description of the work covered under the transmission project is what we have seen earlier. Completion of a part of the total work covered under the project is not what is contemplated in the regulation 15(2) read with the Appendix II and the Note thereto. The element of the transmission project appertains to the scope and ambit of the word transmission system. It means that element of the transmission work which is applicable in a given situation. If it had been the intention of the authors of the Regulations that completion of a part of a work or a part of the project or a part of the transmission system would entitle the transmission licensee to claim additional return on equity then they would have expressly made provision there for and made separate time frame for each of the units or each of the parts of the total works to be implemented within a specific timeframe from the date of investment approval. That has not been done. It is the scheme as a whole, not a part thereof, that would qualify a transmission licensee to the entitlement to the additional return on equity. Interpretation of different provisions of the Act does hardly have too much of relevance in the conspectus of the fact situation in which interpretation of the regulation 15 (2) of the Regulations, 2009 is called for. The element of the transmission project does not mean only one element to the exclusion of others, if there are more than one, and the Commission does appear to have rightly held that the project as a whole has not been commissioned within the time schedule.”

29. In this case, the subject asset is part of the project which has not been fully executed. There is no separate timeline provided for commissioning an element of the transmission system. In the light of the principle laid down by the Tribunal as extracted above, the petitioner's prayer for additional return on equity for the subject asset cannot be allowed as it is not covered under Regulation 15(2) of the 2009 Tariff Regulations read with Appendix II of the 2009 Tariff Regulations.

30. Based on the above, the return on equity has been considered are given overleaf:-



(₹ in lakh)

Particular	2012-13	2013-14
Opening Equity	483.36	639.11
Addition due to Additional Capitalisation	155.75	0.00
Closing Equity	639.11	639.11
Average Equity	561.24	639.11
Return on Equity (Base Rate)	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.330%	11.330%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%
Return on Equity (Pre Tax)	98.11	111.72

31. 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 prayer to allow grossing up the base rate of return with the applicable tax rate as per relevant Finance Act, shall be settled in accordance with the provisions of Regulation 15 of 2009 Tariff Regulations.

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 petition.

(b) The repayment for 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.



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

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

(₹ in lakh)

Particulars	2012-13	2013-14
Gross Normative Loan	1127.85	1491.27
Cumulative Repayment upto previous year	0.00	98.78
Net Loan-Opening	1127.85	1392.49
Addition due to additional capital expenditure	363.42	0.00
Repayment during the year	98.78	112.48
Net Loan-Closing	1392.49	1280.01
Average Loan	1260.17	1336.25
Weighted Average Rate of Interest on Loan	9.0299%	9.0321%
Interest	113.79	120.69

Depreciation

36. 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.”

37. The date of commercial operation of transmission asset is 1.4.2012 and accordingly 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 of the 2009 Tariff Regulation are as given hereunder:-

(₹ in lakh)		
Particulars	2012-13	2013-14
Opening Gross Block	1611.21	2130.38
Addition due to Projected Additional Capitalisation	519.17	0.00
Closing Gross Block	2130.38	2130.38
Average Gross Block	1870.80	2130.38
Rate of Depreciation	5.2800%	5.2800%
Depreciable Value	1683.72	1917.34
Remaining Depreciable Value	1683.72	1818.56
Depreciation	98.78	112.48
Cumulative Depreciation	98.78	211.26

Operation & maintenance expenses

38. Clause (g) of Regulation 19 of the 2009 Tariff Regulations prescribes the norms for operation and maintenance expenses for the transmission system

based on the type of sub-station and the transmission line. Norms prescribed in respect of the elements covered in the instant petition are as under:-

(₹ in lakh)

Element	2009-10	2010-11	2011-12	2012-13	2013-14
400 kV bays (₹ lakh / bay)	52.40	55.40	58.57	61.92	65.46

39. The allowable O&M expenses for the assets are given hereunder:-

(₹ in lakh)

Element	2012-13	2013-14
Transmission Asset	11.48	12.13

40. The petitioner has stated that O&M expenditure for 2009-14 tariff block had been arrived on the basis of normalized actual O&M expenses of the petitioner during the year 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking was also considered while calculating the O&M charges for tariff period 2009-14. The petitioner has submitted that it would approach the Commission for suitable revision in the norms for O&M expenditure in case the impact of wage hike w.e.f 1.1.2007 is more than 50%.

41. The AVVNL, JVVNL and Jd.VVNL have submitted that the additional manpower cost claimed by the petitioner is to be considered only on the basis of the 2009 Tariff Regulations. The petitioner has clarified that the wage revision of the employees of the petitioner company has already been done.

42. We have already given effect to the impact of pay revision in the 2009 Tariff Regulations by factoring 50% on account of pay revision of the employees of PSUs after extensive stakeholders' consultation. We do not see any reason why the admissible amount is inadequate to meet the requirement of the employee cost. However, in case the petitioner approaches with any such application, the same shall be dealt with in accordance with law.

Interest on working capital

43. 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. The value of maintenance spares has accordingly been worked out.

(iii) O & M expenses

Regulation 18(1) (c) (iii) of the 2009 Tariff Regulations provides for operation and maintenance expenses for one month to be included in the working capital. The petitioner has claimed O&M expenses for 1 month of the respective year. This has 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 of 10.00% plus 350 bps as on 1.4.2011 (13.50%). The interest on working capital for the assets covered in the petition has been worked out accordingly.

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

(₹ in lakh)

Particulars	2012-13	2013-14
Maintenance Spares	1.72	1.82
O & M Expenses	0.96	1.01
Receivables	54.99	60.94
Total	57.67	63.77
Rate of Interest	13.50%	13.50%
Interest	7.79	8.61

Transmission charges

45. The transmission charges being allowed for the assets are summarized below:-

(₹ in lakh)

Particulars	2012-13	2013-14
Depreciation	98.78	112.48
Interest on Loan	113.79	120.69
Return on Equity	98.11	111.72
Interest on Working Capital	7.79	8.61
O & M Expenses	11.48	12.13
Total	329.95	365.64

Filing fee and the publication expenses

46. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The BRPL submitted that the filing fee shall be governed as per the Commission's order. 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

47. 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.

48. BRPL has 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. 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

49. 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 has objected to recovery of service tax from the beneficiaries in future as CBEC has exempted service tax on transmission. Vide notification No. 11/2010-service tax dated 20.7.2010. The petitioner 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 premature and accordingly this prayer is rejected.

Sharing of Transmission Charges

50. PSPCL has submitted that the generator, ROSA Power Supply Company Limited (RPSCL), should bear the full transmission charges for pre-poned section of PGCIL- LILO portion till the commissioning of Shahjahanpur Sub-station by the petitioner. The petitioner has clarified that the petitioner has signed transmission



agreement with RPSCL on 1.2.2012, wherein the following has been agreed:-

"1. Till the commissioning of Shahjahanpur substation of PGCIL, connectivity to RPSCL shall be provided through following arrangement:

- a) ROSA-Shahjahanpur line to be connected to one circuit of Lucknow-Bareilly 400 kV line i.e. LILO of Lucknow-Bareilly line at ROSA TPS till commissioning of Shahjahanpur substation. Thereafter, the system as envisaged originally would be restored.
- b) PGCIL would construct one D/C line (LILO portion of one circuit of Lucknow-Bareilly 400 kV line up to proposed site of Shahjahanpur substation) and RPSCL would also bring their line upto proposed site Shahjahanpur substation and both lines would be joined so as to make ROSA-Lucknow and ROSA-Bareilly 400 kV S/C lines.

2. RPSCL shall bear and pay the full transmission charges as determined by CERC, for preponed section of PGCIL 400 kV D/C transmission line as mentioned at b) above from its date of commercial operation till the commissioning of Shahjahanpur substation. Thereafter, the transmission charges shall be shared by the beneficiaries, as per CERC Regulation (as issued from time to time)."

51. The petitioner in its affidavit dated 30.9.2013 has submitted that in the provisional tariff order dated 21.9.2012, the Commission had directed sharing of the LILO in accordance with the Sharing Regulations. The petitioner had requested that in the final order, the sharing of the transmission charges of the instant asset should be borne by RSPCL till the commissioning of the Shahjahanpur Sub-station.

52. The asset for which tariff has been claimed is in regular use since 1.4.2012. The generator, RPSCL, has agreed to bear the transmission charges for the asset till commissioning of Shahjahanpur Sub-station. It is directed that the 15.5 Km Loop in portion of the line section of the LILO of both circuits of 400kV D/C Bareilly-Lucknow line shall be borne RPSCL. Till the commissioning of the remaining portion of LILO, the billing, collection and disbursement of the



transmission charges of the entire asset 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.

53. This order disposes of Petition No. 196/TT/2012.

sd/-
(M. Deena Dayalan)
Member

sd/-
(V. S. Verma)
Member



Annexure

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN			
(₹ in lakh)			
	Details of Loan	2012-13	2013-14
1	Bond XXXII		
	Gross loan opening	300.00	300.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	300.00	300.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	25.00
	Net Loan-Closing	300.00	275.00
	Average Loan	300.00	287.50
	Rate of Interest	8.84%	8.84%
	Interest	26.52	25.42
	Rep Schedule	12 annual installments from 29.03.2014	
2	Bond XXXIII		
	Gross loan opening	200.00	200.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	200.00	200.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	200.00	200.00
	Average Loan	200.00	200.00
	Rate of Interest	8.64%	8.64%
	Interest	17.28	17.28
	Rep Schedule	12 annual installments from 08.07.2014	
3	Bond XXXIV		
	Gross loan opening	300.00	300.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	300.00	300.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	300.00	300.00
	Average Loan	300.00	300.00
	Rate of Interest	8.84%	8.84%
	Interest	26.52	26.52
	Rep Schedule	12 annual installments from 21.10.2014	
4	Bond XXXV		
	Gross loan opening	300.00	300.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	300.00	300.00
	Additions during the year	0.00	0.00

	Repayment during the year	0.00	0.00
	Net Loan-Closing	300.00	300.00
	Average Loan	300.00	300.00
	Rate of Interest	9.64%	9.64%
	Interest	28.92	28.92
	Rep Schedule	12 annual installments from 31.05.2015.	
5	Bond XXXVI		
	Gross loan opening	27.85	27.85
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	27.85	27.85
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	27.85	27.85
	Average Loan	27.85	27.85
	Rate of Interest	9.35%	9.35%
	Interest	2.60	2.60
	Rep Schedule	12 annual installments from 29.08.2016.	
	Total Loan		
	Gross loan opening	1127.85	1127.85
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	1127.85	1127.85
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	25.00
	Net Loan-Closing	1127.85	1102.85
	Average Loan	1127.85	1115.35
	Rate of Interest	9.0299%	9.0321%
	Interest	101.84	100.74