CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 26/TT/2014

Coram:

Shri Gireesh B. Pradhan, Chairperson
Shri A. K. Singhal, Member
Shri A. S. Bakshi, Member

Date of Hearing : 18.06.2015
Date of Order : 27.11.2015

In the matter of:

Approval of transmission tariff for 500 MVA, 400/220/33 KV ICT-II along with associated bays at Moga S/S" (Anticipated COD: 1.3.2014) and "500MVA, 400/220/33KV ICT along with associated bays at Ludhiana S/S" (Anticipated COD:1.3.2014) under the "Augmentation of Transformation capacity in Northern Region-Part A 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 Condition) Regulations, 2009.

And in the matter of:

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

…….Petitioner

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd.,
   Vidyut Bhawan, Vidyut Marg,
   Jaipur- 302 005.

2. Ajmer Vidyut Vitran Nigam Ltd.,
   400 kV GSS Building (Ground Floor), Ajmer Road,
   Heerapura, Jaipur.

3. Jaipur Vidyut Vitran Nigam Ltd.,
   400 kV GSS Building (Ground Floor), Ajmer Road,
   Heerapura, Jaipur.

4. Jodhpur Vidyut Vitran Nigam Ltd.,

400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur.

5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171 004.

6. Punjab State Electricity Board,
The Mall, Patiala-147 001.

7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6
Panchkula (Haryana)-134 109

8. Power Development Department,
Govt. of Jammu and Kashmir
Mini Secretariat, Jammu.

9. Uttar Pradesh Power Corporation Ltd.,
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226 001.

10. Delhi Transco Ltd.,
Shakti Sadan, Kotla Road,
New Delhi-110 002.

11. BSES Yamuna Power Ltd.,
Shakti Kiran Building, Karkardooma,
Delhi-110 092.

12. BSES Rajdhani Power Ltd.,
BSES Bhawan, Nehru Place,
New Delhi.

13. North Delhi Power Ltd.,
Power Trading & Load Dispatch Group,
Cennet Building, Adjacent to 66/11kV Pitampura-3,
Grid Building, Near PP Jewellers,
Pitampura, New Delhi-110 034.

14. Chandigarh Administration,
Sector-9, Chandigarh.

15. Uttarakhand Power Corporation Ltd.,
Urja Bhawan, Kanwali Road,
Dehradun.

16. North Central Railway,
Allahabad.

17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110 002.

….Respondents

For Petitioner : Shri S.S. Raju, PGCIL
Shri M.M. Mondal, PGCIL
Shri S.K. Venkatesan, PGCIL
Smt. Sangeeta Edwards, PGCIL
Shri Rakesh Prasad, PGCIL

For Respondents : Shri R.B. Sharma, BRPL

ORDER

The instant petition has been filed by Power Grid Corporation of India Ltd. (PGCIL) for approval of the transmission tariff for Asset-I: 500 MVA , 400/220/33 kV ICT along with associated bays at Moga Sub-station; Asset- II**:** 500 MVA, 400/220/33 kV ICT along with associated bays at Ludhiana Sub-station under Augmentation of Transformation capacity in Northern Region-Part A (hereinafter collectively referred to as “transmission assets”) for the tariff block 2009-14, in terms of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter "the 2009 Tariff Regulations").

2. The investment approval for the transmission project was accorded by the Board of Directors of the petitioner company, vide C/CP/Aug of transformers in NR-part A, dated 19.12.2012, at an estimated cost of ₹15604 lakh, including IDC of ₹767

lakh (based on October, 2012 price level). The scope of work covered under the scheme is as follows:-

<u>Augmentation of Transformation capacity in Northern Region-Part A</u>

I. Extension of 400/220 kV Allahabad Sub-station-315 MVA, 400/220 kV Transformer

II. Extension of 400/220 kV Bassi (Jaipur) Sub-station-500 MVA, 400/220 kV Transformer

III. Extension of 400/220 kV Meerut Sub-station-500 MVA, 400/220 kV Transformer

IV. Extension of 400/220 kV Ludhiana Sub-station-500 MVA, 400/220 kV Transformer

V. Extension of 400/220 kV Moga Sub-station-2 X 500 MVA, 400/220 kV Transformer (as replacement for 2 X 250 MVA ICTs which will be refurbished and used as spare) along with 2 nos. of 220 kV bays.

VI. Extension of 400/220 kV Wagoora S/S-105 MVA, 400/220 kV Transformer single phase unit (to be kept as spare unit)

VII. 500 MVA, 400/220 kV spare transformer for Northern Region-located at Neemrana

3. The provisional tariff was granted vide order dated 20.6.2014 under Regulation 5(4) of the 2009 Tariff Regulations subject to adjustment as provided under Regulation 5(3) of the 2009 Tariff Regulations.

4. The petitioner vide affidavit dated 16.6.2015 has submitted that the Asset-1 was commissioned on 1.3.2014 and Asset-2 is anticipated to be commissioned during 2014-19 tariff block. Therefore, tariff for Asset-1 is determined in the instant petition. The petitioner has filed Petition No. 410/TT/2014 claiming tariff for Asset-2 in accordance with Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter "the 2014 Tariff Regulations").

5. The petitioner has claimed transmission charges for the instant asset as under:-

(₹ in lakh)

Particulars	2013-14
Depreciation	4.46
Interest on Loan	6.01
Return on equity	4.97
Interest on Working Capital	0.85
O & M Expenses	9.27
Total	25.56

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

(₹ in lakh)

Particulars	**2013-14**
Maintenance Spares	16.69
O & M expenses	9.27
Receivables	22.92
Total	**48.88**
Rate of Interest	13.20%
Interest	**0.54**

7. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the Electricity Act. Punjab State Power Corporation Limited (PSPCL), Respondent No. 6, vide affidavit dated 13.6.2014 has made submissions. BSES Rajdhani Power Limited (BRPL), Respondent No. 12, vide affidavit dated 10.6.2015 has filed its reply. BRPL has raised the issue of O&M Expenses, levy of statutory duties, time over-run, cost over-run, approval of scheme, petition filing fee and service tax. The objections raised by the respondents in their reply and the clarifications given by the petitioner are addressed in the relevant paragraphs of this order.

8. Having heard the representatives of the petitioner present at the hearing and perused the material on record, we proceed to dispose of the petition.

9. PSPCL has submitted that the investment approval is for 500 MVA ICT at Moga Sub-station with 2 nos. of 220 kV line bays. However, the petitioner has not given any details of 220 kV bays in Form-2 which implies that the ICT has been constructed without 2 nos. additional 220 kV line bays. Therefore, tariff for ICT should be allowed only from the date of commissioning of 2 nos. of 220 kV line bays. On perusal of the investment approval, dated 19.12.2012, it is observed that the approval is for extension of 400/220 kV Moga Sub-station – 2X500 MVA, 400/220 kV transformer along with 2 nos. of 220 kV line bays. However, Form-2 annexed to the petition gives details about only one 220 kV line bay and the petitioner has not given any details of the other 220 kV line bay at Moga Sub-station. Accordingly, the petitioner was directed to give reasons for considering one line bay and one ICT bay at Moga Sub-station and to state whether there is any evacuation bottleneck. In response, the petitioner has submitted that in Form-2, 2 nos. bays have been considered inadvertently and the revised tariff Form-2 in case of ICT-2 at Moga Sub-station has been submitted. The petitioner prayed that the error may be condoned. With regard to 2 Nos 220 kV line bays, since these bays are likely to be commissioned in 2014-19 block, the tariff petition for 2 No 220 kV bays shall be filed separately as per 2014 Tariff Regulations. As regards evacuation arrangement, the petitioner submitted that since these ICTs are commissioned as replacement of the existing ICTs there is no bottleneck in evacuation of power.

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 capital cost, as on actual COD, and the additional capital expenditure claimed by the petitioner are summarized below:-

(₹ in lakh)

<table>
<tr><td rowspan="2">Apportioned approved cost</td><td rowspan="2">Hard cost claimed as on COD*</td><td>IDC claimed</td><td>IEDC claimed</td><td rowspan="2">Cost incurred upto actual COD*</td><td colspan="3">Additional capital expenditure</td><td rowspan="2">Total estimation completion cost</td></tr>
<tr><td></td><td></td><td>2013-14</td><td>2014-15</td><td>2015-16</td></tr>
<tr><td>1477.56</td><td>887.75</td><td>31.26</td><td>24.53</td><td>943.54</td><td>140.28</td><td>209.22</td><td>130.06</td><td>1423.10</td></tr>
</table>

*Capital cost as on COD includes initial spares amounting to ₹28.02 lakh. According to Auditor's Certificate, the expenditure up to 31.3.2015 has been verified from the books of accounts of the project. Balance expenditure is on the basis of details furnished by the Management.

12. As per petition the estimated completion cost of the Asset-1 is ₹1772.74 lakh against apportioned approved cost of ₹1807.77 lakh. As the cost estimation was higher when compared to actual cost, the petitioner was directed to submit the detailed computation of FR estimates including the details of Assets (name of assets/equipment/date of order/ quantity and value) which were considered for preparing the basis of estimates, the price levels at which these estimates were prepared, the indices at the time of preparation of FR and at the time of order. In response, the petitioner has submitted that the FR estimate was prepared on the basis of sub-station package 765/400/220 kV at Raichur, 400/220 kV Varanasi GIS sub-station package, 500 MVA Autotransformer package of Kurnool, 3-phase Autotransformer at Magarwada, Shunt Reactor package of Kurnool etc. The petitioner has submitted the list of the packages along with the details of assets indicating name of assets, equipment, date of order etc., which were considered for preparing the FR. The petitioner has also submitted the indices i.e. Transformer Oil, Cobalt, CRGO, WPI, CPI and other indices at the time of preparation of FR, at the time of order and at the time of COD. We have considered the submissions made by the petitioner and we are of the view that the cost claimed by the petitioner is in order.

13. As per investment approval the project was scheduled to be commissioned within 22 months from the date of Board of Director's approval i.e. 6.12.2012. The scheduled commissioning works out to 5.10.2014 i.e. 1.11.2014. The asset was commissioned on 1.3.2014. Thus, there is no time over-run.

Treatment of IDC

14. The petitioner has claimed Interest during Construction (IDC) of ₹31.26 lakh. Based on the information submitted by the petitioner vide affidavit dated 24.8.2015, IDC has been worked out on cash basis. The petitioner has submitted the revised drawl date of SBI loans. Accordingly, IDC of ₹ 32.67 lakh has been worked out as per the latest available information. The petitioner has submitted that IDC discharged upto COD is ₹ 31.26 lakh. Thus, IDC of ₹ 31.26 lakh is being allowed for the asset.

Treatment of IEDC

15. The petitioner has claimed Incidental Expenditure during Construction (IEDC) of ₹24.53 lakh. The petitioner vide affidavit dated 24.8.15 has submitted that IEDC discharged up to COD is ₹24.53 lakh. Accordingly IEDC has been considered as ₹24.53 lakh.

Treatment of decapitalisation of old ICT

16. The petitioner was directed to submit the details of the petition under which the tariff for 2x 250 MVA ICT at Moga Sub-station was allowed and the gross block and cumulative depreciation value of the replaced 1 X 250 MVA ICT along with its COD. The petitioner has submitted that in 30th Standing Committee meeting held on

19.12.2011, PSTCL proposed for replacement of existing 3 X 250 MVA transformers by 3 X 500 MVA ICTs due to load growth in area. Considering the change in project load, it was proposed to replace existing 2 X 250 MVA ICT at Moga with 2 X 500 MVA ICT. It was also proposed that 2 nos. of 250 MVA ICTs (to be replaced at Moga) would be kept as spare ICTs after refurbishment and utilized in case of failure of ICTs at any sub-station in Northern Region. The petitioner has submitted that the Members agreed to the above proposal. As agreed in the 30th Standing Committee by NR constituents, these 250 MVA ICTs are being used as spares, the original gross block of these ICTs should not be de-capitalized from the original project. The petitioner has submitted that it has made investments in these 2x500 MVA ICTs after the approval in 30th Standing Committee meeting. These new ICTs are covered under separate investment approval. The petitioner has submitted that in view of the above, these new 2x500 MVA ICTs should be treated as standalone project and the gross block of the old 2x250 MVA ICT should not be decapitalised as these are being used as spares as agreed by the beneficiaries. The petitioner has submitted that HVPNL has requested to spare of one of these 2x250 MVA spare ICT for use at 400 kV Nawada Sub-station of HVPNL and they are considering HVPNL's request. In case of decapitalisation of existing 2X250 MVA ICTs, any requirement of "spare ICTs" in NR may have to be met by procuring new ICTs which would impact the cost and tariff of NR constituents. The petitioner has submitted that the Commission vide orders dated 3.2.2015 and 6.1.2015 in Petition Nos. 39/TT/2013 and 113/TT/2012 respectively has allowed the transmission tariff for the spare ICTs. The petitioner has prayed that the tariff claimed in Petition Nos. 82/2010 and 122/2010 for Chamera

Stage-I and Kishenpur Moga Trasnmission System may be continued and the tariff claimed in the instant petition may be allowed. The petitioner while submitting the required information pertaining to accumulated depreciation has submitted that decapitalisation of the existing ICT would be against the spirit of agreement by the beneficiaries to pay charges for the existing ICT alongwith the new ICT. The petitioner has also submitted the details of de-capitalized asset like gross block and cumulative depreciation as on 31.3.2009 and 31.3.2014. However, the petitioner has not submitted the date of de-capitalization.

17. We have considered the submissions of the petitioner. The instant asset replaces the old assets under the augmentation of transformation capacity in Northern Region-Part A. The proviso to Regulation 7(1) of 2009 Tariff Regulations provides as follows:-

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

As per proviso to Regulation 7(1) of 2009 Tariff Regulations, the assets forming part of the project, but not in use should be taken out of the capital cost. Therefore, the cost of the existing 250 MVA ICTs at Moga Sub-station which is being replaced has to be de-capitalized by reducing the net value of replaced asset from the capital cost of new asset.

18. As regards the petitioner’s contention that the Commission had allowed tariff of spare ICTs in Petition Nos. 39/TT/2013 and 113/TT/2012, we would like to clarify that the facts in the instant case are different from the two situations quoted by the petitioner. In the instant case, the 500 MVA ICT at Moga Sub-station replaces the

220 kV MVA ICT and in Petition Nos. 39/TT/2013 spare ICTs are provided afresh in Hissar and Lucknow Sub-stations under the scheme Spare ICTs and Reactors for North, East, South and Western Region and similarly in Petition No. 113/TT/2012 spare ICTs are provided in Mandola and Ludhiana afresh and there is no replacement of the ICTs in both the petitions quoted by the petitioner. Accordingly, the instant case cannot be compared to the situations in Petition Nos. 39/TT/2013 and 113/TT/2012. Therefore, the contention of the petitioner is rejected.

19. As the petitioner has not submitted the date of de-capitalization, the date of commissioning of new asset (i.e. 1.3.2014) has been considered as date of de-capitalization of old asset. The net value of de-capitalized asset has been worked out as ₹273.76 lakh (gross block of ₹737.56 less cumulative depreciation up to the date of de-capitalization of ₹463.80 lakh) and the same has been reduced from capital cost claimed by the petitioner for the instant asset (i.e. new 500 MVA, 400/220kV ICT-II at Moga Sub-station). The cumulative depreciation of de-capitalized asset up to the date of de-cap (i.e. ₹463.80) has been computed based on the details submitted by the petitioner (i.e. depreciation upto 31.3.2009 ₹393.97 plus pro-rata depreciation from 1.4.2009 to 28.2.2014 ₹69.83).

Initial spares

20. Regulation 8 of the 2009 Tariff Regulations provides that initial spares shall be capitalised as a percentage of the original project cost, subject to following ceiling norms:-

Transmission line	:	0.75%
Transmission sub-station	:	2.5%

Series compensation devices
& HVDC Station : 3.5%

21. As per Auditor Certificate dated, 31.7.2015, the petitioner has claimed initial spares of ₹28.02 lakh pertaining to sub-station. Further, the petitioner vide affidavit dated 24.8.2015 has submitted the year wise details of liability discharged and they are as under:-

(₹ in lakh)

Period	Initial spare liability discharged
As on COD	2.80
2013-14	0
2014-15	16.81
2015-16	8.41
Total	**28.02**

22. Based on the estimated capital cost as on the cut-off date as mentioned in Auditor Certificate dated 31.7.2015, the initial spare as defined in Regulation 8 of the 2009 Tariff Regulations works out to ₹35.77 lakh. The petitioner has claimed ₹28.02 lakh and as it is within the ceiling limit, it is allowed as cost towards initial spare. However, the initial spare will be regularized on the basis of the actual completion cost as on the cut-off date at the time of determination of tariff for 2014-19 period and variance, if any, shall be adjusted in the year in which the cut-off date falls.

23. As per the discharge details, the initial spare cost amounting ₹25.22 lakh (i.e. ₹16.81 lakh and ₹8.41 lakh) are estimated to be discharged in next tariff period, hence, the same shall be considered as undischarged liability and it shall be considered as additional capital expenditure in the year of actual discharge.

Accordingly, the initial spares of ₹2.80 is considered for the purpose of tariff computation.

Capital cost as on COD

24. Details of capital cost as on COD considered for the purpose of tariff computation is summarized below:-

(₹ in lakh)

Capital cost allowed as on COD			
Capital cost as on COD claimed by petitioner	Un-discharged initial spare	Capital cost reduced due to de-capitalization of existing ICT	Capital cost as on COD allowed for tariff calculation
943.54	25.22	273.76	644.56

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 the instant asset is 31.3.2017.

28. The petitioner has claimed additional capital expenditure for the financial year 2013-14, 2014-15 and 2015-16 amounting to ₹140.28 lakh, 209.22 lakh and ₹130.06 lakh respectively. The cut-off date for the above mentioned asset is 31.3.2017. Additional capital expenditure for 2014-15 and 2015-16 claimed by the petitioner falls within the cut-off date but beyond 2009-14 tariff period. Therefore, additional capital expenditure upto 31.3.2014 has been considered for the purpose of tariff calculation and the additional capital expenditure during 2014-15 and 2015-16 shall be considered in the 2014-19 tariff block.

29. The total estimated cost, from COD to 31.3.2014, considered for the purpose of tariff computation is as follows:-

(₹ in lakh)

Capital cost allowed as on COD	Additional capital expenditure 2013-14	Total estimated completion cost as on 31.3.2014
644.56	140.28	784.84

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. Details of debt-equity in respect of the asset as on the date of commercial operation are given hereunder:-

(₹ in lakh)

Capital cost as on date of commercial operation		
Particulars	**Amount**	**%**
Debt	451.19	70.00
Equity	193.37	30.00
Total	**644.56**	**100.00**

32. Debt-equity ratio of 70:30 is considered for additional capital expenditure.

33. Detail of debt-equity ratio of asset as on 31.3.2014 is as per details given hereunder:-

(₹ in lakh)

Particulars	**Amount**	**%**
Debt	549.39	70.00
Equity	235.45	30.00
Total	**784.84**	**100.00**

Return on equity

34. 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".

35. Return on equity has been computed @ 20.96% p.a on average equity. The MAT Rate for the financial year 2013-14 is considered for computing return on equity.

36. The details of return on equity calculated are given overleaf:-

(₹ in lakh)

Particulars	2013-14 (pro-rata)
Opening Equity	193.37
Addition due to Additional Capitalization	42.08
Closing Equity	235.45
Average Equity	214.41
Return on Equity (Base Rate)	15.50%
Tax rate for the year 2013-14 (MAT)	20.960%
Rate of Return on Equity (Pre Tax)	19.610%
Return on Equity (Pre Tax)	**3.50**

Interest on loan

37. 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."

38. As per provisions of Regulation 16 of the 2009 Tariff Regulations, the petitioner's entitlement to interest on loan has been calculated on the following basis:-

(i) Gross amount of loan, repayment of instalments and rate of interest have been considered as per Form 13 given in the affidavit dated 24.8.2015;

(ii) The Normative repayment for the tariff period 2009-14 has been considered to be equal to the depreciation allowed for that period; and

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

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

40. Details of interest on loan calculated are as given overleaf:-

(₹ in lakh)

Particulars	2013-14 (pro-rata)
Gross Normative Loan	451.19
Cumulative Repayment upto Previous Year	0.00
Net Loan-Opening	451.19
Addition due to Additional Capitalization	98.20
Repayment during the year	3.14
Net Loan-Closing	546.24
Average Loan	498.72
Weighted Average Rate of Interest on Loan	10.1953%
Interest	**4.24**

Depreciation

41. 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."

42. As per clause 17 (4) of 2009 Tariff Regulations depreciation has been calculated annually based on Straight Line Method at rates specified in Appendix-III. COD of the asset fall in financial year 2013-14. Thus, depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix-III.

43. Details of the depreciation worked out are as follows:-

(₹ in lakh)

Particulars	**2013-14 (pro-rata)**
Opening Gross Block	644.56
Additional Capital Expenditure	140.28
Closing Gross Block	784.84
Average Gross Block	714.70
Rate of Depreciation	5.2800%
Depreciable Value	643.23
Depreciation	**3.14**
Cumulative Depreciation	**3.14**

Operation & Maintenance Expenses (O&M Expenses)

44. The petitioner vide affidavit dated 16.6.2015 has submitted that O&M Expenses for the bays is not claimed as replaced ICT is being used as a regional spare.

Interest on working capital

45. The petitioner is entitled to claim interest on working capital as per the 2009 Tariff Regulations. The components of the working capital and the petitioner's entitlement to interest thereon are discussed hereunder:-

(i) Receivables

As per Regulation 18 (1) (c) (i) of the 2009 Tariff Regulations, receivables as a component of working capital will be equivalent to two months fixed cost. The petitioner has claimed the receivables on the basis of 2 months annual transmission charges. In the tariff being allowed, receivables have been worked out on the basis of 2 months transmission charges.

(ii) Since O&M expenses are considered as Nil, the maintenance spares expenses for working capital are also considered as NIL.

(iii) Rate of interest on working capital

SBI Base rate of 9.70% as on 1.4.2013 plus 350 Bps i.e. 13.20% has been considered as the rate of interest on working capital.

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

(₹ in lakh)

Particulars	**2013-14**
Maintenance Spares	0.00
O & M Expenses	0.00
Receivables	22.26
Total	22.26
Interest	0.24

Transmission charges

47. The transmission charges being allowed for the transmission asset are given overleaf:-

(₹ in lakh)

Particulars	2013-14
Depreciation	3.14
Interest on Loan	4.24
Return on equity	3.50
Interest on Working Capital	0.24
O & M Expenses	0.00
Total	**11.13**

Filing fee and the publication expenses

48. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The BRPL submitted that the filing fee shall be governed as per the Commission's order. It is clarified that the petitioner shall be entitled for reimbursement of the publication expenses in connection with the present petition, directly from the beneficiaries as provided in Regulation 42 of the 2009 Tariff Regulations.

Licence fee

49. 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 shall be entitled for reimbursement of licence fee in accordance with Regulation 42 A (1) (b) of the 2009 Tariff Regulations.

Service tax

50. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if it is subjected to such service tax in future. The BRPL has objected to recovery of service tax from the

beneficiaries in future as service tax on transmission service is exempted. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

Sharing of Transmission Charges

51. The billing collection and disbursement of transmission charges shall be governed by provision of 2010 (Sharing of Inter State Transmission Charges & Losses) Regulations, 2010 as amended from time to time.

50. This order disposes of Petition No. 26/TT/2014.

(A.S. Bakshi)	(A.K. Singhal)	(Gireesh B. Pradhan)
Member	Member	Chairperson

Annexure I

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN		
	Details of Loan	**2013-2014**
1	**SBI Loan**	
	Gross loan opening	**644.84**
	Cumulative Repayment upto DOCO/previous year	**0.00**
	Net Loan-Opening	644.84
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	644.84
	Average Loan	644.84
	Rate of Interest	10.25%
	Interest	66.10
	Rep Schedule	22 annual installments from 31.8.2016
2	**Bond XLV**	
	Gross loan opening	**15.64**
	Cumulative Repayment upto DOCO/previous year	**0.00**
	Net Loan-Opening	15.64
	Additions during the year	98.20
	Repayment during the year	0.00
	Net Loan-Closing	113.84
	Average Loan	64.74
	Rate of Interest	9.65%
	Interest	6.25
	Rep Schedule	12 annual installments from 28.2.2018
	Total Loan	
	Gross loan opening	**660.48**
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	660.48
	Additions during the year	98.20
	Repayment during the year	0.00
	Net Loan-Closing	758.68
	Average Loan	709.58
	Rate of Interest	**10.1953%**
	Interest	72.34