CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 98/TT/2013

Coram:

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

Date of Hearing : 17.03.2015
Date of Order : 15.10.2015

In the matter of:

Approval of transmission tariff for Spare ICT at Bhiwadi in Northern Region under provision of Spare ICTs and Reactors for Northern, Eastern, Southern and Western Region from COD to 31.3.2014 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,
   (Formerly Uttar Pradesh State Electricity Board)
   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,
    Shakti Kiran Building, Karkardooma,
    Delhi-110 092

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 66/11kV 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
Shri S. S. Raju, PGCIL
Ms. Sangeeta Edwards, PGCIL

For respondent : None

ORDER

The instant petition has been filed by Power Grid Corporation of India Ltd. (PGCIL) seeking approval of transmission tariff for Spare ICT at Bhiwadi (hereinafter referred to as “transmission asset”) in Northern Region under provision of Spare ICTs and Reactors for Northern, Eastern, Southern and Western Region from COD to 31.3.2014 for tariff block 2009-14 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, (hereinafter referred to as “the 2009 Tariff Regulations”).

2. Investment approval for the project of Provision of Spare Transformers in Northern Region was accorded by the Board of Directors of the petitioner's company vide letter No. C/CP/Spare ICTs & Reactors dated 4.8.2011 for ₹3843 lakh including IDC of ₹104 lakh, based on 1st Quarter, 2011 price level. The project was scheduled to be commissioned within 16 months from the date of IA i.e. by 3.12.2012 say 1.1.2013.

3. The broad scope of work covered under Part-I: Spare Transformers in Northern Region of the project is as follows:-

Numbers of Spare Transformers	Proposed Locations
3 nos. 315 MVA, 400/220/33 kV ICTs	Lucknow Sub-station (U.P), Bhiwadi (Rajasthan) and Hissar (Haryana)

4. The instant petition covers the spare transformer commissioned at Bhiwadi in Northern Region and the details of the asset commissioned are as given below:-

S. No.	Transmission Element
1	Bhiwadi 400/220 kV Sub-station 400/220 kV, 315 MVA ICT

5. This order has been issued after considering the petitioner's affidavits dated 5.6.2013, 27.6.2014, 7.11.2014 and 2.6.2015.

6. The petitioner initially claimed the transmission tariff for the instant asset from the date of commercial operation (COD) of 1.2.2013 based on the Auditors' certificate dated 4.3.2013 for the capital cost incurred upto COD and projected capital expenditure to be incurred from COD to 31.3.2014. However, the Commission, vide "Record of Proceedings" of the hearing on 17.3.2015 in the instant petition had directed the petitioner to submit Auditors' certificate as per audited books of account upto 31.3.2014 along with tariff forms as per true-up provisions of the 2009 Tariff Regulations. The petitioner vide affidavit dated 2.6.2015 submitted the revised Auditors' certificate for capital costs along with revised tariff forms and other information.

7. Details of the transmission charges claimed by the petitioner are as under:-

(₹ in lakh)

Particulars	2012-13 (pro-rata)	2013-14
Depreciation	6.34	48.89
Interest on Loan	7.52	56.28
Return on equity	6.98	54.47
Interest on Working Capital	0.48	3.67
O & M Expenses	-	-
Total	**21.32**	**163.31**

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

(₹ in lakh)

Particulars	2012-13 (pro-rata)	2013-14
Maintenance Spares	-	-
O & M expenses	-	-
Receivables	21.32	27.22
Total	**21.32**	**27.22**
Rate of Interest	13.50%	13.50%
Interest	**0.48**	**3.67**

9. No comments have been received from the general public in response to the notices published in news papers by the petitioner under Section 64 of the Electricity Act, 2003 (the Act). Ajmer Vidyut Vitran Nigam Limited (AVVNL), Respondent No. 2 and Punjab State Power Corporation Limited (PSPCL), Respondent No. 6 have filed replies dated 23.5.2013 and 25.6.2013 respectively. AVVNL has raised the issue of late filing of the petition on 12.4.2013 by the petitioner whereas the COD of the instant asset claimed is 1.2.2013, time over-run, O & M Expenses and confirmation of the petitioner

that all the works included in the scope of the project have been completed and the additional capitalisation is towards balance and retention payments only. PSPCL has submitted that the petitioner should confirm that to achieve economies of scale, the procurement was on the basis of a bulk order based on International Competitive Bidding (ICB) or Domestic Competitive Bidding (DCB) and submit the detailed cost summary of all 12 nos. ICTs procured. PSPCL has further submitted that as the instant asset is a spare ICT and as such the declaration of COD does not meet the requirement of the Regulations as the regular operation would come only after the instant asset is actually used after successful charging, trial operation and regular service and there is a possibility of failure at the time of subsequent utilization after being kept without test charging at the receiving station. PSPCL has also submitted that the claim of the petitioner for incentive is incorrect as incentive is allowed only if the availability is more than normative and in case of spare ICT, there is no scope for claiming or allowing incentive and that the transmission charges should be shared as per the PoC Regulations as against the prayer for sharing by the NR constituents. The petitioner has not filed rejoinder to the reply of AVVNL. The petitioner has filed rejoinder to the reply of PSPCL.

10. AVVNL in its reply has submitted that the petitioner has filed the instant petition on 12.4.2013 even though the instant asset was commissioned on 1.2.2013, thus, there has been a delay of more than two months in filing the petition from COD. Regulation 5(1) of the 2009 Tariff Regulations provides for filing of application for determination of tariff before six months of projected date of commercial operation. Accordingly, the petitioner could

have filed the instant petition during July, 2012. However, the petition was filed on 12.4.2013. This delay in filing of petition has not been explained by the petitioner. Delay in filing petition would cost the beneficiaries by way of interest for the period of delay. As the petitioner has not filed its comments to the issue raised by the respondent, we feel that the petitioner does not have any justifiable reason for the delay in filing the petition. We are of the view that the beneficiaries should not be burdened with interest for the period of delay in filing the petition and accordingly we direct the petitioner not to charge any interest for the period of delay in filing the petition, i.e. from the date of commercial operation to the date of filing of petition (1.2.2013 to 12.4.2013).

Date of commercial operation

11. PSPCL has submitted that as per the claim of the petitioner, 315 MVA 400/220 kV spare transformer at 400/220 kV Bhiwadi Sub-station has been placed at site and is ready for use. However, it is a spare ICT and the condition for successful charging and trial operation have to be achieved/satisfied before declaring COD and it is evident that after re-erection of ICT at the receiving end sub-station, it must be test charged to prove its healthiness. Without test charging, it would not be correct to declare the COD of ICT. The detailed justification/reply of the petitioner is required before acceptance of COD by the Commission.

12. The petitioner vide its rejoinder dated 11.11.2014 has submitted as overleaf:-

a. The transformer is transported from the factory without oil being filled as it is convenient to transport the ICT and oil separately. The necessary testing is done for its healthiness after oil is filled in the transformer tank and proper drying out. After thorough checking/testing, the spare transformer is made completely ready to take into service at any time i.e. kept as standby unit. In case of any failure, the faulty unit is dragged out of the plinth and spare unit is placed in its place at the earliest possible time. Hence, complete readiness of spare transformer as a standby unit is termed as its commissioning and after commissioning, the transformer is ready for intended use and is declared under commercial operation.

b. There is no provision of spare bays for the spare transformer and therefore, charging of the same is not possible under normal circumstances though most of the tests required for charging of any new transformer are also carried out on the spare transformer. If the spare transformer has to be test charged at rated voltage, it will require taking out any one of healthy transformer under operation, resulting in additional outages in the system.

c. The spare transformer can be put into service by removing one transformer in service. In order to exchange the existing healthy transformer in service with a spare one, shutdown of the existing transformer (under operation) will be required for 15 days or more as the existing transformer is to be removed after its total dismantling and draining of oil. To put spare transformer into service by replacing the existing healthy transformer, outage period is to be considered as deemed available and reimbursement of additional expenditure of approx. ₹15 to 20 lakh for completion of the replacement work would be required.

d. The spare unit can be energized when any of the in-service transformers is taken out from its position and spare unit is placed in that position and the healthiness/readiness of spare transformer is ascertained on the basis of pre-commissioning tests done on the transformer.

13. We have considered the submissions of both the respondent and the petitioner and are satisfied that the commissioning of the spare transformer to be in order and accordingly allow the COD as 1.2.2013, as claimed by the petitioner.

14. Having heard the representatives of the petitioner, respondents and perused the material on records, we proceed to dispose of the petition.

Capital cost

15. 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."

16. The petitioner has submitted the revised Auditors' certificate dated 14.5.2015 for expenditure as on COD and for additional capital expenditure incurred or to be incurred for the period from COD to 31.3.2014. The petitioner has submitted additional capital expenditure to be incurred for the years 2014-15 and 2015-16. However, as these two years fall beyond the tariff block 2009-14, the same have not been considered in the instant petition for the purpose of determination of transmission tariff. The details of apportioned approved cost, cost as on date of commercial operation and estimated/projected additional capital expenditure to be incurred for the instant asset, submitted by the petitioner in the instant petition are as overleaf:-

(₹ in lakh)

Apportioned approved cost	Expenditure up to COD	Projected capital expenditure incurred or to be incurred				Total estimated expenditure
		COD to 31.03.13	2013-14	2014-15	2015-16	
1311.04	612.97	215.28	195.24	64.39	38.03	1125.91

Cost over-run

17. The total estimated completion cost is ₹1023.49 lakh and ₹1125.91 lakh as on 31.3.2014 and 31.3.2016 respectively against the apportioned approved cost ₹1311.04 lakh.

18. PSPCL has submitted that the petitioner should give the details of procurement of 12 nos. ICTs, so as to determine if the procurement was through a bulk order for 12 ICTs resulting in lower rates or the procurement was split up in multiples orders, resulting in higher rates and may also confirm the grounds for going in for DCB instead of ICB and whether more competitive rates could have been secured through ICB. PSPCL further submitted that the details of cost/awarded cost of each ICT, through which tender and party on which the order was placed should also be confirmed along with the conformation whether the ICT at Bhiwadi was procured at competitive cost as compared to the other 11 ICTs.

19. The petitioner vide rejoinder dated 11.11.2014 has submitted as under:-

a. The details of procurement of 12 ICTs and Auditors' certificate including cost of ICTs commissioned in Northern, Eastern, Southern and Western Regions has been submitted and the cost of ICTs varies from ₹1002 lakh to ₹1237 lakh.

b. It has been following a well laid down procurement policy which ensures both transparency and competitiveness in the bidding process. The Domestic Competitive Bidding (DCB) process is being followed for procurement of majority of equipment and though packages are similar in nature to ICB process, the ICB is resorted to where the multilateral funding is involved or when there are limited vendors within India. Further, transmission equipment market in India is quite developed and DCB ensures price competitiveness without increasing the overall FERV (FOREX) fluctuation risk.

20. We have considered the submissions of the petitioner and the respondent. We are of the view that the process of procurement of the transformers was transparent and competitive.

Time over-run

21. The scheduled date of completion (SCOD) of the instant transmission asset was 1.1.2013. However, the instant asset has been commissioned on 1.2.2013. Thus, there is a delay of one month.

22. The petitioner was directed to submit the reasons for time over-run along with documentary evidence. The petitioner vide affidavit dated 27.6.2014 submitted that due to heavy intermittent fog during the month of December, 2012 and January, 2013 there was constraint in erection and commissioning of

ICT, which was beyond the control of the petitioner and the delay of one month may be condoned.

23. We have considered the submissions of the petitioner. As regards the fog in Northern Part of India adversely affecting the progress of work, we are of the view that foggy conditions during winter season is a normal phenomenon in parts of Northern Region and that the impact of fog could not be so severe leading to time over-run of one month. The petitioner has not provided any details about longest duration of continuous fog condition, total number of days affected by heavy fog constraint, the type of constraints faced due to intermittent heavy fog during erection and commissioning of spare ICT or any documentary evidence of intermittent heavy fog conditions.

24. We also note that the procedure for long storage of spare ICT at site includes unloading of the unit, initial checks, unpacking and inspection of all accessories, erection, testing and pre-commissioning checks. These activities are usually not affected by the foggy conditions as once oil is filled in the ICT and oil circulation is completed, pre-commissioning testing may be carried out even in the foggy conditions. The intermittent foggy condition may cause delay for a few days and it may affect the initial checks, oil filling and oil processing. We are of the view that the petitioner with vast experience in erection and commissioning of EHV transformers should have completed the work within the scheduled COD. Therefore, we are not inclined to condone the time over-run of one month.

Treatment of IDC & IEDC

25. The petitioner was directed to submit the details of loans, the detailed working/computation of the actual IDC on cash basis along with editable soft copy of computation in Excel format, as the same were not filed with the petition. However, as per the information submitted by the petitioner, an amount of ₹12.33 lakh on account of IDC has been claimed but detailed working/computation as directed has not been submitted. In view of non-submission of complete information by the petitioner, the claim for IDC on cash basis has been considered based on the loans deployed for the instant asset as per Form-13, assuming that the petitioner has not made any default in the payment of interest. As such, IDC on cash basis upto the scheduled/actual date of commercial operation works out to an amount of ₹1.87 lakh. Thus, amount of IDC accrued as on scheduled/actual COD and to be discharged after COD has not been considered in the capital cost for determination of transmission tariff in the instant petition. The undischarged liability of IDC would be considered on submission of complete information. The petitioner is directed to submit detailed working for IDC along with the actual cash expenditure in Form-14A at the time of truing-up.

26. The petitioner has claimed an amount of ₹8.47 lakh on account of Incidental Expenditure during Construction (IEDC) in respect of the instant asset. However, the petitioner has not submitted detailed computations/ supporting documents for admissible IEDC. In the absence of detailed computation/supporting documents of IEDC by the petitioner, the percentage

on Hard Cost indicated in the Abstract Cost Estimate submitted by the petitioner is 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 and hence it is considered for the purpose of tariff calculation. However, the petitioner is once again directed to submit year-wise details of actual IEDC paid at the time of truing-up.

27. 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 25 and 26. 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/IEDC discharged after date of commercial operation. IDC/IEDC allowed will be reviewed at the time of truing-up on submission of adequate and proper information by the petitioner in respect of IDC and IEDC at the time of truing-up.

Initial spares

28. 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%

29. The petitioner has claimed initial spares of ₹24.17 lakh against the amount of ₹1125.91 lakh being the cost of sub-station in the case of instant asset. The claim of the petitioner for initial spares is within the limit specified in the 2009 Tariff Regulations and hence is allowed.

Capital cost as on COD

30. The capital cost as on COD of the instant asset 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	COD	Capital Cost considered for the purpose of tariff after prudence check of IDC/IEDC & Initial Spares, if any, as on COD	Period of tariff
Bhiwadi 400/220 kV Sub-station 400/220 kV, 315 MVA ICT	1.2.2013	602.51	1.2.2013 to 31.3.2014

Additional Capital Expenditure

31. As regards Additional Capital Expenditure clause 9(1) 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:"

32. Further, the 2009 Tariff Regulations define 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 incase of 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".

33. Accordingly, the cut-off date in the instant petition for the instant asset is 31.3.2016.

34. The additional capital expenditure claimed for the period 2012-13 and 2013-14 is admissible under Regulation 9(1) of the 2009 Tariff Regulations, and is allowed. The petitioner has also claimed additional capital expenditure for the years 2014-15 and 2015-16. However, the same has not been considered as it would be part of the next tariff period i.e. 2014-19.

Capital cost as on 31.3.2014

35. The details of the capital cost deemed to be claimed as on 31.3.2014 by the petitioner, for the purpose of transmission tariff in the instant petition, after considering the IDC on cash basis and prudence check of IDC/IEDC and Initial Spares are as below:-

(₹ in lakh)

Srl. No.	Particulars	Amount
(i)	Capital cost claimed as on COD	612.97
(ii)	(+) Additional Capital expenditure claimed (2012-13)	215.28
(iii)	(+) Additional Capital expenditure claimed (2013-14)	195.24
(iv)	(-) IDC claimed on accrual basis	12.33
(v)	(+) IDC worked out considering time over-run and discharge of IDC as on COD	1.87
(vi)	(-) Excess Initial Spares disallowed	-
(vii)	**Total capital cost deemed to be claimed as on 31.3.2014 (i+ii+iii-iv+v-vi-vii)**	**1013.03**

Debt- Equity ratio

36. 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."

37. The petitioner has claimed debt equity ratio of 70:30 as on COD of the asset and for additional capitalization, which is in accordance with the above regulations. The debt equity ratio of 70:30 has been considered to allow the tariff. The details are as follows:-

Particulars	As on COD		As on 31.3.2014	
	Amount (₹ in lakh)	%age	Amount (₹ in lakh)	%age
Debt	421.77	70.00	709.13	70.00
Equity	180.74	30.00	303.90	30.00
Total	**602.51**	**100.00**	**1013.03**	**100.00**

Return on Equity (RoE)

38. Regulation 15 of the 2009 Tariff Regulations provides that:-

"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".

39. The petitioner has submitted that it may be allowed 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 under Regulation 15(5) of the 2009 Tariff Regulations. As discussed at para-6, we would like to clarify that RoE has been computed @ 20.008% p.a and @ 20.961% p.a for the years 2012-13 and 2013-14 respectively on average equity in line with truing-up provisions as per Regulation 15(5) of the 2009 Tariff Regulations and allowed in the instant petition itself.

40. The details of return on equity calculated are as follows:-

(₹ in lakh)

Particulars	**2012-13 (pro-rata)**	**2013-14**
Opening Equity	180.74	245.33
Addition due to Additional Capitalization	64.58	58.57
Closing Equity	245.33	303.90
Average Equity	213.03	274.61
Return on Equity (Base Rate)	15.50%	15.50%
Tax rate for the year (MAT) (Truing-up)	20.008%	20.961%
Rate of Return on Equity (Pre Tax)	19.377%	19.611%
Return on Equity (Pre-tax)	**6.88**	**53.85**

Interest on Loan

41. Regulation 16 of the 2009 Tariff Regulations provides that:-

> "16. (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."

42. In view of provisions of the 2009 Tariff Regulations, interest on loan has been considered as detailed hereinafter:-

(a) Gross amount of loan, repayment of instalments and rate of interest on actual average loan have been considered as per the petition;

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

(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.

43. Interest on loan has been calculated on the basis of prevailing rate of actual loan available as on the date of commercial operation. Any change in rate of interest subsequent to date of commercial operation shall be considered at the time of truing-up.

44. Detailed calculation of the weighted average rate of interest has been given at Annexure.

45. Details of interest on loan calculated are as given hereunder:-

(₹ in lakh)

Particulars	2012-13 (pro-rata)	2013-14
Gross Normative Loan	421.77	572.46
Cumulative Repayment upto Previous Year	-	6.25
Net Loan-Opening	421.77	566.21
Addition due to Additional Capitalization	150.70	136.67
Repayment during the year	6.25	48.33
Net Loan-Closing	566.21	654.55
Average Loan	493.99	610.38
Weighted Average Rate of Interest on Loan	9.0041%	9.1159%
Interest	**7.41**	**55.64**

Depreciation

46. Regulation 17 of the 2009 Tariff Regulations provides for computation of depreciation in the following manner, namely:-

> "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."

47. The instant asset was put under commercial operation on 1.2.2013. Accordingly, the instant asset will complete 12 years beyond 2013-14. Thus depreciation has been calculated annually based on Straight Line Method and

at rates specified in Appendix-III of the 2009 Tariff Regulations.

48. Details of the depreciation worked out are as under:-

(₹ in lakh)

Particulars	2012-13 (pro-rata)	2013-14
Opening Gross Block	602.51	817.79
Additional Capital Expenditure	215.28	195.24
Closing Gross Block	817.79	1013.03
Average Gross Block	710.15	915.41
Rate of Depreciation	5.2800%	5.2800%
Depreciable Value	639.14	823.87
Remaining Depreciable Value	639.14	817.62
Depreciation	**6.25**	**48.33**

Operation & Maintenance Expenses (O&M Expenses)

49. The petitioner has not claimed O&M expenses for the instant asset filed in the instant petition as it being a Spare ICT at the Bhiwadi Sub-station of Northern Region.

50. 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%.

51. The petitioner has also submitted that the claim for transmission tariff is exclusive of any statutory taxes, levies, duties, cess or any other kind of impositions etc. Such kinds of payments are generally included in the O & M Expenses. 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. We do not see any reason why the admissible amount is inadequate to meet the requirement of the employee cost. In this order, we have not allowed O&M Expenses as the petitioner has not made any claim for the instant asset being a spare ICT and in any case the O&M Expenses are allowable as per the existing norms.

Interest on working capital

52. As per the 2009 Tariff Regulations the components of the working capital and the interest thereon are discussed hereunder:-

(i) Maintenance Spares

Regulation 18 (1) (c) (ii) of the 2009 Tariff Regulations provides for maintenance spares @ 15% per annum of the O&M Expenses from 1.4.2009. The petitioner has not claimed maintenance spares for the instant asset and value of maintenance spares has accordingly been worked out as NIL.

(ii) O & M Expenses

Regulation 18 (1) (c) (iii) of the 2009 Tariff Regulations provides for operation and maintenance expenses for one month to be included in the working capital. The petitioner has not claimed O & M expenses for the instant asset and value of O & M expenses has accordingly been worked out as NIL.

(iii) Receivables

As per Regulation 18(1) (c) (i) of the 2009 Tariff Regulations, receivables will be equivalent to two months' average billing calculated on target availability level. The petitioner has claimed the receivables on the basis of 2 months' transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis of 2 months transmission charges.

(ii) Rate of interest on working capital

In accordance with clause (3) of Regulation 18 of the 2009 Tariff Regulations, as amended, rate of interest on working capital shall be on normative basis and in case of transmission assets declared under commercial operation after 1.4.2009 shall be equal to State Bank of India Base Rate as applicable on 1st April of the year of commercial operation plus 350 bps. State Bank of India base interest rate on 1.4.2012 was 10.00%. Therefore, interest rate of 13.50% has been considered in respect of the instant asset.

53. Necessary computations in support of interest on working capital are as under:-

(₹ in lakh)

Particulars	2012-13 (pro-rata)	2013-14
Maintenance Spares	-	-
O & M expenses	-	-
Receivables	21.02	26.91
Total	**21.02**	**26.91**
Rate of Interest	13.50%	13.50%
Interest	**0.47**	**3.63**

Transmission charges

54. The transmission charges being allowed for the transmission asset are summarized as under:-

(₹ in lakh)

Particulars	2012-13 (pro-rata)	2013-14
Depreciation	6.25	48.33
Interest on Loan	7.41	55.64
Return on equity	6.88	53.85
Interest on Working Capital	0.47	3.63
O & M Expenses	-	-
Total	**21.02**	**161.46**

Filing Fee and the Publication Expenses

55. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. 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

56. 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

57. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if notification regarding granting of exemption to transmission service is withdrawn at a later date and it is subjected to such service tax in future the beneficiaries shall have to share the service tax paid by the petitioner. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

Sharing of Transmission Charges

58. PSPCL has submitted that the transmission asset was commissioned on 1.2.2013 and hence the transmission charges should be included in the PoC charges and not to be shared by the constituents of Northern Region. We would like to clarify that 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.

59. This order disposes of Petition No. 98/TT/2013.

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

<u>Annexure</u>

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN			
	Details of Loan	**2012-13**	**2013-14**
1	**Bond XLI**		
	Gross loan opening	279.09	**279.09**
	Cumulative Repayment upto DOCO/previous year	0.00	**0.00**
	Net Loan-Opening	279.09	279.09
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	279.09	279.09
	Average Loan	279.09	279.09
	Rate of Interest	8.85%	8.85%
	Interest	24.70	24.70
	Rep Schedule	12 annual instalments from 19.10.2016	
2	**Bond XXXIX**		
	Gross loan opening	130.00	**130.00**
	Cumulative Repayment upto DOCO/previous year	0.00	**0.00**
	Net Loan-Opening	130.00	130.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	130.00	130.00
	Average Loan	130.00	130.00
	Rate of Interest	9.40%	9.40%
	Interest	12.22	12.22
	Rep Schedule	Bullet Payment as on 29.03.2027	
3	**SBI**		
	Gross loan opening	0.00	**0.00**
	Cumulative Repayment upto DOCO/previous year	0.00	**0.00**
	Net Loan-Opening	0.00	0.00
	Additions during the year	0.00	136.67
	Repayment during the year	0.00	0.00
	Net Loan-Closing	0.00	136.67
	Average Loan	0.00	68.34
	Rate of Interest	10.29%	10.29%
	Interest	0.00	7.03
	Rep Schedule		
4	**Bond XLII**		
	Gross loan opening	0.00	**150.70**
	Cumulative Repayment upto DOCO/previous year	0.00	**0.00**
	Net Loan-Opening	0.00	150.70
	Additions during the year	150.70	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	150.70	150.70
	Average Loan	75.35	150.70

	Rate of Interest	8.80%	8.80%
	Interest	6.63	13.26
	Rep Schedule	Bullet Payment as on 13.03.2023	
5	**Bond XXXVI**		
	Gross loan opening	**20.00**	**20.00**
	Cumulative Repayment upto DOCO/previous year	**0.00**	**0.00**
	Net Loan-Opening	20.00	20.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	20.00	20.00
	Average Loan	20.00	20.00
	Rate of Interest	9.35%	9.35%
	Interest	1.87	1.87
	Rep Schedule	15 annual instalments from 29.08.2016.	
	Total Loan		
	Gross loan opening	429.09	579.79
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	429.09	579.79
	Additions during the year	150.70	136.67
	Repayment during the year	0.00	0.00
	Net Loan-Closing	579.79	716.46
	Average Loan	504.44	648.13
	Rate of Interest	**9.0041%**	**9.1159%**
	Interest	**45.42**	**59.08**