CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

<u>Petition No. 58/TT/2013</u>

Coram:

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

Date of Hearing : 20.10.2015
Date of Order : 15.02.2016

In the matter of:

Approval of transmission tariff of extension of 400/220 kV Ballabgarh Sub-station (re-alignment work) under 765 kV system for Central part of Northern Grid Part-III for tariff block 2009-14 period in Northern Region under Regulation-86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Condition of Tariff) 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 66/11 kV 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 Mukesh Khana, PGCIL
Shri Rakesh Prasad, PGCIL
Shri S.S. Raju, PGCIL
Shri M.M. Mondal, PGCIL
Shri S.K. Venkatesan, PGCIL

For Respondents : None

ORDER

The instant petition has been filed by Power Grid Corporation of India Ltd. (PGCIL) for approval of the transmission tariff for extension of 400/220 kV Ballabgarh Sub-station (re-alignment work) under 765 kV system for Central part of Northern Grid Part-III in Northern Region for tariff block 2009-14 period, 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/765 kV System in Northern Grid dated 3.11.2009, at an estimated cost of ₹107512 lakh, including IDC of ₹7712 lakh (based on 3rd Quarter, 2009 price level). As per the investment approval, the transmission asset was scheduled to be commissioned within 30 months from the

date of investment approval, i.e. by 1.6.2012.

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

Transmission Lines

(i) Meerut-Bhiwani 765 kV S/C line -175 km

(ii) LILO of Bareilly - Mandola 400 kV D/C line at Meerut -103 km

(iii) LILO of both circuits of Bawana/Bahaduragarh-Hissar 400 kV D/C line at Bhiwani-15km.

Sub-stations

(i) New 2x1000 MVA, 765/400 kV and 2x500 MVA, 400/220 kV Bhiwani 765/400/220 kV Sub-station

(ii) Extension of Meerut 765/400 kV Sub-station

(iii) Extension of Mandola 400/220 kV Sub-station

(iv) Extension of Ballabhgarh 400/220 kV Sub-station-Realignment works

Reactive compensation

Line Reactors	Line Reactor-from Bus	Line reactor-to bus
1. Meetut-Bhiwani 765 kV S/c line	-	240 MVAR(switchable)
2. Bus Reactors Bhiwani-2x240 MVAR		

4. Provisional tariff was approved vide order dated 25.3.2013, subject to adjustment as per Regulation 5 (4) of the 2009 Tariff Regulations.

5. The instant petition covers single asset i.e. extension of 400/220 kV Ballabhgarh Sub-station (re-alignment work) under 765 kV system for central part of Northern Grid part-III

6. This order has been issued after considering the petitioner's affidavit dated 15.10.2015 and 2.12.2015.

7. The petitioner has claimed transmission charges for the instant assets as under:-

(₹ in lakh)

Particulars	2012-13	2013-14
Depreciation	1.58	4.90
Interest on Loan	1.92	5.67
Return on equity	1.74	5.46
Interest on Working Capital	0.12	0.37
O & M Expenses	-	-
Total	5.36	16.40

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

(₹ in lakh)

Particulars	2012-13	2013-14
Maintenance Spares	0.00	0.00
O & M expenses	0.00	0.00
Receivables	2.68	2.73
Total	2.68	2.73
Interest	0.12	0.36
Rate of Interest	13.50%	13.50%

9. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the

Electricity Act. A combined reply has been filed by Rajasthan Dicoms, i.e Ajmer Vidyut Vitran Nigam Limited (AVVNL) Respondent No. 2, Jaipur Vidyut Vitran Nigam Limited (JVVNL) Respondent No. 3 and Jodhpur Vidyut Vitran Nigam Limited (Jd.VVNL) Respondent No. 4 vide affidavit dated 15.4.2013. Issues like additional capital expenditure, rate on interest and higher O&M charges have been raised by them. The objections raised by the Rajasthan Discoms are addressed in the relevant paragraphs of this order

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

Capital cost

11. 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."

12. The details of the apportioned approved cost, cost as on COD and estimated/projected additional capitalization to be incurred as per Auditor's Certificate dated 22.9.2015, is as follows:-

(₹ in lakh)

Approved cost	Expenditure up to COD	Expenditure from COD to 31.3.13	Expenditure from 2013-14	Expenditure from 2014-15	Estimated expenditure from 2015-16	Total estimated expenditure
151.72	86.76	6.02	0.00	0.00	70.89	163.67

*The capital cost has been verified from the audited statements of accounts of PGCIL by the respective Auditor, up to 31.3.2015.

Cost over-run

13. As per the Auditor Certificate submitted vide affidavit dated 15.10.2015, the total estimated completion cost of ₹163.67 lakh exceeds the apportioned approved FR cost of ₹151.72 lakh. JVVNL has submitted that the petitioner has to confirm that all the works included in the scope of the project have been completed and the completed cost would be within the cost indicated.

14. The petitioner was directed to submit the reason for increase in completion cost to ₹163.67 lakh against FR cost of ₹151.72 lakh. In response, the petitioner vide affidavit dated 5.12.2015 has submitted that the reason for increase in cost i.e ₹11.95 lakh is due to high actual expenditure for spares of ₹25.82 lakh against FR

cost of ₹6.47 lakh. The petitioner has further submitted that RCE is under approval which will be submitted after approval by the petitioner's Board of Directors.

15. We have considered the views of petitioner and the respondent and documents available on record. The petitioner has not submitted any RCE. The completion cost of ₹163.67 lakh is more than the FR cost of ₹151.72 lakh and hence it is restricted to the apportioned FR cost. The petitioner is at liberty to approach the Commission after approval of RCE, if any, at the time of true-up.

<u>Time over-run</u>

16. As per the Investment Approval (IA) dated 3.11.2009, the project was scheduled to be commissioned within 30 months from the date of investment approval i.e. by 1.6.2012. The petitioner vide affidavit dated 7.3.2014 has submitted that the asset has been commissioned on 1.12.2012. Hence, there is a delay of six months.

17. During hearing on 20.10.2015, the representative of the petitioner has submitted that the asset covered in the instant petition is a realignment work and line is shifted into a different Dia. The representative of the petitioner has further submitted that there was a problem of increase in short circuit level at Ballabhgarh Sub-station and in complete Delhi ring. Ballabhgarh Sub-station connected from one side to Dadri and from other side to Gurgaon. There was a proposal to divert this line form Ballabhgarh Sub-station and connect directly from Dadri to Gurgaon to reduce short circuit level at Ballabhgarh Sub-station. Two options were available,

first is to bypass the line and connect directly from Dadri to Gurgaon permanently and second is to open the main breakers of Dia and pass the line through tie-breaker of Ballabhgarh Sub-station so that in case of emergency, main breaker may be closed at Ballabhgarh Sub-station. Second option was adopted for the total scheme. There is minor diversion of line and only one breaker is required as half Dia was already complete. The representative of the petitioner further submitted that the scheme has approval of CEA/RPC.

18. The Commission observed that this is a minor work and needs to be undertaken through O&M activity. The representative of petitioner submitted that this is a new scheme and they have procured 6 CTs, 3 LAs and 1 circuit breaker. The Commission directed the petitioner to submit the approval of RPC/CEA regarding the realignment work, details of work required for realignment of Ballabhgarh Sub-station and why the realignment work at Ballabhgarh Sub-station has not been carried out under O&M expenses and reason of delay of 6 months in commissioning of asset.

19. In response, the petitioner vide affidavit dated 2.12.2015 has submitted that the work was discussed in 26th Standing Committee Meeting on Transmission System Planning of Northern region held on 13th October, 2008. Subsequently, this matter was discussed in 10th Meeting of TCC and 11th Meeting of Northern Regional Power Committee held on 5th January, 2009 and 6th January, 2009. It is to mention that Ballabgarh Sub-station is also known as Samaypur Sub-station. The Rearrangement of Ballabgarh (Samaypur) is done to reduce the short circuit level at

critical sub-stations around Delhi. Initially, 400 KV Nawada and 400 KV Maharanibagh lines were in different Dia i.e. Maharanibagh and 80 MVAR bus reactor was in one Dia and Nawada was in adjacent Dia with future bay. To reduce the fault level of Ballabgarh Sub-station it was proposed that provision should be there to disconnect these lines from Ballabgarh Bus and to achieve this, both these lines should be in one dia. By doing so, these lines will be disconnected from Ballabgarh Bus by opening Main CBs of these lines and these both lines will remain connected with each other through Tie Bay of New Dia at Ballabgarh Sub-station. For which petitioner procured and installed 6 nos. of Current Transformers 1Ph, 1 no. of Circuit Breaker, 03 nos. of CVT 1 ph, 03 nos. of Surge Arresters 1 Ph & 02 nos. of Isolators, Support Structure for above yard equipment - 01 Lot, Earthing material - 01 Lot, Hardware - 01 Lot. Apart from above, it also involves civil works pertaining to foundation of these equipment.

20. The petitioner has further submitted that matter was initially discussed and agreed in 26th standing committee on Power System Planning in Northern Region held on 13.10.2008. Further, in 10th Meeting of TCC & 11th meeting of Northern Regional Power Committee meeting held in January, 2015 it was discussed and agreed. Further, the Investment Approval dated 3.11.2009 was approved by the competent authorities. Accordingly this work was carried out and capitalized as this is entirely the new scheme. The petitioner has submitted that the instant work was in an existing sub-station and the intermittent shutdown of the sub-station delayed execution of the work by six months. On perusal of minutes of the 26th Standing

Committee meeting on Transmission System Planning of NR held on 13.10.2008 and 10th meeting of TCC and 11th meeting of NRPC held on 5.1.2009 and 6.1.2009, we find that the reconfiguration of Delhi ring was considered to address the short circuit level issue. In both of these meetings it was decided to keep Dadri-G.Noida/M.Bagh-Nawada-Samaypur 400 kV open from Delhi ring at Samaypur. The realignment work as stated by the petitioner in its affidavit dated 2.12.2015 and in the main petition was not deliberated in the above said two meetings.

21. As regards the reasons for not carrying out the realignment work at Ballabhgarh under O&M expenses, the petitioner has submitted that in 10th meeting of TCC and 11th meeting of NRPC held in January, 2015 it was discussed and agreed. The instant works was carried out and capitalized as a new scheme as per the approval of the competent authorities. We find that the scheme was not discussed and agreed as a new scheme in the Standing Committee Meeting. In the said meetings it was only decided to keep Dadri-Greater Noida/Maharnibagh-Nawada-Samaypur 400 kV open from Delhi ring at Samaypur. While we are allowing the expenditure incurred by the petitioner, we would advise the petitioner to discuss such works in the Standing Committee Meetings since they are implemented as new scheme.

22. We have considered the submissions of the petitioner and the documents available on record. As per the submissions of the petitioner, the time over-run of six months is due to intermittent shut-down of the sub-station. However, the petitioner has not submitted any documentary evidence/correspondence in this

regard to substantiate the time over-run. Therefore, we are not inclined to condone the time over-run of six months.

Treatment of IDC and IEDC

23. The petitioner has submitted vide affidavit dated 15.10.2015 the details of IDC. The details submitted by the petitioner and allowable IDC on cash basis are as follows:-

(₹ in lakh)

Claimed on accrual basis	Claimed on cash basis up to COD	Balance IDC discharged in FY 2013-14	Allowed on cash basis up to COD
4.10	2.79	1.31	1.92

The petitioner has also submitted that the above mentioned balance IDC of amount ₹1.31 lakh has been discharged in 2013-14. This balance IDC which is being treated as un-discharged liability, would be considered in tariff at the time of truing up. Further, IDC for the time-over run period of 6 months has been deducted from the capital cost as on COD.

24. The petitioner has not submitted any supporting document with respect to the IEDC claimed. In the absence of detailed computation of IEDC, the percentage of hard cost indicated in the abstract cost estimate is considered as the allowable limit to the IEDC. Accordingly, 5.00% of the hard cost is being taken as IEDC limit as per the abstract cost estimate and the IEDC claimed is ₹1.23 lakh which is lower than 5.00% of the hard cost, as on COD.

25. The IEDC claimed by the petitioner has been allowed on pro-rata basis for the purpose of tariff determination and the same has been allowed to be capitalized as on COD, which is described below:-

(₹ in lakh)

IEDC	
Total IEDC Allowed for the total period of Completion (37 Months)	**1.23**
Detail of IEDC Disallowed for 6 months	
Pro-Rata IEDC Disallowed (6 months)	**0.20**
Total IEDC Allowed	**1.03**

Hence, the IEDC considered for the purpose of tariff computation is ₹1.03 lakh.

26. As per Form 9A, there is no mention of any liability as on COD and thereafter, whereas the petitioner vide Form-9 (i.e. "Statement of additional capital expenditure after COD) has submitted the justification that additional capital expenditure is of balance/retention payment nature. Further, as per the statement of discharge of IDC, all the IDC claimed is not discharged as on COD and some portion of it is discharged during 2013-14. There is a mismatch between Form 9 A, Form 9 and the statement of discharge of IDC with reference to the liability. Hence, it is difficult to determine the capital cost as on COD on cash basis and the nature of additional capital expenditure as whether these are just discharge of liability or addition to gross block. Therefore, due to mismatch in liability and non-availability of capital cost on cash basis final tariff has been determined based on available information. The petitioner is directed to clarify the mismatch and submit the relevant information at the time of truing up.

Treatment of initial spares

27. Regulation 8 of 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%

28. The petitioner has claimed initial spares of ₹23.09 lakh as per certificate of capital cost dated 20.12.2012 filed alongwith the petition. However, as per Auditor's certificate of capital cost dated 22.9.2015, submitted vide affidavit dated 15.10.2015, there is no mention of initial spares. Therefore, no initial spares has been allowed in the instant case.

Capital Cost as on COD

29. The capital cost considered for tariff calculation as on COD, after adding allowable IDC & IEDC is ₹84.38 lakh, which is as follows:-

Capital cost as per CA certificate dated 22.9.2015 as on COD	Less: IDC & IEDC claimed	Add: IDC on cash basis allowed	Add: IEDC allowed	Less: Initial spares claimed as on COD	Add: Initial spares allowed as on COD	Capital Cost as on COD considered for Tariff
86.76	5.33	1.92	1.03	0.00	0.00	84.38

Projected additional capital expenditure

30. 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:"

31. 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".

32. The petitioner has claimed additional capital expenditure of ₹6.02 during 2013-14. Rajasthan Discoms have submitted that the petitioner should confirm that all the works included in the scope of the project have been completed and the completion cost is within the indicated cost. We have considered the submissions of the petitioner and the Rajasthan Discoms. Cut-off date of the assets falls in the next tariff block. The additional capital expenditure claimed by the petitioner is allowed under Regulation 9(1) of the 2009 Tariff Regulations as it is within the cut-off and within the approved apportioned cost.

33. Detail of the additional capital expenditure claimed from COD to 31.3.2014 for the assets is as follows:-

(₹ in lakh)

Capital cost allowed as on COD	Claimed additional capital expenditure for 2013-14	Total completion cost up to 31.3.2014
84.38	6.02	90.40

Debt- equity ratio

34. 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."

The Debt: Equity is considered 70:30 as on COD and as well as for additional capital expenditure.

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

(₹ in lakh)

Particulars	Amount	%
Debt	59.07	70.00
Equity	25.31	30.00
Total	**84.38**	**100.00**

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

(₹ in lakh)

Particulars	Amount	%
Debt	63.28	70.00
Equity	27.12	30.00
Total	**90.40**	**100.00**

Return on equity

37. 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".

38. Based on the above, the return on equity considered are as follows:-

(₹ in lakh)

Particulars	**2012-13 (pro-rata)**	**2013-14**
Opening Equity	25.31	27.12
Addition due to Additional Capitalisation	1.81	0.00
Closing Equity	27.12	27.12
Average Equity	26.22	27.12
Return on Equity (Base Rate)	*15.50%*	*15.50%*
Tax rate for the year (MAT)	20.01%	20.96%
Rate of Return on Equity (Pre Tax)	19.377%	19.610%
Return on Equity (Pre Tax)	1.69	5.32

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 from the beneficiaries without making any application before the Commission. We would like to clarify that the petitioner is allowed to recover the shortfall or refund the excess annual transmission charges under Regulation 15(5) of the 2009 Tariff Regulations. Accordingly, RoE (pre-tax) has been computed @ 19.610% on average equity as

per Regulation 15(5) of the 2009 Tariff Regulations for 2013-14 and RoE (pre-tax) @ 19.377% for 2012-13.

Interest on loan

40. 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."

41. In keeping with the provisions of Regulation 16 of the 2009 Tariff Regulations, the petitioner's entitlement to interest on loan has been calculated on the following basis:-

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

(ii) The 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.

42. Detailed calculations in support of the weighted average rates of interest have been given in Annexure to this order.

43. Based on the above, interest on loan has been calculated are as follows:-

(₹ in lakh)

Particulars	**2012-13 (pro-rata)**	**2013-14**
Gross Normative Loan	59.07	63.28
Cumulative Repayment upto Previous Year	0.00	1.54
Net Loan-Opening	59.07	61.74
Addition due to Additional capitalisation	4.21	0.00
Repayment during the year	1.54	4.77
Net Loan-Closing	61.74	56.97
Average Loan	60.40	59.35
Weighted Average Rate of Interest on Loan	9.306%	9.306%
Interest	1.87	5.52

Depreciation

44. 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."

45. The assets in the instant petition will complete 12 years beyond 2013-14 and 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.

46. Based on the above, the depreciation has been considered are as follows:-

(₹ in lakh)

Particulars	**2012-13 (pro-rata)**	**2013-14**
Opening Gross Block	84.38	90.40
Addition during 2009-14 due to Projected Additional Capitalisation	6.02	0.00
Closing Gross Block	90.40	90.40
Average Gross Block	87.39	90.40
Rate of Depreciation	5.2800%	5.2800%
Depreciable Value	78.65	81.36
Remaining Depreciable Value	78.65	79.82
Depreciation	1.54	4.77

<u>Operation & Maintenance Expenses (O&M Expenses)</u>

47. Rajasthan Discoms have submitted that O&M Expenses should be allowed as per norms specified in 2009 Tariff Regulations. In the instant petition the petitioner has not claimed O&M expenses.

<u>Interest on working capital</u>

48. 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) Maintenance spares

Since O&M expenses have not been claimed by the petitioner, No Maintenance spares have been allowed.

(iii) O & M expenses

No O & M expenses have been allowed.

(iv)Rate of interest on working capital

The SBI Base rate (10.00%) as on 1.4.2012 plus 350 Bps i.e. 13.50% has been considered as the rate of interest on working capital.

49. Necessary computations in support of interest on working capital are as follows:-

(₹ in lakh)

Particulars	**2012-13 (pro-rata)**	**2013-14**
Maintenance Spares	0.00	0.00
O & M expenses	0.00	0.00
Receivables	2.61	2.66
Total	2.61	2.66
Interest	0.12	0.36

Transmission charges

50. The transmission charges being allowed for the assets are as follows:-

(₹ in lakh)

Particulars	**2012-13 (pro-rata)**	**2013-14**
Depreciation	1.54	4.77
Interest on Loan	1.87	5.52
Return on equity	1.69	5.32
Interest on Working Capital	0.12	0.36
O & M Expenses	0.00	0.00
Total	5.22	15.97

Filing fee and the publication expenses

51. 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 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

52. 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 42A (1) (b) of the 2009 Tariff Regulations.

Service tax

53. 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. We consider petitioner's prayer pre-mature.

Sharing of Transmission Charges

54. 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.

55. This order disposes of Petition No. 58/TT/2013.

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

Annexure

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

(₹ in lakh)

	Details of Loan	**2012-13**	**2013-14**
1	**BOND XL (9.30%)**		
	Gross loan opening	32.73	**32.73**
	Cumulative Repayment upto DOCO/previous year	0.00	**0.00**
	Net Loan-Opening	32.73	32.73
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	32.73	32.73
	Average Loan	32.73	32.73
	Rate of Interest	9.30%	9.30%
	Interest	3.04	3.04
	Rep Schedule	12 annual installments from 28.06.2016	
2	**Bond XXXIV**		
	Gross loan opening	2.00	**2.00**
	Cumulative Repayment upto DOCO/previous year	0.00	**0.00**
	Net Loan-Opening	2.00	2.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	2.00	2.00
	Average Loan	2.00	2.00
	Rate of Interest	8.84%	8.84%
	Interest	0.18	0.18
	Rep Schedule	12 annual installments from 21.10.2014	
3	**Bond XXXVI**		
	Gross loan opening	26.00	**26.00**
	Cumulative Repayment upto DOCO/previous year	0.00	**0.00**
	Net Loan-Opening	26.00	26.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	26.00	26.00
	Average Loan	26.00	26.00
	Rate of Interest	9.35%	9.35%
	Interest	2.43	2.43
	Rep Schedule	15 annual installments from 29.08.2016.	
4	**Bond XL (Add. Cap. 2012-13)**		
	Gross loan opening	0.00	**4.21**

	Cumulative Repayment upto DOCO/previous year	0.00	**0.00**
	Net Loan-Opening	0.00	4.21
	Additions during the year	4.21	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	4.21	4.21
	Average Loan	2.11	4.21
	Rate of Interest	9.30%	9.30%
	Interest	0.20	0.39
	Rep Schedule	12 annual installments from 28.06.2016	
	Total Loan		
	Gross loan opening	60.73	64.94
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	60.73	64.94
	Additions during the year	4.21	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	64.94	64.94
	Average Loan	62.84	64.94
	Rate of Interest	**9.3060%**	**9.3059%**
	Interest	5.85	6.04