CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 163/TT/2013

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

Date of Hearing : 22.4.2014
Date of Order : 20.7.2015

In the matter of:

Approval for determination of transmission tariff of 500 MVA, 400/220 kV ICT at Moga (COD: 1.7.2013) under Augmentation of transformation capacity in Northern Region-Part A 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 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 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
Ms. Sangeeta Edwards, PGCIL
Shri S.S Raju, PGCIL

For respondents : Shri Padamjit Singh, PSPCL
Shri T.P.S. Bawa, 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 500 MVA, 400/220 kV ICT at Moga (hereinafter referred to as "transmission asset"), under Augmentation of Transformation capacity in Northern Region-Part A in Northern Region 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 the transmission project was accorded by Board of Directors of the petitioner company vide letter Reference No. 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).

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

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 Merrut Sub-station-500 MVA, 400/220 kV transformer

iv) Extension of 400/220 kV Ludhiana Sub-station-500 MVA, 400/220 kV transformer along with 3 nos. of 220 kV line bays

v) Extension of 400/220 kV Moga Sub-station-2x500 MVA, 400/220 kV transformer (as replacement for 2x250 MVA ICTs which will be refurbished and used as spare) along with 2 nos. of 220 kV line bays

vi) Extension of 400/220 kV Wagoora Sub-station-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

4. The petitioner had prayed for approval of provisional tariff as per clause (4) of Regulation 5 of the 2009 Tariff Regulations. The provisional tariff was granted vide order dated 9.9.2013 under Regulation 5(4) of the 2009 Tariff Regulations subject to adjustment as provided under Regulation 5(3) of the 2009 Tariff Regulations.

5. The transmission charges claimed by the petitioner based on the actual date of commercial operation of 1.7.2013 are as under:-

(₹ in lakh)

Particulars	**2013-14**
Depreciation	33.48
Interest on Loan	34.17
Return on Equity	33.22
Interest on working capital	2.27
O & M Expenses	-
Total	**103.14**

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	-
O & M Expenses	-
Receivables	22.92
Total	**22.92**
Rate of Interest	13.20%
Interest	**2.27**

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. U.P Power Corporation Limited (UPPCL), Respondent No. 9, vide affidavit dated 20.9.2014, BSES Rajdhani Power Limited (BRPL), Respondent No. 12, vide affidavit dated 16.4.2014 have filed replies and Punjab State Power Corporation Limited (PSPCL), Respondent No. 6, filed reply before the Commission on 22.4.2014. The respondents have raised the issues on additional capital cost, 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 estimated completion cost/cost variation, filing fee and publication expenses, O&M expenses, etc. The petitioner has submitted rejoinder to the replies of PSPCL, UPPCL and BSES, vide rejoinders dated 20.6.2014, 3.4.2014, 17.6.2014 respectively. The submissions made by the respondents and the petitioner have been dealt in relevant paragraphs of this order.

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

Capital cost

9. 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."

10. 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 for the instant asset are as follows:-

(₹ in lakh)

Apportioned approved cost	Hard cost claimed	IDC and IEDC claimed #	Cost incurred upto actual COD*	Additional Capitalisation		Total estimated completion cost
				From COD to 31.3.2014	2014-15	
1662.66	733.89	2.08	735.97	217.45	507.38	1460.80

*Capital cost as on COD is inclusive of initial spares
The petitioner has not claimed IEDC

11. As per the investment approval dated 19.12.2012, the instant transmission asset was to be commissioned within 22 months from the date of investment approval i.e. by 18.10.2014, say 1.11.2014. The instant asset was commissioned on 1.7.2013. Thus, there is no time over-run in the case of instant petition.

12. The total estimated completion cost of the instant asset is ₹1460.80 lakh against total apportioned approved cost of ₹1662.66 lakh. The completed cost is within the apportioned approved cost. Thus, there is no cost over-run. However, the Commission has noted that there is cost variation and there is significant cost escalation in certain items. BRPL has also submitted that there is over estimation of cost by 14% and substantial escalation in the cost. The petitioner was directed to-

(a) explain the variation in cost of Foundation for structures, Bus Bars/conductors/ insulators/hardware, outdoor lighting & power and control cables & Auxiliaries, structure for Switchyard and erection escalation;

(b) 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 and the price levels at which these estimates were prepared; and

(c) the indices at the time of preparation of FR, at the time of order and at the time of COD.

13. In response, the petitioner vide affidavit dated 16.12.2013 has submitted that the cost variation in FR & LOA cost for erection works, the variation in case of power & control cables and in case of structure for switchyard are mainly due to variation for Moga Sub-station in total FR & LOA cost. The petitioner has further submitted that the estimates are prepared as per well defined procedure. The FR cost estimate is broad indicative cost worked out generally on the basis of average unit rates of recently awarded contracts/general practice. For procurement open competitive bidding route is followed and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may vary as compared to the cost estimates depending upon prevailing market conditions. The cost variation in respect of above mentioned heads have increased mainly due to variation in total FR and LOA cost and enclosed document in support of cost escalation and tendered cost along with detailed computation of FR estimates including the details of Asset which were considered for preparing the basis of estimates.

14. We have considered the submissions made by the petitioner and BRPL. It has been observed that the petitioner has submitted a copy of FR cost and copy of letter of award indicating details of equipment and their cost instead of the details of estimation of FR cost. Though the overall cost of the project is within the apportioned approved cost, there is substantial variation in the actual cost of a number of items as compared to the FR estimates not only in this petition but also in

other petitions. The cost estimates of the petitioner are not realistic. The petitioner is directed to adopt a prudent procedure to make cost estimates of different elements of the transmission projects more realistic. As there is no overall cost over-run, the cost variation in different heads is allowed.

Treatment of IDC and IEDC

15. The petitioner has made a claim of ₹2.08 lakh towards IDC. However, detailed working of IDC calculation as well as details of IDC paid after COD is not available. In the absence of the required information IDC on cash basis has been considered as per Form 13 and no payment of interest falls due before COD. Thus, IDC upto COD has been considered as NIL against the claim of the petitioner for ₹2.08 lakh. The petitioner has not submitted any claim in respect of IEDC.

16. As per the 2009 Tariff Regulations, the claim of IDC is allowable on cash basis and any undischarged IDC on the date of commercial operation can be claimed as add-cap upto cut-off date. The petitioner is directed to submit details of date of disbursement, supporting documents for exchange rates and interest rates for each interest payment dates till the date of commercial operation and revised loan agreement/s and that of IEDC, if any, at the time of truing-up petition.

Treatment of De-cap of old ICT

17. The petitioner was directed to submit the details of the gross block corresponding to the replaced 2x250 MVA ICTs and its cumulative depreciation as on date of replacement. Further, the petitioner was directed to clarify under which petition the tariff was claimed and allowed for existing 2X250 MVA ICTs at Moga

Sub-station which were being replaced by 2X500 MVA ICTs. The petitioner was also directed to clarify the number of ICTs being considered under the instant petition and to submit Tariff form 5D.

18. The petitioner, vide affidavit dated 18.6.2014, submitted as follows:-

> "b) It is submitted that as per investment approval dated 19.12.2012 two nos. of 250 MVA ICTs were to be replaced by 02 nos. of 500 MVA ICTs and 02 nos. of 220 kV line bays were to be constructed and two 250 MVA ICTs would to be used as spare.
>
> Further it is submitted that in 30th Standing Committee meeting held on 19th Dec' 2011 petitioner stated that the PSTCL proposed for replacement of existing 3*250 MVA transformers by 3*500 MVA ICTs due to load growth in area. PSPCL mentioned that the the Moga S/s was commissioned in 1994 and existing transformers were about 19 years old. Considering the project load, it was proposed to replace existing 2*250 MVA ICT at Moga with 2*500 MVA ICT. It was also proposed that the 02 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 S/s in NR. Members agreed the above proposal. Accordingly the petitioner has replaced these 250 MVA ICTs with 500 MVA ICTs at Moga. It is to be mentioned that since these 250 MVA ICTs will be used as spares by the Northern Region constituents, as agreed in 30th standing committee meeting of Northern region. It is prayed that the Tariff claimed in the original petitions i.e. 82/2010 and 122/2010 may be continued.
>
> c) In the current petition one no. of 500 MVA ICT at Moga is considered"

19. As per the 2009 Tariff Regulations, once the asset is replaced, it is taken out of service. Therefore, the asset has to be decapitalised and taken out of the gross block. Accordingly, the existing ICT at Moga Sub-station after being decapitalised shall be considered at its gross block less cumulative depreciation in another project. Accordingly, the petitioner was directed vide letter dated 18.5.2015 to submit the gross block of existing ICT being replaced and its date of replacement and cumulative depreciation by 1.6.2015. The petitioner vide letter dated 2.6.2015 has sought time upto 30.6.2015 to file the said information. Later, in response to the Commission's letter dated 18.5.2015, the petitioner has filed an affidavit dated 29.6.2015. This affidavit has been received after the time granted by

the Commission to the petitioner and order has already been prepared on the basis of the information available on record. Revising the order at this stage taking into consideration the petitioner's affidavit of 29.6.2015 would delay the issue of order in this matter. Therefore, the petitioner's affidavit of 29.6.2015 will be considered at the time of truing up.

20. Accordingly, de-capitalised asset's value has been arrived at on the basis of certain assumptions. In the absence of the original gross block and accumulated depreciation of the replaced asset, for the purpose of de-capitalisation, the remaining depreciable value (considering 19 years of elapsed life) of the new asset being claimed (i.e. the claimed capital cost up to 31-03-2014) has been considered as net value of replaced asset (i.e. 250 MVA ICT). Accordingly, net value of de-capitalised asset has been reduced from the capital cost allowed for 500 MVA ICT.

21. PSPCL has submitted that as per the minutes of 30th meeting of Standing Committee on Power System Planning of Northern Region, CEA 2 nos. 220 line bays at Moga Sub-station were also to be provided by the petitioner but have not been provided. This will lead to congestion and overloading of the 220 kV lines/ system for evacuating power from the ICTs and therefore the system is incomplete on account of non-provision of the 220 kV line bays. PSPCL has further submitted that there was no requirement of additional 400 kV or 220 kV breaker for the 500 MVA ICT in view of existing 400 kV and 220 kV circuit breakers of the 250 MVA ICT. The petitioner vide rejoinder dated 20.6.2014 submitted that as the existing 250 MVA ICTs were to be replaced by 500 MVA ICT, the replacement of 250 MVA ICTs has been made without any claim for bays. The petitioner has further submitted that the existing

circuit breakers/isolators and CT were replaced with higher current of 1600 A from existing at 1000 A due to replacement of 250 MVA ICTs with 500 MVA ICTs. However, it is observed that 2 nos. line bays have not been provided by the petitioner. We direct the petitioner to provide the line bays at least along with 2nd 500 MVA ICT being replaced. The commissioning of 2nd 500 MVA ICT shall not be allowed, as the system would remain incomplete.

Treatment of Initial Spares

22. As per Regulation 8 (iv) (a) of 2009 Tariff Regulations, the ceiling norm for Initial Spares for sub-station and transmission line is 2.5% and 0.75% respectively of original project cost. The petitioner has claimed initial spares of ₹29.39 lakh for sub-station. The petitioner's claim is allowed as it is within the ceiling norms specified in aforementioned 2009 Tariff Regulations.

23. In view of above, the capital cost considered for tariff is as per details below:-

(₹ in lakh)

Capital cost claimed	**IDC claimed**	**Capital cost considered after IDC adjustment as on COD**	**Capital cost of existing ICTs reduced (on account of de-capitalisation) on assumptive basis**	**Capital cost considered on COD**
735.97	2.08	733.89	300.62	433.27

Projected additional capital expenditure

24. 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:"

25. Clause (11) of Regulation 3 of the 2009 Tariff Regulations defines "cut-off" date as follows:-

> "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".

26. As per the above definition, cut-off date in respect of the transmission asset in the instant petition is 31.3.2016.

27. The petitioner has claimed additional capital expenditure of ₹217.45 lakh and ₹507.38 lakh for the financial years 2013-14 and 2014-15 respectively. The additional capital expenditure claimed is for balance and retention payment and is within cut-off date. The additional capital expenditure claimed for 2014-15 falls within the cut-off date but beyond the tariff period 2009-14 and accordingly has not been considered. UPPCL has submitted that the total additional capital expenditure works out to ₹724.83 lakh against the capital cost of ₹735.97 lakh claimed as on COD and the amount of ₹724.83 lakh includes a provision of ₹151.15 lakh for civil works as per Form 5B submitted by the petitioner. This is not acceptable as after the transformer is connected to the bus bar in the open switchyard it does not require any civil work or building. The petitioner has submitted that the provision under civil works is towards foundation for structures under capitalisation, though all the works was completed till COD and is on account of balance/retention payment. We allow the

additional capital expenditure as claimed by the petitioner. The actual completed cost shall be reviewed at the time of truing up. The petitioner is directed to submit the list of deferred liabilities, if any at the time of truing up.

28. The capital cost as on the date of commercial operation and as on 31.3.2014 is as follows:-

(₹ in lakh)

Capital cost as on COD	**Additional capitalisation 2013-14**	**Total estimated completion cost**
433.27	217.45	650.72

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. 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)

Particulars	**As on COD**		**Add-cap 2013-14**		**As on 31.3.2014**	
	Amount	**%**	**Amount**	**%**	**Amount**	**%**
Debt	303.29	70.00	152.22	70.00	455.50	70.00
Equity	129.98	30.00	65.24	30.00	195.21	30.00
Total	**433.27**	**100.00**	**217.45**	**100.00**	**650.72**	**100.00**

Return on equity

31. 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".

32. 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). Return on Equity has been computed @ 17.481% p.a on average equity as per Regulation 15 of the 2009 Tariff Regulations.

33. Details of return on equity calculated are as follows:-

(₹ in lakh)

Particulars	2013-14 (pro-rata)
Opening equity	129.98
Addition due to additional capital expenditure	65.24
Closing equity	195.21
Average equity	162.60
Return on equity (Base Rate)	15.50%
Tax rate for the year 2008-09 (MAT)	11.33%
Rate of Return on Equity (Pre Tax)	17.481%
Return on Equity (Pre Tax)	**21.32**

Interest on loan

34. Regulation 16 of the 2009 Tariff Regulations provides as follows:-

"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 the petition.

(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.

36. UPPCL has submitted that the petitioner's prayer for floating rate of interest claim not be allowed as it entails an avoidable element of risk of increase in the rate of interest to which the consumers are exposed. The petitioner has submitted that in the instant petition the loan deployed is of the fixed interest rate. The interest on loan has been calculated on the basis of prevailing rate available on the date of commercial operation. 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 to this order.

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

(₹ in lakh)

Particulars	**2013-14 (pro-rata)**
Gross Normative Loan	303.29
Cumulative Repayment upto previous year	-
Net Loan-Opening	303.29
Addition due to additional capital expenditure	152.22
Repayment during the year	21.48
Net Loan-Closing	434.02
Average Loan	368.65
Weighted Average Rate of Interest on Loan	7.9300%
Interest	**21.93**

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 asset in the instant petition was commissioned on 1.7.2013. The date of commercial operation of the asset falls in 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 has been considered as given under:-

(₹ in lakh)

Particulars	**2013-14 (pro-rata)**
Opening Gross Block	433.27
Addition due to Projected Additional Capitalisation	217.45
Closing Gross Block	650.72
Average Gross Block	541.99
Rate of Depreciation	5.2843%
Depreciable Value	487.79
Remaining Depreciable Value	487.79
Depreciation	**21.48**

Operation & Maintenance Expenses (O&M Expenses)

42. Clause (g) of Regulation 19 of the 2009 Tariff Regulations prescribes the norms for operation and maintenance expenses for the transmission system based

on the type of sub-station and the transmission line but the petitioner has not claimed any O&M Expenses in the instant petition.

43. 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. BRPL has submitted that O&M expenses be allowed as per the 2009 Tariff Regulations as all such charges are generally included in the O&M Expenses.

44. 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

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 overleaf:-

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) 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.

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

(₹ in lakh)

Particulars	**2013-14 (pro-rata)**
Maintenance Spares	-
O & M Expenses	-
Receivables	14.71
Total	14.71
Rate of Interest	**13.20%**
Interest	**1.46**

Transmission charges

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

(₹ in lakh)

Particulars	2013-14 (pro-rata)
Depreciation	21.48
Interest on Loan	21.93
Return on Equity	21.32
Interest on Working Capital	1.46
O & M Expenses	-
Total	**66.18**

Filing fee and the publication expenses

48. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. BRPL has submitted that the application filing fee and the publication expenses 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 A (1) (a) 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 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

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 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

51. 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.

52. This order disposes of Petition No. 163/TT/2013.

sd/-	sd/-	sd/-
(A.S. Bakshi) **Member**	**(A.K. Singhal)** **Member**	**(Gireesh B. Pradhan)** **Chairperson**

Annexure

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN		
	Details of Loan	**2013-2014**
1	**Bond XLIII**	
	Gross loan opening	**515.18**
	Cumulative Repayment upto DOCO/previous year	**0.00**
	Net Loan-Opening	515.18
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	515.18
	Average Loan	515.18
	Rate of Interest	7.93%
	Interest	40.85
	Rep Schedule	12 annual instalments from 20.05.2017
	Total Loan	
	Gross loan opening	**515.18**
	Cumulative Repayment upto DOCO/previous year	0.00
	Net Loan-Opening	515.18
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	515.18
	Average Loan	515.18
	Rate of Interest	**7.9300%**
	Interest	**40.85**