

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 164/TT/2013

Coram:

Shri Gireesh B. Pradhan, Chairperson

Shri A.K. Singhal, Member

Shri A.S. Bakshi, Member

Date of Hearing : 07.07.2015

Date of Order : 02.11.2015

In the matter of:

Approval for determination of transmission tariff of Combined Assets for transmission system associated with Augmentation of Transformation capacity (Part-1-NR) in Northern Region for tariff block 2009-14 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

.....Petitioner

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
Vidyut Bhawan, Vidyut Marg,
Jaipur- 302 005
2. Ajmer Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura, Jaipur
3. Jaipur Vidyut Vitran Nigam Limited,
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura, Jaipur
4. Jodhpur Vidyut Vitran Nigam Limited,
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 Power Corporation Limited,
Thermal Shed T-1A, Patiala
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula (Haryana)-134 109
8. Power Development Department,
Govt. of Jammu and Kashmir,
Mini Secretariat, Jammu
9. Uttar Pradesh Power Corporation Limited,
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226 001
10. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi-110 002
11. BSES Yamuna Power Limited,
BSES Bhawan, Nehru Place,
Delhi
12. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi.
13. North Delhi Power Limited,
Power Trading & Load Dispatch Group,
Cennet Building, Adjacent to 66/11 kV Pitampura-3,
Grid Building, Near PP Jewellers,
Pitampura, New Delhi-110 034
14. Chandigarh Administration,
Sector-9, Chandigarh
15. Uttarakhand Power Corporation Limited,
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

For respondents : Shri Rajiv Srivastava, Advocate, PSPCL
Shri R.B. Sharma, Advocate, BRPL

ORDER

This petition has been filed by Power Grid Corporation of India Limited (PGCIL) for approval of the transmission charges of Combined Assets for transmission system associated with Augmentation of Transformation capacity (Part-1-NR) in Northern Region (hereinafter referred to as "transmission asset") for the tariff block 2009-14, in terms of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations").

2. The investment approval for both Part-I and Part-II of the project, Part-I being Augmentation of Transformation Capacity in Northern Region, was accorded by Board of Directors of the petitioner company vide Memorandum Reference No. C/CP/Aug. of transf. capacity in NR & ER dated 2.7.2012 at an estimated cost of ₹9197 lakh, including IDC of ₹290 lakh (based on April, 2012 price level). The project was scheduled to be commissioned within 20 months from the date of approval by the Board i.e. June 27, 2012 i.e. by 27.2.2014 say 1.3.2014.

3. The broad scope of work covered under the Part-I of the project is as follows:-



Sub-stations

- i) 1x315 MVA, 400/220 kV transformer at Nalagarh Sub-station along with associated bays;
- ii) 1x315 MVA, 400/220 kV transformer at Abdullapur Sub-station along with associated bays;
- iii) 1x500 MVA, 400/220 kV transformer at Amritsar Sub-station along with associated bays and 3 nos. of 220 kV line bays;
- iv) 4x105 MVA, 400/220 kV single phase transformers at Kishenpur Sub-station along with associated bays;

4. The petitioner has filed the instant petition covering all the above four assets and the actual COD of the instant assets is as under:-

Asset	Particulars	SCOD	Actual COD	Delay
Asset-I	1x315 MVA, 400/220 kV transformer at Nalagarh Sub-station	1.3.2014	1.11.2013	No Delay
Asset-II	1x315 MVA, 400/220kV transformer at Abdullapur Sub-station			
Asset-III	1x500 MVA, 400/220kV transformer at Amritsar Sub-station		1.10.2013	
Asset-IV	4x105 MVA, 400/220kV single phase transformers at Kishenpur Sub-station		1.3.2014	

5. The provisional tariff in respect of Asset-I, Asset-II and Asset-III was granted vide order dated 9.9.2013 and for Asset-IV vide order dated 15.5.2014 under Regulation 5(4) of the 2009 Tariff Regulations subject to adjustment as provided under Regulation 5(3) of the 2009 Tariff Regulations.

6. This order has been issued after considering the petitioner's affidavits dated 13.12.2013, 27.2.2014, 4.9.2014, 1.7.2015, 16.7.2015 and 7.8.2015.



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

(₹ in lakh)

Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Depreciation	25.78	22.39	36.83	9.08
Interest on Loan	7.97	5.22	8.57	3.35
Return on Equity	28.72	24.94	40.95	10.11
Interest on working capital	3.91	3.68	8.66	1.01
O & M Expenses	46.37	46.37	124.37	9.27
Total	112.75	102.60	219.38	32.82

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

(₹ in lakh)

Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Maintenance Spares	16.69	16.69	37.31	16.69
O & M Expenses	9.27	9.27	20.73	9.27
Receivables	45.10	41.04	73.13	65.64
Total	71.06	67.00	131.17	91.60
Rate of Interest	13.20%	13.20%	13.20%	13.20%
Interest	3.91	3.68	8.66	1.01

9. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the Electricity Act. Replies have been filed by U.P Power Corporation Limited (UPPCL), Respondent No. 9, vide affidavit dated 26.9.2013, Jaipur Vidyut Vitran Nigam Limited (JVVNL), Respondent no. 3, vide affidavit dated 31.10.2013 and BSES Rajdhani Power Limited (BRPL), Respondent No. 12, vide affidavit dated 3.3.2014 and the respondents have raised issues like excess claim of initial spares, rate of interest on working capital, grossing up of rate of return on equity with applicable tax, floating



rate of interest, service tax, license fee, O&M Expenses, cost of Asset-II and Asset-IV, filing fee and publication expenses. The petitioner has submitted rejoinder to the replies of UPPCL, JVVNL and BRPL, vide rejoinders dated 27.2.2014, 3.3.2014 and 28.7.2015 respectively. The submissions made by the respondents and the petitioner have been dealt in relevant paragraphs of this order.

10. Having heard the representatives of the respondent, the petitioner and perused the material on record, we proceed to dispose of the petition.

Capital cost

11. Regulation 7 of the 2009 Tariff Regulations so far as relevant provides as follows:-

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

(a) The expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan – (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the fund deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check.

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

(c) additional capital expenditure determined under regulation 9:

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

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

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

Provided further that in cases where benchmark norms have not been specified, prudence check may include scrutiny of the reasonableness of the capital expenditure, financing plan, interest during construction, use of efficient technology,



cost over-run and time over-run, and such other matters as may be considered appropriate by the Commission for determination of tariff.”

12. The details of apportioned approved cost, actual expenditure incurred as on date of commercial operation and additional capital expenditure incurred/projected to be incurred for the period from COD to 31.3.2014 and for 2014-15 and 2015-16 for the instant assets have been submitted by the petitioner vide affidavits dated 1.7.2015, 16.7.2015, 28.7.2015 and 7.8.2015 and are as follows:-

Particulars	Apportioned approved cost	Expenditure upto COD	Expenditure from COD to 31.3.2014	Additional Capitalisation		Total estimated completion cost
				2014-15	2015-16	
				(₹ in lakh)		
Asset-I	1803.93	1004.55	334.19	233.39	155.59	1727.72
Asset-II	1556.79	924.24	186.77	250.82	167.21	1529.04
Asset-III	2638.42	1103.09	577.76	349.69	233.12	2263.66
Asset-IV	3198.05	1796.07	533.36	503.58	335.72	3168.73

13. As per the Investment Approval dated 27.6.2012, the asset was to be commissioned within 20 months from the date of investment approval i.e. by 26.2.2014 say 1.3.2014. The instant assets were commissioned within the scheduled time as discussed at para-4 and there is no time over-run in commissioning of the assets.

14. JVVNL has submitted that even though total cost of the project is within the approved cost, the actual cost in respect of Asset-II and IV is more than the approved cost and the petitioner should clarify the variation in cost and confirm that all the works included in the scope of the project have been completed and the completed cost is within the cost indicated. BRPL has also raised the issue of variation in completion cost of Asset-IV. The petitioner in its rejoinder to the reply of JVVNL has



clarified that the variation in the cost of Asset-II and Asset-IV due to increase in foundation cost, taxes and spares. The petitioner further clarified that all the works for the assets covered in the petition has been completed and the 4X105 MVA ACT at Kishenpur is proposed to be commissioned on 1.3.2014. In response to BRPL's contention regarding the cost, the petitioner has clarified in its rejoinder that there is no cost over-run in any of the instant assets.

15. The petitioner was directed vide letter dated 10.7.2014 to submit the reasons for cost variation in Asset-I and Asset-II. The petitioner vide affidavit dated 7.8.2015 has submitted that the cost variation is due to site conditions and variation in quantities of various equipment. The estimated completion cost of the instant assets is within the apportioned approved cost. Thus, there is no cost over-run.

Treatment of IDC and IEDC

16. The petitioner initially made a claim of ₹4.17 lakh ₹3.42 lakh ₹4.50 lakh and ₹5.89 lakh on account of IDC in respect of Asset-I, Asset-II, Asset-III and Asset-IV respectively. The petitioner vide affidavits dated 16.7.2015 and 7.8.2015 submitted details of IDC on cash basis discharged upto COD as NIL in respect of Asset-I, Asset-II and Asset-III and ₹0.39 lakh in respect of Asset-IV and the balance amount of ₹4.17 lakh, ₹3.42 lakh, ₹4.50 lakh and ₹5.50 lakh as undischarged liability in respect of Asset-I, Asset-II, Asset-III and Asset-IV respectively, in response to the directions of the Commission vide RoP dated 10.7.2015. However, it is noted that the instant assets include foreign loans also and the information submitted by the petitioner for the computation of IDC is not adequate. In the absence of the required information IDC on cash basis has been considered as per revised information



submitted for the instant assets and the balance amount as undischarged liability on account of IDC. Thus, the petitioner is directed to submit adequate information in the truing-up petition and confirm, if the undischarged liability portion of IDC to be claimed during 2013-14 and 2015-16 is included in the projected additional capital expenditure.

17. The petitioner has claimed an amount of ₹38.22 lakh, ₹32.22 lakh, ₹46.95 lakh and ₹72.30 lakh on account of Incidental Expenditure during Construction (IEDC) for Asset-I, Asset-II, Asset-III and Asset-IV respectively. The percentage of 10.75% on Hard Cost indicated in the Abstract Cost Estimate submitted by the petitioner has been considered as the allowable limit of the IEDC. The amount of IEDC claimed is within the percentage of the Hard Cost indicated in the Abstract Cost Estimate as on COD in respect of the instant assets and hence it is considered for the purpose of tariff calculation.

18. Regulation 9 of the 2009 Tariff Regulations provides for the treatment of undischarged liabilities after the same are discharged. However, as the petitioner has not submitted the required information with regard to the IDC/IEDC actually discharged, we have considered the amount of IDC/IEDC in the instant petition as discussed at paras 16 and 17. The petitioner is directed to submit the amount of IDC/IEDC paid and specific to the transmission asset considered in this petition upto date of commercial operation and balance IDC discharged after date of commercial operation. IDC allowed will be reviewed at the time of truing-up on submission of adequate and proper information by the petitioner in respect of IDC at the time of truing-up.



Treatment of Initial Spares

19. As per Regulation 8 (iv) (a) of 2009 Tariff Regulations, the ceiling norm for Initial Spares for sub-station & transmission line is 2.5% and 0.75% respectively of original project cost. The petitioner has claimed initial spares for sub-station in respect of Asset-I, Asset-II, Asset-III and Asset-IV for an amount of ₹76.67 lakh, ₹73.02 lakh, ₹73.97 lakh and ₹75.75 lakh respectively and also submitted the information of year-wise payment made against initial spares for the instant assets vide affidavit dated 7.8.2015. UPPCL, JVVNL and BRPL have submitted that the petitioners' claim for initial spares is higher than provided under the 2009 Tariff Regulations. BRPL has also submitted that the justification provided by the petitioner for the project being a green field is a mere excuse and the claim be allowed as per norms prescribed.

20. The petitioner vide rejoinder dated 27.2.2014 in reply of UPPCL has submitted that the project cost of green field project is much more than the project cost of an extension project. However, similar types of spares are being procured for both type of project, which would result in higher percentage for the extension project.

21. We have considered the objection raised by the respondents, the 2009 Tariff Regulations do not provide separate norms for existing sub-station. The norms are same for new (green field) or (brown field) sub-station project. The spare claimed by the petitioner are more than specified normative limit of 2.5% in the case of Asset-I,



Asset-II and Asset-III, the same are restricted to 2.5%. In the case of Asset-IV, spares claimed are within specified limit which are allowed.

22. Thus, the claim of Initial Spares discharged upto 31.3.2014 in case of the instant assets is allowed in this order. The amount of discharged/undischarged liability against the claim of initial spares after 31.3.2014 shall be considered in the 2014-19 tariff period and the variance in the discharge of initial spares upto 31.3.2014, if any, shall be reviewed at the time of truing-up, after the information of actual expenditure in the commissioning of the instant assets is submitted upto the respective cut-off dates of each of the instant assets.

23. In view of above, the details of initial spares claimed, allowed upto COD and from COD to 31.3.2014 and considered for tariff are as per details below:-

Particulars	Total initial spares claimed			Initial spares allowable as per estimated capital cost upto actual cut-off date	Initial spares allowed	
	Upto actual cut-off date	Upto COD	From COD to 31.3.2014		Upto COD	COD to 31.3.2014
Asset-I	76.67	13.47	30.30	42.33	13.47	28.86
Asset-II	73.02	11.28	13.37	37.33	11.28	13.37
Asset-III	73.97	15.47	13.29	56.15	15.47	13.29
Asset-IV	75.75	17.19	0.00	79.31	17.19	0.00

(₹ in lakh)

Capital cost as on COD

24. The capital cost as on COD of the instant assets considered, as per proviso of Regulation 7(1) of the CERC (Terms and Conditions of Tariff) Regulations, 2009, for the purpose of tariff calculations is as follows:-



(₹ in lakh)

Particulars	Claimed upto COD			Allowed upto COD		
	Capital expenditure (a)	Initial spares (b)	Excess IDC (c)	Capital expenditure (d)=(a)-{(b)+(c)}	Initial spares (e)	Total capital expenditure (f)=(d)+(e)
Asset-I	1004.55	76.67	4.17	923.71	13.47	937.18
Asset-II	924.24	73.02	3.42	847.80	11.28	859.08
Asset-III	1103.09	73.97	4.50	1024.62	15.47	1040.09
Asset-IV	1796.07	75.75	5.50	1714.82	17.19	1732.01

Projected additional capital expenditure

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

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

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

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. As per the above definition, cut-off date in respect of Asset-I, Asset-II and Asset-III is 31.3.2016 and in respect of Asset-IV is 31.3.2017 in the instant petition.

28. The petitioner has claimed additional capital expenditure of ₹334.19 lakh, ₹186.77 lakh, ₹577.76 lakh and ₹533.36 lakh in respect of Asset-I, Asset-II and Asset-III and Asset-IV respectively for the financial year 2013-14. The additional



capital expenditure claimed is for balance and retention payment and is within cut-off date and is allowed in the instant petition. The additional capital expenditure claimed for 2014-15 and 2015-16 falls within the cut-off date but beyond the tariff period 2009-14 and accordingly has not been considered.

29. Thus, the capital cost as on 31.3.2014 is as follows:-

(₹ in lakh)

Particulars	Capital cost as on COD	Initial spares from COD to 31.3.2014	Additional capitalisation	Total estimated cost as on 31.3.2014
			2013-14	
Asset-I	937.18	28.86	334.19	1300.23
Asset-II	859.08	13.37	186.77	1059.22
Asset-III	1040.09	13.29	577.76	1631.14
Asset-IV	1732.01	0.00	533.36	2265.37

Debt-Equity ratio

30. 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.”

31. The capital cost on the date of commercial operation arrived at as above and additional capital expenditure allowed have been considered in the normative debt-equity ratio of 70:30. Details of debt-equity as on date of commercial operation and 31.3.2014 considered on normative basis are as given under:-

(₹ in lakh)

Asset-I				
Particulars	As on COD		As on 31.3.2014	
	Amount	%	Amount	%
Debt	656.03	70.00	910.16	70.00
Equity	281.15	30.00	390.07	30.00
Total	937.18	100.00	1300.23	100.00
Asset-II				
Particulars	As on COD		As on 31.3.2014	
	Amount	%	Amount	%
Debt	601.36	70.00	741.46	70.00
Equity	257.72	30.00	317.76	30.00
Total	859.08	100.00	1059.22	100.00
Asset-III				
Particulars	As on COD		As on 31.3.2014	
	Amount	%	Amount	%
Debt	728.07	70.00	1141.80	70.00
Equity	312.02	30.00	489.34	30.00
Total	1040.09	100.00	1631.14	100.00
Asset-IV				
Particulars	As on COD		As on 31.3.2014	
	Amount	%	Amount	%
Debt	1212.41	70.00	1585.77	70.00
Equity	519.60	30.00	679.60	30.00
Total	1732.01	100.00	2265.37	100.00

Return on equity

32. Regulation 15 of the 2009 Tariff Regulations provides as follows:-

“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".

33. The petitioner has prayed 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. UPPCL has submitted that the petitioner be directed by the Commission to submit a separate petition with a auditors' certificate in respect of actual income tax paid and not allow the petitioner to claim return on equity in case of a change on their own. 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). We would like to clarify that the RoE has been computed @ 19.611% p.a based on the tax rate (MAT) for the year 2013-14 on average equity as per Regulation 15(5) of the 2009 Tariff Regulations. The details are as under:-

(₹ in lakh)

Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Opening equity	281.15	257.72	312.02	519.60
Addition due to additional capital expenditure	108.92	60.04	177.32	160.01
Closing equity	390.07	317.76	489.34	679.60
Average equity	335.61	287.74	400.68	599.60
Return on equity (Base Rate)	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	20.96%	20.96%	20.96%	20.96%
Rate of Return on Equity (Pre Tax)	19.611%	19.611%	19.611%	19.611%
Return on Equity (Pre Tax)	27.42	23.51	39.29	9.80

Interest on loan

34. 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.”

35. 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 loan have been considered as per affidavit dated 16.7.2015 and 26.6.2014 respectively. Accordingly weighted average rate of interest on actual average loan has been considered and exchange rate for ADB-VI loan utilised for the purpose of additional capitalisation has been considered as per data submitted in affidavit dated 16.7.2015;

(b) The 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; and

(d) Weighted average rate of interest for the ADB-VI loans has been referred from the Floating Rate of Interest in affidavit dated 26.6.2014 and the weighted average rate of interest used for tariff calculation is 1.8279% for the year 2013-14.

36. UPPCL has submitted that the existing financial packages do not have any provision of floating rate of interest and the 2009 Tariff Regulations provide for swapping of loans in the interest of consumers. Therefore, there appears to be no cause for the petitioner to pray for floating rate of interest as it entails an avoidable element of risk of increase in the rate of interest to which the consumers are exposed. Thus, the prayer of the petitioner is not tenable. The petitioner has submitted that earlier direct settlement with the beneficiaries was allowed on account of any change in interest on account of floating rate of interest for tariff block 2004-09. Hence, the prayer has been made in the instant petition in line with the past practice, in case of any change on account of floating rate of interest. The interest on loan has been calculated on the basis of prevailing rate available on the date of commercial operation. The petitioner is directed to submit documents in support of exchange rates at the time of truing-up. Any change in rate of interest subsequent to the date of commercial operation will be considered at the time of truing up.



37. Detailed calculations in support of the weighted average rates of interest have been given at Annexure-1 to Annexure 4 to this order.

38. Based on the above, interest on loan has been calculated are given below:-

(₹ in lakh)

Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Gross Normative Loan	656.03	601.36	728.07	1212.41
Cumulative Repayment upto previous year	-	-	-	-
Net Loan-Opening	656.03	601.36	728.07	1212.41
Addition due to additional capital expenditure	254.14	140.10	413.74	373.35
Repayment during the year	24.61	21.10	35.34	8.79
Net Loan-Closing	885.56	720.36	1106.47	1576.97
Average Loan	770.79	660.86	917.27	1394.69
Weighted Average Rate of Interest on Loan	2.4075%	1.8279%	1.8279%	2.8392%
Interest	7.73	5.03	8.38	3.30

Depreciation

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

“17. **Depreciation** (1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.

(2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.

Provided that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site;

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciable value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff.

(3) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III to these regulations for the assets of the generating station and transmission system:



Provided that, the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets.

(5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2009 from the gross depreciable value of the assets.

(6) Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.”

40. The instant assets in the instant petition have been commissioned on during financial year 2013-14. Thus, depreciation has been calculated annually, based on Straight Line Method and at rates specified in Appendix-III to the 2009 Tariff Regulations. Accordingly, depreciation has been worked out on the basis of capital expenditure as on the date of commercial operation and additional capital expenditure incurred/ projected to be incurred thereafter, wherein depreciation for the first year has been calculated on *pro-rata* basis for the part of year.

41. Based on the above, the depreciation considered for the computation of tariff is as follows:-

(₹ in lakh)

Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Opening Gross Block	1732.01	859.08	1040.09	1732.01
Addition due to Projected Additional Capitalisation	533.36	200.14	591.05	533.36
Closing Gross Block	2265.37	1059.22	1631.14	2265.37
Average Gross Block	1998.69	959.15	1335.62	1998.69
Rate of Depreciation	5.2800%	5.2800%	5.2913%	5.2800%
Depreciable Value	1798.82	863.24	1202.05	1798.82
Remaining Depreciable Value	1798.82	863.24	1202.05	1798.82
Depreciation	8.79	21.10	35.34	8.79



Operation & Maintenance Expenses (O&M Expenses)

42. The norms for O&M Expenses for the transmission system based on the type of sub-station and the transmission line are specified in clause (g) of Regulation 19 of the 2009 Tariff Regulations.

43. The details of elements covered in the instant petition and their date of commercial operation are as under:-

S. No.	Assets	COD	No. of bays
	Asset-I:		
	Nalagarh Sub-station:		
1.	400 kV ICT bay	1.11.2013	1
2.	220 kV ICT bay		1
	Asset-II:		
	Abdullapur Sub-station:		
1.	400 kV ICT bay	1.11.2013	1
2.	220 kV ICT bay		1
	Asset-III:		
	Amritsar Sub-station:		
1.	400 kV ICT bay	1.11.2013	1
2.	220 kV ICT bays		4*
	Asset-IV:		
	Kishenpur Sub-station:		
1.	400 kV ICT bay	1.3.2014	1
2	220 kV ICT bay		1

*Three extra line bays have been considered at Amritsar Sub-station as decided in 30th Standing Meeting held on 19.12.2011 and as desired by PSTCL for drawl of power from Amritsar.

44. Accordingly, the details of O&M Expenses considered for the purpose of tariff calculations in the instant petition are as under:-

Element	(₹ in lakh)
	2013-14 (pro-rata)
Asset-I	
1 no. 400 kV ICT bay	27.38
1 no. 220 kV ICT bay	19.09
Asset-II	



1 no. 400 kV ICT bay	27.38
1 no. 220 kV ICT bay	19.09
Asset-III	
1 no. 400 kV ICT bay	32.73
4 nos. 220 kV ICT bays	91.64
Asset-IV	
1 no. 400 kV ICT bay	5.45
1 no. 220 kV ICT bay	3.82

45. However, the petitioner has submitted that O&M Expenses for the year 2009-14 had been arrived at on the basis of normalized actual O&M Expenses during the period 2003-04 to 2007-08 and by escalating it by 5.72% per annum for arriving at norms for the years of tariff period. The wage hike of 50% on account of pay revision of the employees of public sector undertaking has also been considered while calculating the O&M Expenses for the tariff period 2009-14. The petitioner has further submitted that it may approach the Commission for suitable revision in norms for O&M Expenses in case the impact of wage hike with effect from 1.1.2007 is more than 50%. Further, the petitioner has also submitted that the claim of transmission charges is exclusive of any statutory taxes, levies, duties, cess etc. UPPCL, JVVNL and BRPL have submitted that O&M expenses be allowed as per the 2009 Tariff Regulations and BRPL has also submitted as far as claim for levies, duties, cess or any other statutory taxes is concerned, all such charges are generally included in the O&M Expenses.

46. While specifying the norms for the O & M Expenses, the Commission has in the 2009 Tariff Regulations, given effect to impact of pay revision by factoring 50% on account of pay revision of the employees of PSUs after extensive consultations with the stakeholders, as one time compensation for employee cost and other expenses. However, as the petitioner has not made any claim on account of O&M



Expenses, we do not see any reason why the admissible amount, if any, would be inadequate to meet the requirement of the employee cost and other charges.

Interest on working capital

47. The petitioner is entitled to claim interest on working capital as per the 2009 Tariff Regulations. UPPCL has submitted that the petitioner be directed to submit the record of interest on working capital @ 13.20%. 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 transmission charges 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 2009 Tariff Regulations, SBI Base Rate as on 1.4.2013 i.e. 9.70% Plus 350 bps (13.20%) has been considered as the rate of interest on working capital for the asset. The interest on working capital for the assets covered in the petition has been worked out accordingly.

48. Necessary computations in support of interest on working capital are given under:-

(₹ in lakh)

Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Maintenance Spares	16.73	16.73	37.31	16.69
O & M Expenses	9.29	9.29	20.73	9.27
Receivables	44.04	39.90	71.99	64.31
Total	70.06	65.92	130.03	90.27
Rate of Interest	13.20%	13.20%	13.20%	13.20%
Interest	3.85	3.63	8.58	0.99

Transmission charges

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

(₹ in lakh)

Particulars	Asset-I	Asset-II	Asset-III	Asset-IV
	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)	2013-14 (pro-rata)
Depreciation	24.61	21.10	35.34	8.79
Interest on Loan	7.73	5.03	8.38	3.30
Return on Equity	27.42	23.51	39.29	9.80
Interest on Working Capital	3.85	3.63	8.58	0.99
O & M Expenses	46.47	46.47	124.37	9.27
Total	110.09	99.74	215.96	32.16



Filing fee and the publication expenses

50. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. BRPL has submitted that the claim for application filing fee and the publication expenses was earlier declined by the Commission vide order dated 11.9.2008 in Petition No. 129 of 2005 and can be allowed at the discretion of the Commission but this prayer of the petitioner be rejected. The petitioner has clarified that reimbursement of expenditure has been claimed in terms of Regulation 42 of the 2009 Tariff Regulations. 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 of the 2009 Tariff Regulations.

Licence fee

51. 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. The petitioner has clarified that the licence fee has been a new component of cost to the transmission licence under O&M stage of the project and has become incidental to the petitioner only from 2008-09. UPPCL has submitted that the prayer of the petitioner is not justified and not tenable. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42 A (1) (b) of the 2009 Tariff Regulations.

Service tax



52. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if it is subjected to such service tax in future. The 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. Both UPPCL and BRPL have submitted that the prayer of the petitioner is premature. We also consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

Sharing of Transmission Charges

53. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time.

54. This order disposes of Petition No. 164/TT/2013.

sd/-

(A.S. Bakshi)
Member

sd/-

(A.K. Singhal)
Member

sd/-

(Gireesh B. Pradhan)
Chairperson



Annexure-1
(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN		
	Details of Loan	2013-14
1	ADB - COD	
	Gross loan opening	703.17
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	703.17
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	703.17
	Average Loan	703.17
	Rate of Interest	1.83%
	Interest	12.85
	Rep Schedule	40 Semi annual instalments from 1.6.2017
2	ADB - Add. Cap. 2013-14	
	Gross loan opening	0.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	112.39
	Repayment during the year	0.00
	Net Loan-Closing	112.39
	Average Loan	56.20
	Rate of Interest	1.83%
	Interest	1.03
	Rep Schedule	40 Semi annual instalments from 1.6.2017
3	Bond XLV	
	Gross loan opening	0.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	121.54
	Repayment during the year	0.00
	Net Loan-Closing	121.54
	Average Loan	60.77
	Rate of Interest	9.65%
	Interest	5.86
	Rep Schedule	12 annual instalments from 28.2.2018
	Total Loan	
	Gross loan opening	703.17
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	703.17
	Additions during the year	233.93
	Repayment during the year	0.00
	Net Loan-Closing	937.10
	Average Loan	820.14
	Rate of Interest	2.4075%
	Interest	19.74



Annexure-2

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN		
	Details of Loan	2013-14
1	ADB - COD	
	Gross loan opening	10.37
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	10.37
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	10.37
	Average Loan	10.37
	Rate of Interest	1.83%
	Interest	0.19
	Rep Schedule	40 Semi annual instalments from 1.6.2017
2	ADB - Add. Cap. 2013-14	
	Gross loan opening	0.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	2.18
	Repayment during the year	0.00
	Net Loan-Closing	2.18
	Average Loan	1.09
	Rate of Interest	1.83%
	Interest	0.02
	Rep Schedule	40 Semi annual instalments from 1.6.2017
	Total Loan	
	Gross loan opening	10.37
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	10.37
	Additions during the year	2.18
	Repayment during the year	0.00
	Net Loan-Closing	12.55
	Average Loan	11.46
	Rate of Interest	1.8279%
	Interest	0.21



Annexure-3

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN		
	Details of Loan	2013-14
1	ADB - COD	
	Gross loan opening	771.96
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	771.96
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	771.96
	Average Loan	771.96
	Rate of Interest	1.83%
	Interest	14.11
	Rep Schedule	40 Semi annual instalments from 1.6.2017
2	ADB - Add. Cap. 2013-14	
	Gross loan opening	0.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	404.43
	Repayment during the year	0.00
	Net Loan-Closing	404.43
	Average Loan	202.22
	Rate of Interest	1.83%
	Interest	3.70
	Rep Schedule	40 Semi annual instalments from 1.6.2017
	Total Loan	
	Gross loan opening	771.96
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	771.96
	Additions during the year	404.43
	Repayment during the year	0.00
	Net Loan-Closing	1176.39
	Average Loan	974.18
	Rate of Interest	1.8279%
	Interest	17.81



Annexure-4

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN		
	Details of Loan	2013-14
1	ADB - COD	
	Gross loan opening	1257.26
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1257.26
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1257.26
	Average Loan	1257.26
	Rate of Interest	1.83%
	Interest	22.98
	Rep Schedule	40 Semi annual instalments from 1.6.2017
2	Bond XLV	
	Gross loan opening	0.00
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	373.35
	Repayment during the year	0.00
	Net Loan-Closing	373.35
	Average Loan	186.68
	Rate of Interest	9.65%
	Interest	18.01
	Rep Schedule	12 annual instalments from 28.2.2018
	Total Loan	
	Gross loan opening	1257.26
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	1257.26
	Additions during the year	373.35
	Repayment during the year	0.00
	Net Loan-Closing	1630.61
	Average Loan	1443.94
	Rate of Interest	2.8392%
	Interest	41.00

