

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 113/TT/2012

Coram:

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

Date of Hearing : 04.03.2014

Date of Order : 06.01.2015

In the matter of:

Approval of transmission tariff for Spare interconnecting transformers (ICTs) for Northern Region under Regulation-86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 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 (Haryana).

.....**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.,
BSES Bhawan, Nehru Place,
New Delhi.
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 S. K. Venkatesan, PGCIL
Shri M. M. Mondal, PGCIL
Ms. Sangeeta Edwards, PGCIL
Shri S.S Raju, PGCIL
Shri P. Saraswat, PGCIL

For respondent : Shri R. B. Sharma, Advocate, BRPL

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited (PGCIL) seeking approval of the transmission tariff for Spare interconnecting transformers (ICTs) at Mandola and Ludhiana in Northern Region (hereinafter referred to as "transmission assets") 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 transmission project was accorded by Board of Directors of the petitioner on 8.10.2010 at an estimated cost of ₹2778 lakh, including IDC of ₹109 lakh based on 2nd quarter, 2010 price level. The asset was scheduled to be commissioned within 20 months from the date of investment approval i.e. 1.7.2012. The scope of work covered under the project is as follows:-

Sub-station:

- (i) Mandola 400/220 kV sub-station- 400/220 kV, 315 MVA ICT
- (ii) Ludhiana 400/220 kV sub-station- 400/220 kV, 315 MVA ICT



3. In the instant petition, transmission tariff has been computed in respect of Mandola 400/220 kV Sub-station- 400/220 kV, 315 MVA ICT (**hereinafter referred to as Asset-1**) which was commissioned on 1.11.2010 and Ludhiana 400/220 kV Sub-station- 400/220 kV, 315 MVA ICT which was commissioned on 1.12.2011 (**hereinafter referred to as Asset-2**).

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

(₹ in lakh)

Particulars	Asset-1			
	2010-11 (Pro-rata)	2011-12	2012-13	2013-14
Depreciation	23.51	57.65	58.45	58.45
Interest on Loan	29.57	68.63	64.06	58.43
Return on Equity	24.10	59.10	59.93	59.93
Interest on Working capital	1.44	3.46	3.41	3.30
O & M Expenses	0.00	0.00	0.00	0.00
Total	78.62	188.84	185.85	180.11

(₹ in lakh)

Particulars	Asset-2		
	2011-12 (Pro-rata)	2012-13	2013-14
Depreciation	13.97	42.72	45.84
Interest on Loan	17.35	50.27	49.96
Return on Equity	13.88	42.43	45.53
Interest on Working capital	0.90	2.70	2.82
O & M Expenses	0.00	0.00	0.00
Total	46.10	138.12	144.15

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

(₹ in lakh)

Particulars	Asset-1			
	2010-11 (Pro-rata)	2011-12	2012-13	2013-14
Maintenance Spares	0.00	0.00	0.00	0.00
O & M Expenses	0.00	0.00	0.00	0.00
Receivables	13.10	31.47	30.98	30.02
Total	13.10	31.47	30.98	30.02
Rate of Interest	11.00%	11.00%	11.00%	11.00%
Interest	1.44	3.46	3.41	3.30

(₹ in lakh)

Particulars	Asset-2		
	2011-12 (Pro-rata)	2012-13	2013-14
Maintenance Spares	0.00	0.00	0.00
O & M Expenses	0.00	0.00	0.00
Receivables	23.05	23.02	24.03
Total	23.05	23.02	24.03
Rate of Interest	11.75%	11.75%	11.75%
Interest	0.23	2.70	2.82

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. Jaipur Vidyut Vitran Nigam Ltd (JVVNL), Respondent No. 3 has filed reply vide affidavit dated 21.3.2012, Jodhpur Vidyut Vitran Nigam Ltd (Jd. VVNL), Respondent No. 4, has filed reply vide affidavit dated 27.3.2012, and BSES Rajdhani Power Ltd (BRPL), Respondent No. 12, has filed its reply vide affidavit dated 3.3.2014. The respondents have broadly raised the issue of additional capital expenditure, additional return on equity, O&M Expenses, approval of the scheme, cost over-run, additional Return on Equity, petition filing fee and service tax. The petitioner has not filed the rejoinder of the replies of JVVNL, Jd.VVNL and BRPL. The objections raised by the respondents in their reply are addressed in the relevant paragraphs of this order.

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

Date of commercial operation

8. The transmission assets were scheduled to be commissioned on 1.7.2012. Initially, the petitioner claimed transmission tariff for Asset-1 from the actual date of commercial operation i.e. 1.11.2010 till the anticipated date of commercial operation of Asset-2, i.e. 1.1.2012 and for the combined tariff for Asset-1 and 2, from the anticipated date of commercial operation of Asset-2 i.e. from 1.1.2012 to 31.3.2014. Subsequently, the petitioner advanced the date of commercial operation of Asset-2 from 1.1.2012 to 1.11.2011. The petitioner was directed vide letter dated 16.1.2012 to submit the status of the commissioning of Asset-2. In reply, the petitioner vide affidavit dated 31.12.2012 has submitted that Asset-2 was put under commercial operation on 1.12.2011 and also submitted Auditor's certificate as per the actual date of commercial operation.

9. The petitioner has further submitted vide affidavit dated 1.1.2014 that in case of Asset-2, no expenditure was incurred on supply of the equipment and the actual expenditure was incurred between 1.12.2011 to 29.2.2012. The petitioner has further submitted vide affidavit dated 18.11.2014 that the transmission charges have been claimed from the actual date of commercial operation considering actual expenditure incurred between date of commercial operation to 29.2.2012.

10. We have considered the submissions of the petitioner regarding the date of commercial operation of the instant transmission assets. Asset-1 was commissioned on 1.11.2010 and there is no difficulty on this aspect. As regards Asset-2, the asset was commissioned on 1.12.2011; however, the capital expenditure was incurred from the date of commercial operation i.e 1.12.2011 to 29.2.2012. This is an unusual situation. As per Regulation 7 of 2014 Tariff Regulations, the capital expenditure upto the date of commercial operation is to be capitalized. But in the case of Asset-2, no capital expenditure has been incurred till the date of commercial operation. Therefore, taking into account the peculiarity of the facts of the case, the capital cost incurred as on 1.3.2012 shall be considered for determination of tariff and tariff shall be paid with effect from the date of commercial operation.

11. In view of above, the commissioning date of the Asset -1 and 2 have been considered as under:-

Asset	Scheduled DOCO*	Actual DOCO	DOCO for tariff computation
Asset-1	1.7.2012	1.11.2010	1.11.2010
Asset-2	1.7.2012	1.12.2011	1.3.2012

*20 months from the date of investment approval dated 8.10.2010

Capital Cost

12. Regulation 7 of the 2009 Tariff Regulations provides as follows:-

“(1) Capital cost for a project shall include:-

- (a) The expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan – (i)

being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the fund deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check.

(b) capitalised initial spares subject to the ceiling rates specified in regulation 8; and

(c) additional capital expenditure determined under regulation 9:

Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost.

(2) The capital cost admitted by the Commission after prudence check shall form the basis for determination of tariff:

Provided that in case of the thermal generating station and the transmission system, prudence check of capital cost may be carried out based on the benchmark norms to be specified by the Commission from time to time:

Provided further that in cases where benchmark norms have not been specified, prudence check may include scrutiny of the reasonableness of the capital expenditure, financing plan, interest during construction, use of efficient technology, cost over-run and time over-run, and such other matters as may be considered appropriate by the Commission for determination of tariff.”

13. The details of apportioned approved cost, capital cost as on date of commercial operation and additional capital expenditure incurred or projected to be incurred for the assets covered in the instant petition are as given below:-

(₹ in lakh)

Particular	Apportioned approved cost	Actual cost incurred as on DOCO*	Projected additional capital expenditure				Total estimated completion cost
			DOCO to 31.3.11	2011-12	2012-13	2013-14	
Asset-1	1422.06	1060.63	15.94	30.50	0.00	0.00	1107.07
Asset-2	1355.94	0.00	808.98		0.27	117.94	927.19
Total	2778	1060.63	855.42		0.27	117.94	2034.26

14. Initially in the petition, the petitioner has claimed capital cost of ₹1060.63 lakh as on the date of commercial operation vide Auditor's certificate dated

16.6.2011 for Asset-1 and no capital cost was claimed for Asset-2. The capital cost of Asset-1 has been considered as given in the Auditor certificate. As regards Asset-2, the petitioner was directed to confirm, vide letter dated 31.1.2013, that no capital cost was incurred upto the date of commercial operation. In response, the petitioner vide affidavit dated 20.9.2013 has submitted the management certificate dated 18.9.2013 for Asset-2 stating that no expenditure was incurred prior to the date of commissioning.

15. As stated in para 10, 1.12.2011 is being considered as date of commercial operation. However, for the tariff purpose, it is considered as 1.3.2012.

16. The petitioner vide affidavit dated 20.9.2013 has submitted that IDC & IEDC in both the assets is NIL. However, the petitioner has capitalized IDC & IEDC in case of Asset-2 for the period 1.12.2011 to 29.2.2012 i.e. postdate of commercial operation, vide management certificate dated 18.9.2013. The petitioner was directed to submit the justification for the claiming IDC and IEDC post commissioning of the asset.

17. In response, the petitioner vide affidavit dated 1.4.2014 clarified that:-

"it was inadvertently mentioned in vide affidavit dated 20.9.2013 that IDC and IEDC in case of both the assets is NIL and it is submitted that IDC and IEDC for Asset-1 only i.e. ICT at Mandola is NIL. The IDC and IEDC for Asset-2 i.e. ICT at Ludhiana are Rs19.69 lakh and Rs8.17 lakh respectively.

It may be submitted that Asset-2 i.e. ICT at Ludhiana was declared under commercial operation w.e.f. 1.12.2011. However, till the date of commercial operation neither any bill was received nor any advance was drawn by the supplier. Therefore, even though the asset was ready for commercial operation no expenditure was incurred on supply. All the expenditure was incurred after the

COD. However, based on the allocation of common expenditure incurred (CC and RHQ expenses) and also interest on loans drawn and allocated for the project, IDC and IEDC was to be capitalized up to DOCO.”

18. The IDC amount is against the loan drawn, but capitalized on the date of payment after the date of commercial operation. It is observed from the following loan details submitted by the petitioner that interest payment date falls beyond date of commercial operation i.e. 2012-13.

Loan	Drawl Date	Interest payment date
Bond XXXV	31.5.2011	31.5.2012
Bond XXXVI	29.8.2011	29.8.2012
Bond XXXIX	29.3.2012	29.3.2013
Bond XLI	19.10.2012	19.10.2013

19. The petitioner has submitted that there is common expenditure incurred (CC and RHQ expenses) and IDC has been allocated against this common expenditure. The petitioner has further submitted vide affidavit dated 1.1.2014 that in case of Asset-2, no expenditure was incurred on supply and the actual expenditure was incurred from the date of commercial operation to 29.2.2012. As per the management certificate dated 18.9.2013 no expenditure was incurred by the petitioner as on the date of commercial operation i.e 1.11.2012. Accordingly, there is no liability created prior to date of commercial operation with regard to IDC and IEDC. Further, in line with Para 11, the capital cost is to be considered as on the date from which the tariff is to be allowed for Asset-2. Therefore, in order to work out the capital cost as on the date from which tariff is to be worked out, IDC and IEDC claimed by the petitioner after the date of commercial operation for Asset-2 are disallowed and have been excluded from capital cost for

tariff purpose as under:-

(₹ in lakh)				
Asset	Date for Tariff Computation	Capital Cost Claimed as on Date	IDC and IEDC amount claimed	Admissible Capital Cost as on Date
Asset-1	1.11.2010	1060.63	0.00	1060.63
Asset-2	1.3.2012	808.98	27.86	751.12

Cost estimation

20. The total estimated completion cost claimed by the petitioner is ₹2034.26 lakh against the apportioned approved cost of ₹2778 lakh. The cost estimates prepared by the petitioner are higher. BRPL has submitted that there is over estimation while approving the cost and accordingly the cost over-run cannot be determined.

21. The cost estimates of the petitioner are not realistic not only in this petition but also in other similar petitions. In our view the petitioner should adopt a prudent procedure to make cost estimates of different elements of the transmission projects more realistic.

Time Over-run

22. As per Investment Approval (I.A.) the assets were scheduled to be commissioned by 1.7.2012 against this Asset-1 was commissioned on 1.11.2010 and Asset-2 was commissioned on 1.12.2011. Accordingly, there is no time over-run.

Initial Spares

23. The petitioner has not claimed any initial spares for Asset-1. The petitioner in its management certificate dated 18.9.2013, submitted vide affidavit dated 20.9.2013, has claimed spares of ₹21.07 lakh (2.27% of sub-station cost) for Asset-2. The initial spares claimed by the petitioner for Asset-2 is allowed as the same falls within the ceiling limit specified in Regulation 8 of the 2009 Tariff Regulations.

24. Accordingly, capital cost of ₹1060.63 lakh and ₹751.12 lakh as on the date of commercial operation of Asset-1 and Asset-2, respectively have been considered for the purpose of determination of transmission tariff.

Projected additional capital expenditure

25. 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.”

26. 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”.

27. In case of Asset-1, the petitioner has claimed additional capital expenditure, incurred or to be incurred, amounting to ₹15.94 lakh and ₹30.50 lakh from the date of commercial operation to 31.3.2011 and 2011-12 respectively. In case of Asset-2, the petitioner vide affidavit dated 20.9.2013 has submitted management certificate dated 18.9.2013 and claimed capital cost of ₹808.98 lakh, inclusive of ₹8.17 lakh and ₹19.69 lakh pertaining to IEDC and IDC respectively, from the date of commercial operation to 31.3.2012 and ₹0.27 lakh for 2012-13 and ₹117.94 lakh for 2013-14.

28. As mentioned above, even though the asset was ready for commercial operation, no expenditure was incurred on supply. All the expenditure was incurred after the date of commercial operation. The capital cost considered for the purpose of additional capitalization for Asset-2 is as follows:-

(₹in lakh)		
Year	Additional capital expenditure claimed	Additional capital expenditure considered
2011-12	30	30
2012-13	0.27	0.27
2013-14	117.94	117.94

29. The projected additional capital expenditure claimed by the petitioner falls

within the cut-off date and is mainly on account of balance and retention pavements. Hence, the additional capital expenditure has been considered for the purpose of tariff determination under Regulations 9 (i) of the 2009 Tariff Regulations. Capital cost incurred or to be incurred up to date of commercial operation and projected additional capital expenditure will be reviewed at the time of truing up.

30. Details of the additional capital expenditure incurred/projected to be incurred from the date of commercial operation to 31.3.2011 and for the period 2011-12 to 2013-14 for the instant transmission assets covered in the petition are given below:-

(₹ in lakh)						
Asset	DOCO: 1.11.2010 to 31.3.2011	For tariff 1.3.2012 to 31.03.2012	2011-12	2012-13	2013-14	Total
Asset-1	15.94	---	30.50	---	---	1107.07
Asset-2	---	751.12	30	0.27	117.94	899.33

31. The additional capital expenditure has been claimed by the petitioner on account of balance and retention payments. Accordingly, the additional capital expenditure has been considered under Regulation 9(1) of the 2009 Tariff Regulations for the purpose of tariff calculations. The projected additional capital expenditure shall be reviewed at the time of truing up.

Debt- equityratio

32. Regulation 12 of the 2009 Tariff Regulations provides as follows:-

“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.”

33. The detail of opening debt-equity ratio of assets considered for the purpose of tariff calculation is given above table:-

(₹ in lakh)

Capital cost as on DOCO		
Particulars	Amount	%
Debt	742.44	70.00
Equity	318.19	30.00
Total	1060.63	100.00
Particulars	Amount	%
Debt	525.78	0.00
Equity	225.34	0.00
Total	751.12	0.00

34. The debt-equity ratio for projected additional capital expenditure considered is as given overleaf:-

(₹ in lakh)

Capital cost as on DOCO				
	Asset 1		Asset 2	
2011-12	Amount	%	Amount	%
Debt	21.35	0.00	21.00	0.00
Equity	9.15	0.00	9.00	0.00
Total	30.50	0.00	30.00	0.00
2012-13				
Debt	0.00	0.00	0.19	0.00
Equity	0.00	0.00	0.08	0.00
Total	0.00	0.00	0.27	0.00
2013-14				
Debt	0.00	0.00	82.56	0.00
Equity	0.00	0.00	35.38	0.00
Total	0.00	0.00	117.94	0.00

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

(₹ in lakh)

Capital cost as on 31.3.2014		
Asset-1		
Particulars	Amount	%
Debt	774.95	70.00
Equity	332.12	30.00
Total	1107.07	100.00
Asset-2		
Particulars	Amount	%
Debt	629.53	70.00
Equity	269.80	30.00
Total	899.33	100.00

Return on Equity

36. Regulation 15 of the 2009 Tariff Regulations provides asunder:-

“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".

37. The petitioner has claimed additional Return on Equity. The petitioner has submitted that the timeline for the instant transmission asset is same as for new 400 kV A/C sub-station, i.e. 24 months for Plain Area from the date of IA as specified in the Appendix-II of the 2009 Tariff Regulations. The petitioner has submitted that the instant assets have been commissioned within 20 months from the date of IA and hence eligible for additional Return on Equity of 0.5%. The petitioner was directed vide letter dated 15.2.2012 to give reasons for claiming additional Return on Equity since no timeline is specified for ICT in the 2009 Tariff Regulations. The petitioner vide affidavit dated 19.12.2012 has submitted that since there is no timeline given for ICTs in 2009 Tariff Regulations and the

timeline specified for the sub-station has been considered for claiming additional Return on Equity of 0.5% for both the assets covered in this petition.

38. JVVNL and Jd.VVNL have submitted that the petitioner has not submitted the extra efforts made for commissioning the instant assets and hence additional Return on Equity as claimed by the petitioner may not be allowed. BRPL has also made similar submissions.

39. We have considered the submissions made by both the petitioner and the respondents. No timeline for allowing additional Return on Equity of 0.5% for ICTs is specified in the 2009 Tariff Regulations. The timeline of 24 months specified in the Appendix-II of the 2009 Tariff Regulations is for new 400 kV A/C sub-stations and this timeline cannot be extended for existing sub-stations, as in the instant case and hence the petitioner's prayer for additional return of 0.5% is not allowed.

40. The petitioner's prayer to recover the shortfall or refund the excess Annual Fixed Charges, on account of return on equity due to change in applicable Minimum Alternate Tax/Corporate Income Tax rate as per the Income Tax Act, 1961 of the respective financial year directly without making any application before the Commission shall be dealt under Regulation 15(5) as stated above. Return on Equity has been computed @ 17.481% p.a on average equity.

41. Based on the above, the return on equity has been considered as given hereunder:-

(₹ in lakh)

Particulars	Asset-1			
	2010-11	2011-12	2012-13	2013-14
Opening Equity	318.19	322.97	332.12	332.12
Addition due to Additional Capitalisation	4.78	9.15	0.00	0.00
Closing Equity	322.97	332.12	332.12	332.12
Average Equity	320.58	327.55	332.12	332.12
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.33%	11.33%	11.33%	11.33%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	23.35	57.26	58.06	58.06

(₹ in lakh)

Particulars	Asset-2		
	2011-12 (pro-rata)	2012-13	2013-14
Opening Equity	225.34	234.34	234.42
Addition due to Additional Capitalisation	9.00	0.08	35.38
Closing Equity	234.34	234.42	269.80
Average Equity	229.84	234.38	252.11
Return on Equity (Base Rate)	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.33%	11.33%	11.33%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	3.35	40.97	44.07

Interest on Loan

42. 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.”

43. The interest on loan has been calculated as provided under Regulation 16 of the 2009 Tariff Regulations, 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; and

(d) Notwithstanding moratorium period availed by the transmission licensee, the repayment of the loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.

44. In case of Asset-1, there was no loan outstanding/drawn as on date of commercial operation i.e. 1.11.2010 and loans were drawn only during 2011-12. Accordingly, the second proviso of Regulation 16 (5) has been applied. Accordingly, the weighted average rate of interest of the transmission licensee as a whole has been worked out for 2010-11 as per audited Balance Sheet of 2010-11. It is pertinent to mention that in general circumstances only long term loans are to be considered for the purpose of computation of weighted average rate of interest, however segregation of the interest charged against short term loan and long term loan is not possible from the Profit and Loss Account. Therefore, weighted average rate of interest has been calculated considering short term loans as well as long term loans as depicted in the Balance Sheet. Further, from the schedules to the Balance Sheet, it is observed that certain amount against interest has been transferred to IEDC against capital work in progress (CWIP). Accordingly, 70% of CWIP, considering as debt portion, has been reduced from the total debt for the calculation of weighted average rate of interest. Consequently, the weighted average rate of interest works out to 5.1634% for

2010-11. Any variation in the interest rate will be considered at the time of true up.

45. In case of Asset-2, petitioner has considered Bond XLI as an addition during the year 2011-12 in Form-13 i.e. Calculation of Weighted Average Rate on Actual Loans. The allotment date of Bond XLI is 19.10.2012, which falls during the year 2012-13. Accordingly, Bond XLI has been considered as addition during the year in Form-13.

46. Detailed calculations in support of the weighted average rates of interest have been given in Annexure I and II of this order.

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

(₹ in lakh)

Particulars	Asset-1			
	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	742.44	753.60	774.95	774.95
Cumulative Repayment upto Previous Year	0.00	23.51	81.16	139.61
Net Loan-Opening	742.44	730.09	693.79	635.34
Addition due to Additional Capitalisation	11.16	21.35	0.00	0.00
Repayment during the year	23.51	57.65	58.45	58.45
Net Loan-Closing	730.09	693.79	635.34	576.89
Average Loan	736.27	711.94	664.57	606.11
Weighted Average Rate of Interest on Loan	5.1634%	9.6400%	9.6400%	9.6400%
Interest	15.84	68.63	64.06	58.43

(₹ in lakh)

Particulars	Asset-2		
	2011-12 (pro-rata)	2012-13	2013-14
Gross Normative Loan	525.78	546.78	546.97
Cumulative Repayment upto Previous Year	0.00	0.00	44.62
Net Loan-Opening	525.78	543.41	502.35
Addition due to Additional Capitalisation	21.00	0.19	82.56
Repayment during the year	3.37	41.25	44.37
Net Loan-Closing	543.41	502.35	540.54
Average Loan	534.60	522.88	521.45
Weighted Average Rate of Interest on Loan	9.5255%	9.4773%	9.4599%
Interest	4.24	49.56	49.33

Depreciation

48. 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.”

49. Asset-1 and Asset-2 were put under commercial operation as on 1.11.2010 and 1.12.2011 respectively. The commercial operation of 1.3.2012 has been recognized for the tariff purpose. Since, the asset has been into operation from 1.12.2011, the useful life will start from 1.12.2011 but the depreciation has been computed from 1.3.2012. Accordingly, assets will complete 12 years beyond 2013-14. Thus, depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix-III of the 2009 Tariff Regulations, as per details given hereunder:-

(₹ in lakh)

Particulars	Asset-1			
	2010-11	2011-12	2012-13	2013-14
Opening Gross Block	1060.63	1076.57	1107.07	1107.07
Addition due to Projected Additional Capitalisation	15.94	30.50	0.00	0.00
Closing Gross Block	1076.57	1107.07	1107.07	1107.07
Average Gross Block	1068.60	1091.82	1107.07	1107.07
Rate of Depreciation	5.2800%	5.2800%	5.2800%	5.2800%
Depreciable Value	961.74	982.64	996.36	996.36
Remaining Depreciable Value	961.74	959.13	915.21	856.75
Depreciation	23.51	57.65	58.45	58.45

(₹ in lakh)

Particulars	Asset-2		
	2011-12 (pro-rata)	2012-13	2013-14
Opening Gross Block	751.12	781.12	781.39
Addition due to Projected Additional Capitalisation	30.00	0.27	117.94
Closing Gross Block	781.12	781.39	899.33
Average Gross Block	766.12	781.26	840.36
Rate of Depreciation	5.2800%	5.2800%	5.2800%
Depreciable Value	689.51	703.13	756.32
Remaining Depreciable Value	689.51	699.76	711.70
Depreciation	3.37	41.25	44.37

Operation & Maintenance Expenses (O&M Expenses)

50. The petitioner has not claimed O&M expenses for spare ICTs. However, the petitioner has submitted that O&M Expenses 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 Expenses for tariff period 2009-14. The petitioner has submitted that it would approach the Commission for suitable revision in the norms for O&M Expenses due to wage revision, if any.

51. The Commission has given effect to 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.

52. JVVNL and Jd. VVNL have submitted that higher O&M charges may not be accepted as the Tariff is to be determined strictly as per 2014 Tariff Regulations.

53. The O&M Expenses have not been claimed by the petitioner and hence objection of JVVNL and Jd.VVNL is not considered.

Interest on Working Capital

54. 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

No O&M expenses have been claimed in the instant petition. Accordingly, as per Regulation 19 Maintenance spares and one month O&M expenses work out to NIL.

(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 interest rate @ 13.50% (Base rate as on 1.4.2012 i.e. 10% and 350 basis points) for asset. The interest on working capital for the assets covered in the petition has been worked out accordingly.

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

(₹ in lakh)

Particulars	Asset-1			
	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	0.00	0.00	0.00	0.00
O & M Expenses	0.00	0.00	0.00	0.00
Receivables	10.53	31.16	30.66	29.70
Total	10.53	31.16	30.66	29.70
Interest	0.48	3.43	3.37	3.27

(₹ in lakh)

Particulars	Asset-2		
	2011-12 (pro-rata)	2012-13	2013-14
Maintenance Spares	0.00	0.00	0.00
O & M Expenses	0.00	0.00	0.00
Receivables	22.36	22.40	23.42
Total	22.36	22.40	23.42
Interest	0.22	2.63	2.75

Transmission Charges

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

(₹ in lakh)

Particulars	Asset-1			
	2010-11	2011-12	2012-13	2013-14
Depreciation	23.51	57.65	58.45	58.45
Interest on Loan	15.84	68.63	64.06	58.43
Return on Equity	23.35	57.26	58.06	58.06
Interest on Working Capital	0.48	3.43	3.37	3.27
O & M Expenses	0.00	0.00	0.00	0.00
Total	63.18	186.97	183.95	178.21

(₹ in lakh)

Particulars	Asset-2		
	2011-12 (pro-rata)	2012-13	2013-14
Depreciation	3.37	41.25	44.37
Interest on Loan	4.24	49.56	49.33
Return on Equity	3.35	40.97	44.07
Interest on Working Capital	0.22	2.63	2.75
O & M Expenses	0.00	0.00	0.00
Total	11.18	134.41	140.52

Filing Fee and the Publication Expenses

57. 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 shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on *pro-rata* basis in accordance with Regulation 42A (1) (a) of the 2009 Tariff Regulations.

Licence Fee

58. The petitioner has submitted that the O&M norms for tariff block 2009-14 does not capture the cost associated with license fees and the license fee may be allowed to be recovered separately from the respondents. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42A (1) (b) of the 2009 Tariff Regulations.

Service Tax

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

Sharing of Transmission Charges

60. The transmission charges allowed shall be recovered on monthly basis in accordance with Regulation 23 and shared by the beneficiaries in accordance with Regulation 33 of the 2009 regulation up to 30.6.2011. With effect from 1.7.2011, the billing, collection & disbursement of the transmission charges shall be governed by the provision of Central Electricity Regulatory Commission (sharing of inter-state transmission charges and losses) Regulations, 2010 as amended from time to time.

61. This order disposes of Petition No. 113/TT/2012.

sd/-

(A. K. Singhal)
Member

sd/-

(M. Deena Dayalan)
Member

sd/-

(Gireesh B. Pradhan)
Chairperson



Annexure-1

Calculation of Weighted Average Rate of Interest on Actual Loans

(₹ in lakh)

Details of Loan	2010-11	2011-12	2012-13	2013-14
1 Bond XXXV				
Gross loan opening	0.00	0.00	742.45	742.45
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
Net Loan-Opening	0.00	0.00	742.45	742.45
Additions during the year	0.00	742.45	0.00	0.00
Repayment during the year	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	742.45	742.45	742.45
Average Loan	0.00	371.23	742.45	742.45
Rate of Interest	0.00%	9.64%	9.64%	9.64%
Interest	0.00	35.79	71.57	71.57
Rep Schedule	12 Annual Installments from 31.5.2015			
2 Bond XXXV (AddCap for 2010-11 Drawl on 31.5.2011)				
Gross loan opening	0.00	0.00	11.15	11.15
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
Net Loan-Opening	0.00	0.00	11.15	11.15
Additions during the year	0.00	11.15	0.00	0.00
Repayment during the year	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	11.15	11.15	11.15
Average Loan	0.00	5.58	11.15	11.15
Rate of Interest	8.68%	9.64%	9.64%	9.64%
Interest	0.00	0.54	1.07	1.07
Rep Schedule	12 Annual Installments from 31.5.2015			
3 Bond XXXV (AddCap for 2011-12 Drawl on 31.5.2011)				
Gross loan opening	0.00	0.00	21.35	21.35
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
Net Loan-Opening	0.00	0.00	21.35	21.35
Additions during the year	0.00	21.35	0.00	0.00
Repayment during the year	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	21.35	21.35	21.35
Average Loan	0.00	10.68	21.35	21.35
Rate of Interest	9.95%	9.64%	9.64%	9.64%
Interest	0.00	1.03	2.06	2.06
Rep Schedule	12 Annual Installments from 31.5.2015			
Total Loan				
Gross loan opening	0.00	0.00	774.95	774.95

Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
Net Loan-Opening	0.00	0.00	774.95	774.95
Additions during the year	0.00	774.95	0.00	0.00
Repayment during the year	0.00	0.00	0.00	0.00
Net Loan-Closing	0.00	774.95	774.95	774.95
Average Loan	0.00	387.48	774.95	774.95
Rate of Interest*	5.1634%	9.6400%	9.6400%	9.6400%
Interest	0.00	37.35	74.71	74.71

Annexure-2

Calculation of Weighted Average Rate of Interest on Actual Loans

(₹ in lakh)

Details of Loan	2011-12	2012-13	2013-14
1 Bond XXXIX			
Gross loan opening	0.00	254.00	254.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	0.00	254.00	254.00
Additions during the year	254.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	254.00	254.00	254.00
Average Loan	127.00	254.00	254.00
Rate of Interest	9.40%	9.40%	9.40%
Interest	11.94	23.88	23.88
Rep Schedule	Bullet Payment 29.3.2027		
2 Bond XXXV			
Gross loan opening	225.04	225.04	225.04
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	225.04	225.04	225.04
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	225.04	225.04	225.04
Average Loan	225.04	225.04	225.04
Rate of Interest	9.64%	9.64%	9.64%
Interest	21.69	21.69	21.69
Rep Schedule	12 Annual Installments from 31.5.2015		
4 Bond XXXVI			
Gross loan opening	56.00	56.00	56.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	56.00	56.00	56.00
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00
Net Loan-Closing	56.00	56.00	56.00
Average Loan	56.00	56.00	56.00
Rate of Interest	9.350%	9.35%	9.35%
Interest	5.24	5.24	5.24
Rep Schedule	15 Equal Annual Installments from 26.12.2015		
5 Bond XLI			
Gross loan opening	0.00	0.00	10.25
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
Net Loan-Opening	0.00	0.00	10.25
Additions during the year	0.00	10.25	0.00

	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	0.00	10.25	10.25
	Average Loan	0.00	5.13	10.25
	Rate of Interest	8.85%	8.85%	8.85%
	Interest	0.00	0.45	0.91
	Rep Schedule	12 Equal Annual Installments from 19.10.2016		
6	Bond XLI (AddCap for 2011-12 drawl on 31.3.2012)			
	Gross loan opening	0.00	0.00	21.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	0.00	0.00	21.00
	Additions during the year	0.00	21.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	0.00	21.00	21.00
	Average Loan	0.00	10.50	21.00
	Rate of Interest	8.85%	8.85%	8.85%
	Interest	0.00	0.93	1.86
	Rep Schedule	12 Equal Annual Installments from 19.10.2016		
7	Bond XLI (AddCap for 2012-13 drawl on 31.3.2013)			
	Gross loan opening	0.00	0.00	0.19
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	0.00	0.00	0.19
	Additions during the year	0.00	0.19	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	0.00	0.19	0.19
	Average Loan	0.00	0.10	0.19
	Rate of Interest	0.00%	8.85%	8.85%
	Interest	0.00%	0.01	0.02
	Rep Schedule	12 Equal Annual Installments from 19.10.2016		
	Total Loan			
	Gross loan opening	281.04	535.04	566.48
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	281.04	535.04	566.48
	Additions during the year	254.00	31.44	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	535.04	566.48	566.48
	Average Loan	408.04	550.76	566.48
	Rate of Interest	9.5255%	9.4773%	9.4599%
	Interest	38.87	52.20	53.59