### CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### Petition No. 100/TT/2013

#### Coram:

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

Date of Hearing : 22.04.2014 Date of Order : 31.10.2014

#### In the matter of:

Approval of transmission tariff for **Asset-I**: 400/220 kV, 315 MVA ICT-II at Samba S/S alongwith associated bays and 3 nos. 220 kV Line bays and **Asset-II**: 1 no. 400 kV, 80 MVAR Bus Reactor at Samba S/S along with associated bays under NRSS-XXII for tariff block 2009-14 period under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009

#### And in the matter of:

Power Grid Corporation of India Limited "Saudamini", Plot No.2, Sector-29, Gurgaon -122 001

#### Vs

.....Petitioner

- Rajasthan Rajya Vidyut Prasaran Nigam Ltd., Vidyut Bhawan, Vidyut Marg, Jaipur- 302 005
- Ajmer Vidyut Vitran Nigam Ltd., 400 kV GSS Building (Ground Floor), Ajmer Road, Heerapura, Jaipur.
- Jaipur Vidyut Vitran Nigam Ltd.,
  400 kV GSS Building (Ground Floor), Ajmer Road,
  Heerapura, Jaipur.
- Jodhpur Vidyut Vitran Nigam Ltd., 400 kV GSS Building (Ground Floor), Ajmer Road, Heerapura, Jaipur.

- 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.
- 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.S Raju, PGCIL Ms. Sangeeta Edwards,PGCIL Ms. Seema Gupta, PGCIL Shri S.K. Venkatesan, PGCIL
For respondent	:	Shri R.B. Sharma, Advocate, BRPL Shri Padamjit Singh, PSPCL Shri T.P.S. Bawa, PSPCL

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

This petition has been filed by Power Grid Corporation of India Limited (PGCIL) seeking approval of the transmission tariff for **Asset-I**: 400/220 kV, 315 MVA ICT-II at Samba Sub-station along with associated bays and 3 nos. 220 kV Line bays and **Asset-II**: 1 no. 400 kV, 80 MVAR Bus Reactor at Samba Sub-station along with associated bays under the Northern Region System Strengthening Scheme-XXII (NRSS-XXII) 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. Investment approval for the project was accorded by the Board of Directors of the petitioner's company vide letter No. C/CP/NRSS-XXII, dated 15.12.2010 for ₹20978 lakh including an IDC of ₹1212 lakh (based on 2<sup>nd</sup> Quarter, 2010 price level). The project was scheduled to be commissioned within 32 months from the date of investment approval i.e. by 1.9.2013.

3. The scope of works covered under the NRSS-XXII broadly includes:-

#### Transmission Line

 (i) Kishenpur- Samba 400 kV D/C Line (with 2 x S/C portion near Kishenpur Sub-station end)

#### **Substations**

- (i) New 2x315 MVA, 400/220 kV Substation at Samba.
- (ii) Extension of 400/220 kV Kishenpur Substation.

#### **Reactive Compensation**

(i) 80 MVAR bus reactor at Samba Substation.

4. In the instant petition, transmission tariff has been considered in respect of 400/220 kV, 315 MVA ICT-II at Samba Sub-station along with associated bays and 3 nos. 220 kV Line bays (hereinafter referred to as "Asset-I") and 1 no. 400 kV, 80 MVAR Bus Reactor at Samba Sub-station along with associated bays (hereinafter referred to as "Asset-I"), both of which were commissioned on 1.4.2013.

5. Initially the petitioner claimed tariff on the basis of anticipated date of commercial operation of the instant asset, as 1.6.2013. Accordingly, the petitioner submitted the Auditor's Certificate and tariff forms along with the petition on the basis of anticipated date of commercial operation. Later, the petitioner has vide affidavit dated 20.11.2013, submitted that both the assets were put under commercial operation on 1.4.2013. The petitioner has also submitted revised Management Certificates for the expenditure based on actual date of commercial operation of the assets. As of now, the instant petition covers determination of tariff based on actual expenditure incurred up to the date of commercial operation, based on management

certificates, and projected additional capital expenditure to be incurred from the date of commercial operation to 31.3.2014.

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

	(*	₹ in lakh)
	Asset-I	Asset-II
Particulars	2013-14	2013-14
Depreciation	74.68	29.31
Interest on Loan	86.73	34.03
Return on Equity	76.56	30.05
Interest on working capital	18.78	5.64
O & M Expenses	248.74	65.46
Total	505.49	164.49

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

		(₹ in lakh)
	Asset-I	Asset-II
Particulars	2013-14	2013-14
Maintenance Spares	37.31	9.82
O & M Expenses	20.73	5.46
Receivables	84.25	27.42
Total	142.29	42.70
Rate of Interest	13.20%	13.20%
Interest	18.78	5.64

8. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the Electricity Act. Ajmer Vidyut Vitran Nigam Ltd (AVVNL), Respondent No. 2, Jaipur Vidyut Vitran Nigam Ltd (JVVNL), Respondent No. 3, and Jodhpur Vidyut Vitran Nigam Ltd (Jd. VVNL), Respondent No. 4, have filed a combined reply vide affidavit dated 23.5.2013. Punjab State Power Corporation Limited (PSPCL), Respondent No. 6,

has submitted its reply during hearing on 22.4.2014. Uttar Pradesh Power Corporation Limited (UPPCL), Respondent No. 9, has filed its reply vide affidavit dated 28.11.2013 and BSES Rajdhani Power Ltd (BRPL), Respondent No. 12, has filed its reply vide affidavit dated 16.4.2014. The petitioner has filed rejoinder to the common reply of AVVNL, JVVNL and Jd. VVNL, vide affidavit dated 9.4.2014. Further, the petitioner has filed separate rejoinders to the replies filed by UPPCL, BRPL, and PSPCL, vide affidavits dated 9.4.2014, 19.6.2014 and 20.6.2014 respectively. The respondents have raised the issue of additional capital expenditure, additional return on equity, O&M Expenses, cost variation, higher initial spares, etc.

9. We have heard the representatives of the parties present at the hearing and have perused the material on record. We proceed to dispose of the petition. While doing so, the submissions of the respondents will be duly taken care of.

#### Capital Cost

- 10. Regulation 7 of the 2009 Tariff Regulations provides as follows:-
  - "(1) Capital cost for a project shall include:-
    - (a) The expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan – (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii)being equal to the actual amount of loan in the event of the actual equity less than 30% of the fund deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check.
    - (b) capitalised initial spares subject to the ceiling rates specified in regulation 8; and
    - (c) additional capital expenditure determined under regulation 9:

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

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

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

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

11. Details of apportioned approved cost, actual cost incurred as on date of commercial operation and details of additional capital expenditure incurred / projected to be incurred for the assets covered in the petition are summarized below:-

				(₹	in lakh)
Name of the asset	Apportioned approved cost	Expenditure up to DOCO	Projected exp. from DOCO to 31.3.2014	Projected expenditure 2014-15	Total estimated completion cost
Asset-I	2280.89	1204.95	418.81	133.50	1757.26
Asset-II	734.05	388.22	333.83	50.35	772.40

#### **Cost Variation**

12. The estimated completion cost in respect of Asset-I is ₹1,757.26 lakh which is less than the apportioned approved cost of ₹2,280.89 lakh and in respect of Asset-II, estimated completion cost is ₹772.4 lakh which is more than the apportioned approved cost of ₹734.05 lakh. Thus, there is a marginal cost over-run of ₹38.35 lakh in respect of Asset-II.

13. BRPL has vide its reply dated 16.4.2014 submitted that that there is huge saving in Asset-I, but Asset-II has cost over-run. This shows that there was over-estimation of the revised cost estimates for this scheme, when it was accorded approval by the Board of Director of the petitioner and accordingly, the cost over-run cannot be determined. Further, the petitioner has not furnished benchmarking data.

14. PSPCL has submitted that the estimated completion cost of Asset-II is shown as ₹777.37 lakh as against apportioned approved cost of ₹734.05 lakh. It seeks to know if the petitioner has approved the excess in completion cost.

15. The petitioner has vide its affidavit dated 19.6.2014 submitted that benchmarking cost data sought by BRPL will be submitted at the time of truing up of the assets. As regards cost over-run in case of Asset-II, the petitioner has vide its affidavit dated 20.11.2013 submitted that the entire scope of the project is completed and the total completion cost of the project is ₹20978 lakh against total approved cost of ₹18593 lakh. The project cost as a whole is within the approved cost. The petitioner has further submitted that the 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 possible market prices for required product/ services are obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. In the instant case the awarded price was above the estimated FR rates in Sub-station items like Control, Relay & Protection Panel, Page **8** of **30**  Structure for Switchyard, Switchgear (CT, PT, Circuit Breaker, and Isolators) and auxiliary system.

16. We have considered the submission made by the petitioner and the respondents regarding cost-variation. The cost variation is not within the control of the petitioner. Accordingly, the cost variation is allowed.

#### Time Over-run

17. As per Investment Approval dated 15.12.2010, the scheme was scheduled to be completed within 32 months from the date of investment approval, i.e. by 1.9.2013. Both the assets have been commissioned on 1.4.2013. Hence, there is no time over-run.

#### Treatment of Initial Spares

18. The petitioner has, vide affidavit dated 26.11.2013, submitted revised management certificate and has claimed initial spares as under:

#### (₹ in lakh)

Asset	Estimated completion cost	Initial spares claimed	% of sub-station cost
Asset-I	1,757.26	62.72	3.57%
Asset-II	772.4	35.62	4.61%
Total	2,529.66	98.34	3.89%

19. BRPL has vide affidavit dated 16.4.2014 submitted that the capitalization of initial spares in the capital cost should be limited to the ceiling norms prescribed in the 2009 Tariff Regulations. The petitioner has vide affidavit dated 20.6.2014

submitted that the initial spares for transmission line for the project as a whole are within the norms prescribed in the 2009 Tariff Regulation.

20. In this order, initial spares are restricted to ceiling norm of 2.50% of the capital cost as per the 2009 Tariff Regulations, and accordingly, the excess initial spares are deducted as per details given below:-

					(	₹ in lakh)	
Particulars	Capital cost claimed as on cut-off date (31.3.2015)	Initial spares claimed	Capital cost considered up to 31.3.2014	Proportionate claim of initial spares against the capital cost up to 31.3.2014	Ceiling limits as per 2009 Tariff Regulations	Initial spares worked out	Excess initial spares claimed
Asset-I	1,757.26	62.72	1623.76	57.96	2.50%	40.15	17.81
Asset-II	772.40	35.62	722.05	33.30	2.50%	17.66	15.64

21. The following capital cost as on the date of commercial operation has been considered for the purpose of calculation of tariff:-

(₹ in lakhs)

Assets	Capital cost before adjustment of IDC/ IEDC & initial spares, if any, as on DOCO	Deduction in respect of excess IDC/IEDC	respect of	Capital cost after scrutiny of IDC/IEDC & initial spares as on DOCO
Asset-I	1204.95	0.00	17.81	1187.14
Asset-II	388.22	0.00	15.64	372.58

#### **Projected Additional Capital Expenditure**

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

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

- (i) Undischarged liabilities;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital Spares within the original scope of work, subject to the provisions of Regulation 8;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
- (v) Change in Law:"
- 23. Further, Regulation 3 (11) 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".

Accordingly, the cut-off date for the instant assets is 31.3.2015.

24. Details of additional capital expenditure claimed by the petitioner are as

below:-

			(₹ in lakh)
Name of Assets	DOCO	2013-14	2014-15
Asset-I	1.4.2013	418.81	133.50
Asset-II	1.4.2013	333.83	50.35

25. Additional capital expenditure claimed by the petitioner falls within the cutoff date and is on account of balance and retention payment. However, the petitioner has claimed ₹133.50 lakh and ₹50.35 lakh in respect of Asset-I and Asset-II respectively as additional capital expenditure for the year 2014-15.

26. AVVNL, JVVNL and Jd.VVNL have submitted that additional capital expenditure claimed are on account of Balance and Retention Payment. They requested to know if all the works included in the scope of the project have been

completed and the completed cost was within the cost indicated. UPPCL has vide its affidavit dated 9.4.2014 submitted that item- wise cost has not been given by the petitioner. It has further submitted that Balance and Retention Payment for the period 2014-15 included in the petition is beyond the scope of the 2009 Tariff Regulations.

27. The petitioner has vide affidavit dated 9.4.2014 submitted that all the works for the Asset-I and Asset-II covered in this petition are completed in all respects and the estimated completed cost is within the apportioned approved cost. Regarding additional capital expenditure on account of Balance and Retention Payment, the petitioner has, vide affidavit dated 20.6.2014, given details of expenditure under the head 'Balance and Retention Payment' and submitted that the bills were raised after date of commercial operation of the Assets causing increase in Balance and Retention Payment.

28. The admissibility of additional capital expenditure incurred after date of commercial operation is to be dealt in accordance with the provisions of Regulation 9 (1) the 2009 Tariff Regulations. The capital cost up to 31.3.2014, for Asset-I and Asset-II, is within the apportioned approved cost and has been considered for the purpose of tariff calculations. Additional capital expenditure claimed for 2014-15 is not being allowed in tariff block 2009-14 and will be considered as per 2014 Tariff Regulations in period 2014-19.

#### Debt- Equity Ratio

29. 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."

30. Details of debt equity ratio as on date of commercial operation of assets are

as follows:-

		(₹ in lakh)			
	Asset-I				
Particulars	Amount	%			
Debt	831.01	70.00			
Equity	356.14	30.00			
Total	1187.14	100.00			
	Asset-II				
Particulars	Amount	%			
Debt	260.81	70.00			
Equity	111.77	30.00			
Total	372.58	100.00			

31. Details of debt-equity ratio for additional capital expenditure are given hereunder:-

(₹ in lakh)			
	Asset-I		
Ac	dd-Cap for 2013-1	4	
Particulars	Amount	%	
Debt	293.17	70.00	
Equity	125.64	30.00	
Total	418.81	100.00	
	Asset-II		
Ac	dd-Cap for 2013-1	4	
Particulars	Amount	%	
Debt	233.68	70.00	
Equity	100.15	30.00	
Total	333.83	100.00	

32. Details of debt-equity ratio as on 31.3.2014 are as follows:-

Asset-I				
Capita	al cost as on 31.3	.2014		
Particulars	Amount	%		
Debt	1124.17	70.00		
Equity	481.78	30.00		
Total	1605.95	100.00		
	Asset-II			
Capita	al cost as on 31.3	.2014		
Particulars	Amount	%		
Debt	494.49	70.00		
Equity	211.92	30.00		
Total	706.41	100.00		

#### (₹ in lakh)

#### **Return on Equity**

33. 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".

34. The petitioner has claimed additional return on equity of 0.5% under Regulation 15(2) of the 2009 Tariff Regulations, for completion of the assets within the timeline.

35. AVVNL, JVVNL and Jd. VVNL have, vide affidavit dated 9.4.2014, submitted that the petitioner's claim of 0.5% additional return on equity should not be allowed since the project scheme as a whole needs to be completed within schedule. The

petitioner has not mentioned anything about the status of rest of the elements of the scheme. UPPCL and BRPL have submitted that Regulation 15(2) of 2009 Tariff Regulations provides for additional return on equity of 0.5% in case of projects commissioned on or after 1.4.2009 if such projects are completed within the timeline specified in Appendix-II. In the instant petition, the commissioning of the above works will not render full advantage of strengthening of NR transmission system as envisaged under the said Investment Approval. Unless the entire works mentioned under the Investment Approval are commissioned before the schedule of 32 months, 0.5% additional return on equity of 0.5% cannot be allowed.

36. The petitioner has vide affidavit dated 20.6.2014 submitted that as per Investment Approval, the project scope was scheduled to be completed by 1.9.2013. The timeline for completion of 400 kV D/C line (twin conductor) (hilly terrain) is 34 months and accordingly, the project would become eligible for additional return on equity if the actual date of commercial operation falls within November, 2013. The assets have been commissioned on 1.4.2013 and hence the project qualifies for additional return on equity of 0.5%.

37. We have considered the submission of the petitioner and respondents. The complete project scope has been commissioned on 1.4.2013. Hence, additional return on equity of 0.5% is allowed.

38. 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(3) as stated above. Return on Equity has been computed @ 18.044% p.a on average equity as per Regulation 15 of the 2009 Tariff Regulations.

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

		(₹ in lakh)
	Asset-I	Asset-II
Particulars	2013-14	2013-14
Opening Equity	356.14	111.77
Addition due to Additional Capitalisation	125.64	100.15
Closing Equity	481.78	211.92
Average Equity	418.96	161.85
Return on Equity (Base Rate )	16.00%	16.00%
Tax rate for the year 2008-09 (MAT)	11.33%	11.33%
Rate of Return on Equity (Pre Tax)	18.044%	18.044%
Return on Equity (Pre Tax)	75.60	29.20

#### Interest on Loan

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

"16. **Interest on Ioan 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 reenactment 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 refinancing of loan."

41. In keeping with the provisions of Regulation 16 of the 2009 Tariff Regulations,

the petitioner's entitlement to interest on loan has been calculated on the following

basis:-

(a) Gross amount of loan, repayment of instalments and rate of interest on

actual loans have been considered as per the affidavit dated 20.11.2013.

(b) The yearly repayment for the tariff period 2009-14 has been considered

to be equal to the depreciation allowed for that period.

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

42. Detailed calculations in support of the weighted average rate of interest have been given in Annexure-I & Annexure-II to this order.

43. Based on the above, interest on loan has been calculated as per details given

#### hereunder:-

		(********
	Asset-I	Asset-II
Particulars	2013-14	2013-14
Gross Normative Loan	831.01	260.81
Cumulative Repayment upto previous year	0.00	0.00
Net Loan-Opening	831.01	260.81
Addition due to additional capital	293.17	233.68
expenditure		
Repayment during the year	73.74	28.49
Net Loan-Closing	1050.43	466.00
Average Loan	940.72	363.41
Weighted Average Rate of Interest on Loan	9.1033%	9.1014%
Interest	85.64	33.07

# Depreciation

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

"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

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(₹ in lakh)

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."

45. The assets covered in the current petition were put under commercial operation as on 1.4.2013. The assets will complete 12 years beyond 2013-14. Accordingly, depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix-III to the 2009 Tariff Regulations, as per details are given hereunder:-

(₹	in	lakh)
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		•
	Asset-I	Asset-II
Particulars	2013-14	2013-14
Opening Gross Block	1187.14	372.58
Addition due to Projected	418.81	333.83
Additional Capitalisation		
Closing Gross Block	1605.95	706.41
Average Gross Block	1396.55	539.50
Rate of Depreciation	5.2800%	5.2800%
Depreciable Value	1256.89	485.55
Remaining Depreciable Value	1256.89	485.55
Depreciation	73.74	28.49

#### **Operation & Maintenance Expenses (O&M Expenses)**

46. As per the norms of Tariff Regulations, 2009, allowable O&M Expenses for the asset covered in the petition are as under:-

	(₹ in		n lakh)
S. No.	Asset	Description	O&M Expenses
1	400/220 kV, 315 MVA ICT-II at Samba S/s along with associated bays and 3 no. of 220 kV Line bays	1 no. of 400 kV and 1 no. of 200 kV ICT Bays and 3 nos. of 220 kV Line Bays	248.74
2	1 no. 400 kV, 80 MVAR Bus Reactor at Samba S/s along with associated bays	1 no. of 400 kV Reactor Bay	65.46
Total			314.20

47. BRPL has submitted that the Commission has already covered the increase in employee cost on account of pay revision of the employees of the PSUs in O&M Expenses for the year 2009-10 by rationalizing the O&M Expenses by 50% increase in employee cost. Further revision in employee cost, if any, due to wage revision must be taken care of by improvement in their productivity levels by the petitioner company so that the beneficiaries are not unduly burdened over and above the provisions made in the 2009 Tariff Regulations. AVVNL, JVVNL and Jd. VVNL have submitted that O&M Expenses may be allowed as per norms given in the 2009 Tariff Regulations.

48. The petitioner has submitted that O&M Expenses for 2009-14 tariff block was arrived at 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 has also been considered while calculating the O&M Expenses for tariff period 2009-14. The petitioner has also

submitted that it would approach the Commission for suitable revision in the norms for O&M Expenses due to impact of wage revision.

49. The Commission has 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 consultation with stakeholders. 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

50. As per the 2009 Tariff Regulations, the components of the working capital and the 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 of 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 O&M 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 the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2011 dated 21.6.2010, State Bank of India Base Rate plus 350 bps as on 1.4.2013 (13.20%) has been considered as the rate of interest on working capital for Asset-I and Asset-II.

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

	Asset-I	Asset-II	
Particulars	2013-14	2013-14	
Maintenance Spares	37.31	9.82	
O & M Expenses	20.73	5.46	
Receivables	83.74	26.97	
Total	141.78	42.24	
Interest	18.71	5.58	

(₹ in lakh)

#### Transmission Charges

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

		(₹ in lakh)
	Asset-I	Asset-II
Particulars	2013-14	2013-14
Depreciation	73.74	28.49
Interest on Loan	85.64	33.07
Return on Equity	75.60	29.20
Interest on Working Capital	18.71	5.58
O & M Expenses	248.74	65.46
Total	502.43	161.80

#### Filing Fee and the Publication Expenses

53. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. BRPL has submitted that the petitioner's prayer for filing fee should be rejected in line with 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 the 2009 Tariff Regulations.

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

#### Licence Fee

55. 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.

56. UPPCL 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.

57. 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

58. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if it is subjected to such service tax in future. UPPCL and BRPL have objected to recovery of service tax from the beneficiaries in future as CBEC has exempted service tax on transmission. The petitioner has clarified that if notifications regarding granting of exemption to transmission service are withdrawn at a later date, the beneficiaries shall have to share the service tax paid by the petitioner. We consider the petitioner's prayer pre-mature and accordingly this prayer is rejected.

#### Sharing of Transmission Charges

59. UPPCL has submitted that Asset-I is 400/220 kV 315 MVA step down in ICT-II at Samba Sub-station, and the ICT concerned is directly serving Samba Sub-station of Jammu & Kashmir. Therefore, Jammu & Kashmir should bear the entire AFC for this asset, in view of Regulation 33 (5) of the 2009 Tariff Regulations which provides as under:-

"Transmission charges for 400 / 220 kV step down transformers (ICTS) and downstream systems, under inter-state transmission schemes brought under commercial operation after 28.03.2008 shall be determined separately (i.e. segregated from the rest of the scheme) and shall be payable only by the beneficiary directly served."

60. The contention of UPPCL that entire AFC of Asset-I should be borne by Jammu & Kashmir is not as per the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 (hereinafter "the Sharing Regulations"). As the actual date of commercial operation of both the assets included in the instant petition is after 30.6.2011, the billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of the Sharing Regulations, 2010, as amended from time to time.

61. This order disposes of Petition No. 100/TT/2013.

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

#### Annexure- I

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

		(₹ in lakh)
	Details of Loan	2013-14
1	Bond XLII	
	Gross loan opening	123.47
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	123.47
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	123.47
	Average Loan	123.47
	Rate of Interest	8.80%
	Interest	10.87
	Rep Schedule	Bullet Payement as on 13.03.23
2	Bond XLI	
	Gross loan opening	206.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	206.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	206.00
	Average Loan	206.00
	Rate of Interest	8.85%
	Interest	18.23
	Rep Schedule	12 annual installments from 19.10.2016
3	Bond XXXIV	
5	Gross loan opening	20.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	20.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	20.00
	Average Loan	20.00
	Rate of Interest	8.84%
	Interest	1.77
	Rep Schedule	12 annual installments from 21.10.2014
4	Bond XXXVII	
-	Gross loan opening	54.00

	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	54.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	54.00
	Average Loan	54.00
	Rate of Interest	9.25%
	Interest	5.00
	Rep Schedule	12 annual installments from 26.12.2015.
5	Bond XL	
	Gross loan opening	431.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	431.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	431.00
	Average Loan	431.00
	Rate of Interest	9.30%
	Interest	40.08
	Rep Schedule	12 annual installments from 28.06.2016
6	Bond XXXVI	
	Gross loan opening	9.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	9.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	9.00
	Average Loan	9.00
	Rate of Interest	9.35%
	Interest	0.84
	Rep Schedule	15 annual installments from 29.08.2016.
	Total Loan	
	Gross loan opening	843.47
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	843.47
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	843.47
	Average Loan	843.47
	Rate of Interest	9.1033%
	Interest	76.78

#### <u>Annexure- II</u>

		(₹ in lakh)
	Details of Loan	2013-14
1	Bond XLII	
	Gross loan opening	51.75
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	51.75
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	51.75
	Average Loan	51.75
	Rate of Interest	8.80%
	Interest	4.55
	Rep Schedule	Bullet Payement as on 13.03.23
2	Bond XLI	
	Gross loan opening	50.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	50.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	50.00
	Average Loan	50.00
	Rate of Interest	8.85%
	Interest	4.43
	Rep Schedule	12 annual installments from 19.10.2016
3	Bond XXXIV	
ა	Gross loan opening	10.00
		10.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	10.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	10.00
	Average Loan	10.00
	Rate of Interest	8.84%
	Interest	0.88
	Rep Schedule	12 annual installments from 21.10.2014
	Bond XXXVII	
4		

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

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	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	20.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	20.00
	Average Loan	20.00
	Rate of Interest	9.25%
	Interest	1.85
	Rep Schedule	12 annual installments from 26.12.2015.
_	Bond XL	
5		4.40.00
	Gross loan opening	140.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	140.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	140.00
	Average Loan	140.00
	Rate of Interest	9.30%
	Interest	13.02
	Rep Schedule	12 annual installments from 28.06.2016
	Total Loan	
	Gross loan opening	271.75
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	271.75
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	271.75
	Average Loan	271.75
	Rate of Interest	9.1014%
	Interest	24.73