### CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

## Petition No. 71/TT/2012

### Coram:

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

Date of Hearing: 18.6.2013 Date of Order : 24.6.2013

#### 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 projected date of commercial operation: 1.1.2012 to 31.3.2014 for 315 MVA, 400/220 kV ICT at Bhiwadi under Northern Regional Transmission Strengthening Scheme in Northern Region for tariff block 2009-14 period.

## And

## In the matter of:

Power Grid Corporation of India Limited, Gurgaon

.....Petitioner

#### Vs

- 1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd., Jaipur
- 2. Ajmer Vidyut Vitran Nigam Ltd., Jaipur
- 3. Jaipur Vidyut Vitran Nigam Ltd., Jaipur
- 4. Jodhpur Vidyut Vitran Nigam Ltd., Jaipur
- 5. Himachal Pradesh State Electricity Board, Shimla
- 6. Punjab State Electricity Board, Patiala
- 7. Haryana Power Purchase Centre, Panchkula
- 8. Power Development Deptt., Govt. of Jammu & Kashmir, Jammu
- 9. Uttar Pradesh Power Corporation Ltd., Lucknow
- 10. Delhi Transco Ltd., New Delhi
- 11.BSES Yamuna Power Ltd., Delhi
- 12.BSES Rajdhani Power Ltd., New Delhi
- 13.North Delhi Power Ltd., New Delhi
- 14. Chandigarh Administration, Chandigarh
- 15. Uttarakhand Power Corporation Ltd., Dehradun
- 16.North Central Railway, Allahabad
- 17. New Delhi Municipal Council, New Delhi

....Respondents

Order in Petition No. 71/TT/2012

## The following were present:

- 1. Shri S. S. Raju, PGCIL
- 2. Shri T. P. S. Bawa, PSPCL
- 3. Shri M. M. Mondal, PGCIL
- 4. Shri U. K. Tyagi, PGCIL
- 5. Shri R. B. Sharma, Advocate, BRPL

#### <u>ORDER</u>

This petition has been filed by Powergrid Corporation of India Ltd (hereinafter referred to as "petitioner") for determination of transmission tariff for "315 MVA 400/220 kV ICT at Bhiwadi under Northern Regional Transmission Strengthening Scheme in Northern Region" (hereinafter referred to as "transmission asset") from anticipated date of commercial operation i.e. 1.1.2012 to 31.3.2014 under Eastern Region based on Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "2009 Tariff Regulations").

2. Investment approval for the "Northern Regional Transmission Strengthening Scheme" was accorded by the petitioner's Board of Director vide memorandum dated 17.3.2010 at an estimated cost of ₹96568 lakhs including IDC of ₹7003 lakhs (based on 3<sup>rd</sup> Quarter '2009 price level). The scope of work covered under the project broadly includes construction of following transmission lines and Sub-stations:-

## 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-Bareily (POWERGRID) line (Quad) at Shahjahanpur

v) LILO of both circuits of 400 kV D/C Agra-Jaipur line (Quad) at Jaipur (South).

# Substation:

- i) New 2x315 MVA, 400/220 kV Substation at Sohawal
- ii) New 2x315 MVA, 400/220 kV Substation at Shahjahanpur
- iii) New 2x315 MVA,400/220 kV Substation at Saharanpur
- iv) New 2x315 MVA,400/220 kV Substation at Jind
- v) New 2x315 MVA,400/220 kV Substation at Jaipur (South)
- vi) Extension of Bhiwadi 400/220 kV substation -1x315 MVA 400/220 kV transformer
- vii) Extension of Gurgaon 400/220 kV Gas Insulated Substation
- viii) Extension of Bhiwani 765/400/220 kV substation
- ix) Extension of Jaipur (Bassi) 400/220 kV substation
- x) Extension of Bareily 400/220 kV substation

3. At the time of filing the petition, the petitioner had claimed tariff on the basis of anticipated date of commercial operation of 1.1.2012. However, later vide affidavit dated 30.7.2012 the petitioner submitted the actual date of commercial operation of the transmission tariff has been 1.4.2012. The petitioner has also filed corresponding Management Certificate and revised tariff forms for the transmission asset.

4. Details of the transmission charges claimed by the petitioner are given hereunder:-

	ſ	in lakh)
Particulars	2012-13	2013-14
Depreciation	97.77	131.93
Interest on Loan	118.99	151.28
Return on equity	97.01	130.93
Interest on Working	17.83	20.74
Capital		
O & M Expenses	191.94	202.92
Total	523.54	637.80

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

		(` in lakh)
Particulars	2012-13	2013-14
Maintenance Spares	28.79	30.44
O & M expenses	16.00	16.91
Receivables	87.26	106.30
Total	132.05	153.65
Interest	17.83	20.74
Rate of Interest	13.50%	13.50%

6. 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, 2003. Reply to the petitioner has been filed by BSES Rajdhani Power Limited, Respondent No. 12 and Punjab State Power Corporation Limited, Respondent No.6 (successor to PSEB). The petitioner has filed rejoinder to the reply filed by BRPL, vide affidavit dated 20.2.2013. The objections raised by the respondent and the clarifications given by the petitioner are dealt in relevant paragraphs of this order.

7. The matter was heard on 29.1.2013 and order was reserved. As two of the Members of the Commission demitted the office, the matter was heard again on 18.6.2013. During the hearing, the representatives of PSPCL and BRPL raised the issue of date of commercial operation and additional return of equity. These issues are also discussed in the relevant paragraphs of this order. Having heard the representatives of the parties and perused the material on records, we proceed to dispose of the petition.

## **Capital cost**

8. As regards the capital cost, Regulation 7 (1) (a) of the 2009 Tariff Regulations provides as under:-

- "(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;"
- 9. Details of capital cost submitted by the petitioner, vide Management

Certificate dated 21.6.2012, as on date of commercial operation and estimated additional capital expenditure projected to be incurred for the transmission asset are as under:-

			(₹ in lakh)
Apportioned approved cost (as per original petition)	Actual cost incurred upto DOCO*	Expenditure proposed from 1.4.2012 to 31.3.2013	Estimated completion cost
2337.56	1202.96	1293.56	2496.52

\*The capital cost as on date of commercial operation is inclusive of initial spares.

10. The total estimated completion cost exceeds the apportioned approved cost, therefore, the total capital cost of the asset has been restricted up to the apportioned approved cost i.e. ₹2337.56 lakh. Accordingly, additional capital expenditure amounting to ₹1134.60 lakh out of ₹1293.56 lakh during 2012-2013 period is being allowed for the purpose of tariff calculation. The capital cost/additional capital expenditure shall be re-examined once the apportioned costs of other assets under this transmission system are known or after the submission of RCE, as the case may be.

## Treatment of initial spares

11. The petitioner has claimed initial spares of ₹65.46 lakh pertaining to sub-station corresponding to capital cost of ₹2496.52 lakh as on the cut-off date. BRPL has requested to restrict the initial spares as specified in the 2009 Tariff Regulations. As the capital cost as on the cut-off date has been restricted to ₹2337.56 lakh, initial spares claimed by the petitioner has also been proportionately reduced. Accordingly, excess initial spares have been deducted from the cost of sub-station of the asset. Details of the same are given below:-

				(₹ i	n lakh)
Particulars	Cost as on the cut-off date	Proportionate initial spares claimed	Ceiling limits as per Regulation 8 of the 2009 Tariff Regulations	Initial spares worked out	Excess initial spares claimed
1	2	3	4	5= [(2)-(3)]*(4)/[100%-(4)]	6=(3)-(5)
Sub-station (Inclusive PLCC)	2337.56	61.29	2.50%	58.37	2.93

12. The capital cost and initial spares shall be reviewed at the time of truing up. Accordingly capital cost of ₹1200.03 lakh as on the date of commercial operation, after restricting excess initial spares, has been considered for the purpose of tariff calculation.

# Projected additional capital expenditure

13. With regard to additional capital expenditure, Regulation 9(1) 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;
- (i) Works deferred for execution;
- (ii) Procurement of initial capital spares within the original scope of work, subject to the provisions of Regulation 8;
- (iii) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
- (iv) Change in Law:"
- 14. The 2009 Tariff Regulations further defines the cut-off date as-

"cut-off date means 31<sup>st</sup> march of the year closing after 2 years of the year of commercial operation of the project, and incase of the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31<sup>st</sup> March of the year closing after 3 years of the year of commercial operation".

15. Accordingly, the cut-off date for the transmission asset covered in the instant petition is 31.3.2015.

16. The petitioner has claimed estimated additional capital expenditure for the year 2012-13 amounting to ₹1293.56 lakh. However, as the total estimated completion cost exceeds the apportioned approved cost, additional capital expenditure has been restricted up to ₹1134.60 lakh. Hence, this amount has been considered for the purpose of tariff calculation.

## Debt- equity ratio

17. Regulation 12 of the 2009 Tariff Regulations provides that:-

"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."

18. Details of debt-equity in respect of the transmission assets as on the

date of commercial operation are as under:-

	Apportioned approved cost		As on the date of commercial operation	
	Amount	%	% Amount	
	(`lakh)		(`lakh)	
Debt	701.27	30.00	840.02	30.00
Equity	1636.29	70.00	360.01	70.00
Total	2337.56	100.00	1200.03	100.00

19. Debt- equity ratio as on 31.3.2014 is as under:-

		(` in lakh)
Capital cost as on 31.3.2014		
Particulars	Amount	%
Debt	1634.24	70.00
Equity	700.39	30.00
Total	2334.63	100.00



20. Debt-equity ratio for projected additional capital expenditure considered in the instant petition is given overleaf:-

		(` in lakh)	
Additional capital expenditure for 2012-13			
	Normative		
Particulars	Amount	%	
Debt	794.22	70.00	
Equity	340.38	30.00	
Total	1134.60	100.00	

#### Return on equity

21. Regulation 15 of the 2009 Tariff Regulations provides that:-

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

(`in lakh)

Return on Equity	2012-13	2013-14
Opening equity	360.01	700.39
Addition due to additional capital	340.38	0.00
expenditure		
Closing equity	700.39	700.39
Average equity	530.20	700.39
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)	92.68	122.44

22. Based on the above, the following return on equity has been allowed:-

23. The petitioner's prayer to allow grossing up the base rate of return with applicable tax rate as per relevant Finance Act, shall be settled in accordance with the provisions of Regulation 15 of the 2009 Tariff Regulations. Pre-tax Return on Equity of 17.481% has been considered.

#### Additional return on equity:

24. As per the investment approval, the project scope was scheduled to be commissioned within 32 months from the date of investment approval. The date of investment approval was 17.3.2010 and accordingly the scheduled commissioning works out to 17.11.2012, say 1.12.2012, against which the asset covered in the instant petition was commissioned on 1.4.2012. The petitioner has claimed additional return on equity of 0.5% in terms of Regulation 15(2) of the 2009 Tariff Regulations on the ground that the

transmission asset has been commissioned before the commissioning schedule specified in Appendix II of the 2009 Tariff Regulations.

25. The petitioner has submitted that as per the provisions of Appendix-II of the 2009 Tariff Regulations, in case of a scheme having combination of the various types of projects, the qualifying time schedule of the activity having maximum time period shall be considered for the scheme as a whole. The petitioner has submitted that Regulation 15(2) read with Appendix II of the 2009 Tariff Regulations establish that different elements would be eligible for additional RoE if it is completed within the eligible time line to be worked out in accordance with the regulations. The petitioner has further submitted that regulations do not stipulate that the project would be eligible for additional RoE only if in case the total project is completed. Even if a part of the project is completed within the eligible time line, the beneficiaries would be benefited by the reduced IDC & IEDC components of the project cost and the utility would also be incentivized for early completion of the asset. In line with this, the timeline for this project is same as for 400 kV D/C Twin Transmission line i.e. 28 months for plain area from the date of investment approval and therefore the transmission asset covered in the instant petition qualifies for additional return of 0.5% under Regulation 15(2) of 2009 Tariff Regulations if it is commissioned before 28 months.

26. BRPL and PSPCL, in their replies have vehemently argued to reject the petitioner's request for additional return on equity in the light of the judgement of Hon'ble Appellate Tribunal for Electricity (hereinafter referred to as the "Tribunal") dated 10.5.2012 in Appeal No.155/2011. During the hearing on 18.6.2013, the representative of PSPCL and the learned counsel for BRPL submitted that two transformers are already in place in Bhiwadi and the asset in question is the third transformer. It is neither a new sub-station nor a new transmission line. There is no provision in the 2009 Tariff Regulations for additional return of equity of 0.5% for installation of an element of the project.

27. 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-Ballabhgarh 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."

28. 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 such as transformer. 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.

#### Interest on loan

29. Regulation 16 of the 2009 Tariff Regulations provides that,-

"16. (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."

30. In these calculations, interest on loan has been worked out as detailed hereunder:-

- (a) Gross amount of loan, repayment of instalments & 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 (i) above is applied on the notional average loan during the year to arrive at the interest on loan.

31. Details of the interest on loan worked on the above basis are as given overleaf:-

		(` in lakh)
Particulars	2012-13	2013-14
Gross normative loan	840.02	1634.24
Cumulative repayment upto previous year	0.00	93.42
Net loan-opening	840.02	1540.83
Addition due to additional capital	794.22	0.00
expenditure		
Repayment during the year	93.42	123.38
Net loan-closing	1540.83	1417.45
Average loan	1190.42	1479.14
Weighted average rate of interest on loan	9.5505%	9.5518 %
Interest	113.69	141.28

32. Detailed calculation of the weighted average rate of interest has been given in the Annexure to this order.

## **Depreciation**

33. Regulation 17 of the 2009 Tariff Regulations provides for computation

of depreciation in the following manner, namely:-

"17. (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."

34. The subject transmission asset was put under commercial operation

on 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 2009 Tariff Regulation.

35. Details of the depreciation worked out are as under:-

		(` in lakh)
Particulars	2012-13	2013-14
Opening gross block	1200.03	2334.63
Addition during 2009-14 due to projected additional capital expenditure	1134.60	0.00
Closing gross block	2334.63	2334.63
Average gross block	1767.33	2334.63
Rate of depreciation	5.2858%	5.2847%
Depreciable value	1590.60	2101.17
Remaining depreciable value	1590.60	2007.75
Depreciation	93.42	123.38

## **Operation & maintenance expenses**

36. Clause (g) of Regulation 19 of the 2009 Tariff Regulations prescribes the norms for operation and maintenance expenses based on the type of substation and transmission line. Norms prescribed in respect of the elements covered in the instant petition are given hereunder:-

(` in lakh)

Element	2009-10	2010-11	2011-12	2012-13	2013-14
400 kV bay (₹ Lakh/ bay)	52.40	55.40	58.57	61.92	65.46
220 kV bay (₹ Lakh/ bay)	36.68	37.78	41.00	43.34	45.82

37. Based on the above norms, the following amount of operation and maintenance expenses are allowed:-

		(₹ in lakh)
Element	2012-13	2013-14
1 no. 400 kV bay	61.92	65.46
3 nos. 220 kV bays	130.02	137.46
Total O&M Expenses	191.94	202.92

38. The petitioner has submitted that O & M expenses for the year 2009-14 had been arrived at on the basis of normalized actual O & M expenses during the period 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking has also been considered while calculating the O&M expenses for the tariff period 2009-14. The petitioner has further submitted that it would approach the Commission for suitable revision in the norms for O&M expenses in case the impact of wage hike with effect from 1.1.2007 is more than 50%. 39. BRPL in its reply has submitted that the Commission has already covered the increase in employee cost on account of pay revision of the PSUs by rationalizing the O&M expenses by 50% increase in employee cost. Any further increase in the employee cost should be taken care by the petitioner by improving their productivity levels and the beneficiaries should not be unduly burdened over and above the provisions made in the 2009 Tariff Regulations. PSPCL has also submitted that O&M expenses should be allowed only as per the 2009 Tariff Regulations.

40. The petitioner has clarified that per Ckt Km and per bay O&M rates considered in the instant petition are based on 2009 Tariff Regulations. While framing the 2009 Tariff Regulations, the petitioner had furnished the actual O&M cost, line and bay details of its transmission system for the 5 year period i.e. 2003-04,2004-05, 2005-06, 2006-07 and 2007-08, without taking into account expected manpower cost implications on account of wage revision due with effect from 1.1.2007. The Commission has considered 50% in the wage hike so as to stipulate the norms for 2009-10.

41. We have considered the submissions of the petitioner and the respondents. We have 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

42. The 2009 Tariff Regulations provides for the components of the working capital and the interest thereon as under:-

## (i) Receivables

As per Regulation 18(1) (c) (i) of the 2009 Tariff Regulations, receivables 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 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 as a component of working capital. The petitioner has claimed O&M expenses for 1 month of the respective year as claimed in the petition. This has been considered in the working capital.

# (iv) Rate of interest on working capital

Interest rate of 11.75% (SBI Base Rate 10.00% as on 1.4.2011 plus 350 bps) has been considered for calculating interest on working capital.

43. Details of interest on working capital allowed are given hereunder:-

		(` in lakh)
Particulars	2012-13	2013-14
Maintenance Spares	28.79	30.44
O & M expenses	16.00	16.91
Receivables	84.87	101.69
Total	129.66	149.04
Interest	17.50	20.12

# Transmission Charges

44. The transmission charges allowed for the transmission assets covered

in the instant petition are given hereunder:-

		(` in lakh)
Particulars	2012-13	2013-14
Depreciation	93.42	123.38
Interest on Loan	113.69	141.28
Return on equity	92.68	122.44
Interest on working Capital	17.50	20.12
O & M Expenses	191.94	202.92
Total	509.24	610.14

# Filing fee and the publication expenses



45. The petitioner has sought reimbursement of fee paid by it for filing the petition and expenses related to publication of notices. BRPL has submitted that the petitioner's prayer for filing fee and publication expenses should be governed as per the Commission's order dated 11.9.2008 in Petition No. 129/2005. The petitioner has clarified that reimbursement of expenditure has been claimed in terms of Regulation 42 of 2009 Tariff Regulations. We would like to clarify that order dated 11.9.2008 in Petition No. 129/2005 pertains to 2004-09 period. 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

46. 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 has submitted that the petitioner's request for reimbursement for licence fee should be rejected. The petitioner has clarified that the licence fee shall be recoverable as per Regulation 42A (1)(b) of the 2009 Tariff Regulations. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42A (1)(b) of the 2009 Tariff Regulations.

#### Service tax

47. 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. 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 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 the prayer of the petitioner pre-mature and accordingly the petitioner's prayer is rejected.

## Sharing of transmission charges

48. The billing, collection and disbursement of transmission charges shall be governed by provisions of the Central Electricity Regulatory Commission (Sharing of inter-State transmission charges and losses) Regulations, 2010.

49. This order disposes of Petition No. 71/TT/2012.

sd/-(M. Deena Dayalan) Member sd/-(V. S. Verma) Member



## **CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN**

			(` in lakh)
	Details of Loan	2012-13	2013-14
1	Bond XXXIII		
	Gross loan opening	10.00	10.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	10.00	10.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	10.00	10.00
	Average Loan	10.00	10.00
	Rate of Interest	8.64%	8.64%
	Interest	0.86	0.86
	Rep Schedule		nstallments from
			.07.2014
2	Bond XXXIV		
-	Gross loan opening	10.00	10.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year	0.00	
	Net Loan-Opening	10.00	10.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	10.00	10.00
	Average Loan	10.00	10.00
	Rate of Interest	8.84%	8.84%
	Interest	0.88	0.88
	Rep Schedule		nstallments from
	Kep Belleddie	21.10.2014	
3	Bond XXXVI		
•	Gross loan opening	50.00	50.00
	Cumulative Repayment upto	0.00	0.00
	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	0.00
	Net Loan-Closing	50.00	50.00
	Average Loan	50.00	50.00
	Rate of Interest	9.35%	9.35%
	Interest	4.68	4.68
	Rep Schedule		nstallments from
	Rep Schedule		.08.2018
4	Bond XXXII	20	
•	Gross loan opening	36.00	36.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	36.00	36.00
		50.00	50.00



	Additions during the year	0.00	0.00
	Repayment during the year	0.00	3.00
	Net Loan-Closing	36.00	33.00
		36.00	34.50
	Average Loan Rate of Interest		
		8.84%	8.84%
	Interest	3.18	3.05
	Rep Schedule	12 annual installments from 29.03.2014	
5	Bond XXXVII		
	Gross loan opening	36.07	36.07
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	36.07	36.07
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	36.07	36.07
	Average Loan	36.07	36.07
	Rate of Interest	9.25%	9.25%
	Interest	3.34	3.34
	Rep Schedule	12 annual installments from 26.12.2015	
6	Bond XXXV		
	Gross loan opening	700.00	700.00
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	700.00	700.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	700.00	700.00
	Average Loan	700.00	700.00
	Rate of Interest	9.64%	9.64%
	Interest	67.48	67.48
	Rep Schedule	12 annual installments from 31.05.2015	
	Total Loan		
	Gross loan opening	842.07	842.07
	Cumulative Repayment upto	0.00	0.00
	DOCO/previous year		
	Net Loan-Opening	842.07	842.07
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	3.00
	Net Loan-Closing	842.07	839.07
	Average Loan	842.07	840.57
	Rate of Interest	9.5505%	9.5518%