

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 61/TT/2013

Coram:

**Shri A.K. Singhal, Member
Shri A.S. Bakshi, Member**

Date of Hearing : 03.03.2015

Date of Order : 09.06.2015

In the matter of:

Approval for determination of transmission tariff of 400 kV 80 MVAR Bus Reactor along with associated bays at 400/220 kV Sikar Sub-station under System Strengthening scheme in Northern Region for Sasan & Mundra UMPPs 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 Jasbir Singh, PGCIL
Shri Vivek kumar Singh, PGCIL
Shri Anshul Garg, PGCIL
Shri M. M. Mondal, PGCIL
Shri S.K. Venkatesan, PGCIL
Ms. Sangeeta Edwards, PGCIL
Shri S.S Raju, PGCIL
Shri Prashant Sharma, PGCIL

For respondents : Shri S.M Malik, PEL Power
Shri Anand K Ganeian, PEL Power

ORDER

This petition has been filed by Power Grid Corporation of India Limited (PGCIL) for approval of the transmission charges of 400 kV 80 MVAR Bus Reactor along with associated bays at 400/220 kV Sikar Sub-station (hereinafter referred to as "transmission assets"), under System Strengthening Scheme in Northern Region for Sasan & Mundra UMPPs 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 dated 10.12.2009 at an estimated cost of ₹121683 lakh, including IDC of ₹5770 lakh (based on 2nd Quarter, 2009 price level).



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

Transmission Lines:

- i) Agra-Sikar 400 kV D/C (Quad) Line :320 km
- ii) Sikar-Jaipur 400 kV D/C Line :157 km
- iii) Sikar-Ratangarh (RVPN) 400 kV D/C Line :90 km
- iv) LILO of both circuits of Nathpa Jhakri-Abdullapur 400 kV D/C (Triple Snowbird) line at Panchkula :2x25 km
- v) LILO of both circuits of Sikar (RVPN)-Ratangarh (RVPN) 220 kV D/C line at Sikar (POWERGRID) :5.4 km

Sub-Stations:

- i) 2x315 MVA,400/220 kV Sikar Sub-station (New)
- ii) 2x315 MVA,400/220 kV Panchkula Sub-station (New)
- iii) 765/400 kV Agra Sub-station (Extension)
- iv) 400/220 kV Ratangarh (RVPN) Sub-station (Extension)
- v) 400/220 kV Jaipur Sub-station (Extension)

Reactive Compensation:

Transmission line	Line Reactors (MVAR)	
	From end	To end
i) Agra-Sikar 400 kV D/C (Quad) line	50	50 (switchable)
ii) LILO of both circuits of Nathpa Jhakri-Abdullapur 400 kV D/C at Panchkula		
a) Nathpa Jhakri-Panchkula 400 kV D/C line	-	50 (switchable)
b) Panchkula-Abdullapur 400 kV D/C line	-	50 (existing reactor to be retained)
Switchable Bus Reactor (MVAR)		
(i) Sikar	80	
(ii) Ratangarh	125	
(iii) Panchkula	125	

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 25.3.2013 under Regulation 5(4) of the 2009 Tariff Regulations subject to adjustment as provided under Regulation 5(3) of the 2009 Tariff Regulations.



5. This order has been issued after considering the petitioner's affidavits dated 27.6.2014 and 28.10.2014.

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

(₹ in lakh)

Particulars	2012-13	2013-14
Depreciation	28.59	57.52
Interest on Loan	7.55	14.33
Return on Equity	28.89	57.98
Interest on working capital	3.49	6.61
O & M Expenses	36.12	65.46
Total	104.64	201.90

7. 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	9.29	9.82
O & M Expenses	5.16	5.46
Receivables	29.90	33.65
Total	44.35	48.92
Rate of Interest	13.50%	13.50%
Interest	3.49	6.61

8. 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. Ajmer Vidyut Vitran Nigam Limited (AVVNL), Respondent No. 2, vide affidavit dated 23.5.2013 has filed reply and has raised the issues like delay in filing the petition, additional capital cost, interest on loan and O&M expenses. The petitioner has not submitted rejoinder to the reply of AVVNL. The submissions made by the respondent have been dealt in relevant paragraphs of this order.



9. AVVNL in its reply has submitted that the petitioner has filed the instant petition on 13.2.2013 even though the instant asset was commissioned on 1.9.2012, thus, there has been a delay of about five and a half months in filing the petition. 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 application during February, 2012, however, the petition was filed on 13.2.2013. 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 (1.9.2012 to 13.2.2013).

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

Capital cost

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

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

(a) The expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign



exchange risk variation during construction on the loan – (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the fund deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check.

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

(c) additional capital expenditure determined under regulation 9:

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

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

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

Provided further that in cases where benchmark norms have not been specified, prudence check may include scrutiny of the reasonableness of the capital expenditure, financing plan, interest during construction, use of efficient technology, cost over-run and time over-run, and such other matters as may be considered appropriate by the Commission for determination of tariff.”

12. The details of apportioned approved cost, actual expenditure incurred as on date of commercial operation and additional capital expenditure incurred/projected to be incurred for the period from 1.9.2012 to 31.3.2014 for the instant asset are as under:-

Apportioned approved cost	Cost incurred up to Actual DOCO (1.9.2012)	Additional Capitalisation (estimated)		Total estimated completion cost
		From DOCO to 31.3.2013	2013-14	
1242.52	847.79	193.33	128.89	1170.01

13. As per the investment approval dated 10.12.2009, the asset was to be commissioned within 32 months from the date of investment approval i.e. by 1.9.2012.



The instant asset has been commissioned on 1.9.2012. Thus, there is no time over-run in the present petition.

14. The total estimated completion cost of the instant asset is ₹1170.01 lakh against total apportioned approved cost of ₹1242.52 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.

15. The petitioner was directed vide letter dated 3.6.2014 to submit the information regarding (a) the time taken by the petitioner in the execution of the project and whether the contractor completed the project on time as the work was awarded on 10.3.2010 with scheduled COD 10.8.2011, whereas the date of commercial operation was on 1.9.2012 (b) the utilization of bus reactor, reasons for the high variations in cost of Switchgear, control relay and protection panel and outdoor lighting (c) explanation for the higher awarded costs in certain items (d) quantum of work involved under the head "Misc Common Equipment" and (e) details of liquidated damages (L.D.) to be recovered.

16. The petitioner, vide affidavit dated 29.10.2014 submitted that the details of start of work and date of completion of work has been provided in Form-5C. The date of completion of work was 10.8.2011 and 9.6.2012 for various packages but work was not completed in time by the concerned contractor. The L.D. amount, if any, shall be adjusted after closing of contract. However, the date of commercial operation of the instant asset is 1.9.2012 and there is no delay in commissioning of the said asset. The petitioner submitted that the installation of 80 MVAR Bus Reactor at Sikar is part of approved scheme as per the IA. Though, the bus reactor may not be required



continuously in the system for which switching is provided, the sub-station was facing over voltage problem during off peak load period and the line reactor was used as bus reactor. The petitioner further submitted that under the head “Misc Common Equipment”, the works involved are DG set, Fire Fighting system, battery and battery charger, AC system, LT transformer and Miscellaneous testing equipment, etc are included.

17. In response to cost variation, the petitioner submitted that it is due to higher tender price received in open competitive bidding. The estimates are prepared by the petitioner as per well defined procedures. The cost estimate is broad indicative cost, worked out generally on the basis of average unit rates of recently awarded contracts. For procurement, open competitive bidding route is followed, and lowest possible market prices for required product/services is obtained by providing equal opportunity to all eligible firms, and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders are lower as compared to the cost estimate depending upon prevailing market conditions. Further, the petitioner submitted that the cost estimates was on the basis of 2nd Quarter, 2009 price level, where the contract date was on 1st Quarter 2010 price level and has submitted detailed item wise reasons for cost variation.

18. We observe that the cost estimates of the petitioner are not realistic, though the petitioner has stated to have taken various steps to make the cost estimates realistic, in actuality there continues to be wide variation between the FR cost and the actual cost. We are of the view that the petitioner should analyze the reasons for such huge variations and come out with the methodologies or procedure for preparation of



cost estimates which are realistic and do not vary widely from the actual expenditure. The petitioner is directed to adopt a prudent procedure while estimating the cost of different elements of the transmission projects.

Treatment of IDC and IEDC

19. As per Form 13 submitted for the asset, only foreign loan i.e. IBRD-V has been deployed for debt funding. In the absence of the required information the IDC has not been worked out. As per the 2009 Tariff Regulations, the claim of IDC and IEDC is allowable on cash basis and any undischarged IDC/IEDC on the date of commercial operation can be claimed as add-cap upto cut-off date, but the petitioner has not submitted proper and sufficient details. 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 for IBRD-V, if applicable and that of IEDC, at the time of truing-up petition.

Treatment of initial spares

20. As per Regulation 8 (iv) (a) of 2009 Tariff Regulations, the ceiling norm for Initial Spares for sub-station & transmission line is 2.5% and 0.75% respectively of original project cost. The petitioner has claimed initial spares of ₹15.47 lakh for sub-station cost of ₹1170.71 lakh, which are 1.32% of sub-station cost. The claim of Initial Spares is allowed as it is within the ceiling norms specified in aforementioned 2009 Tariff Regulations.



Projected additional capital expenditure

21. 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.”

22. 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”.

23. As per the above definition, cut-off date in respect of the transmission asset in the instant petition is 31.3.2015.

24. The petitioner has claimed additional capital expenditure of ₹193.33 lakh and ₹128.89 lakh for the financial years 2012-13 and 2013-14 respectively. The additional capital expenditure claimed is for balance and retention payment and is within cut-off date. AVVNL has submitted that the petitioner should confirm that the completed cost shall remain within the add-cap as projected. 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.



25. 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 DOCO	Additional capitalisation		Total estimated cost
	2012-13	2013-14	
847.79	193.33	128.89	1170.01

Debt-Equity ratio

26. 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.”

27. The capital cost on the dates 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 overleaf:-



(₹ in lakh)

Particulars	As on DOCO		As on 31.3.2014	
	Amount	%	Amount	%
Debt	593.45	70.00	819.01	70.00
Equity	254.34	30.00	351.00	30.00
Total	847.79	100.00	1170.01	100.00

Return on equity

28. 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".

29. 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.

30. Details of return on equity calculated are as under:-

(₹ in lakh)

Particulars	2012-13	2013-14
Opening equity	254.34	312.34
Addition due to additional capital expenditure	58.00	38.67
Closing equity	312.34	351.00
Average equity	283.34	331.67
Return on equity (Base Rate)	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.33%	11.33%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%
Return on Equity (Pre Tax)	28.89	57.98

Interest on loan

31. 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.”

32. 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 loans 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.

33. AVVNL has raised the issue that interest on loan has been mentioned to be as prevailing on 1.4.2009 whereas it should be on actual basis as on the date of commercial operation. 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.

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

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

(₹ in lakh)

Particulars	2012-13	2013-14
Gross Normative Loan	593.45	728.78
Cumulative Repayment upto previous year	0.00	28.59
Net Loan-Opening	593.45	700.19
Addition due to additional capital expenditure	135.33	90.22
Repayment during the year	28.59	57.52
Net Loan-Closing	700.19	732.89
Average Loan	646.82	716.54
Weighted Average Rate of Interest on Loan	2.0000%	2.0000%
Interest	7.55	14.33

Depreciation

36. 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.”

37. The asset in the instant petition was commissioned on 1.9.2012. The date of commercial operation of the asset falls in financial year 2012-13. 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.

38. Based on the above, the depreciation has been considered as given overleaf:-



(₹ in lakh)

Particulars	2012-13	2013-14
Opening Gross Block	847.79	1041.12
Addition due to Projected Additional Capitalisation	193.33	128.89
Closing Gross Block	1041.12	1170.01
Average Gross Block	944.46	1105.57
Rate of Depreciation	5.1897%	5.2028%
Depreciable Value	842.39	987.39
Remaining Depreciable Value	842.39	958.79
Depreciation	28.59	57.52

Operation & Maintenance Expenses (O&M Expenses)

39. 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. Norms prescribed in respect of the elements covered in the instant petition are as follows:-

Norms for Sub-stations:

(₹ lakh per bay)

Bay	2009-10	2010-11	2011-12	2012-13	2013-14
400kV	52.40	55.40	58.57	61.92	65.46

40. As per the 2009 Tariff Regulations, allowable O&M expenses for the instant asset are as under:-

(₹ in lakh)

Element	2012-13 (pro-rata)	2013-14
400kV,80 MVAR Bus Reactor at Sikar Sub-station	36.12	65.46

41. 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%. AVVNL has submitted that O&M expenses be allowed as per the 2009 Tariff Regulations.

42. 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 allowed O&M Expenses as per the existing norms.

Interest on working capital

43. 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 of fixed cost.

The petitioner has claimed the receivables on the basis of 2 months of



transmission charges in the petition. In the tariff being allowed, receivables have been worked out on the basis of 2 months of transmission charges.

(ii) Maintenance Spares

Regulation 18 (1) (c) (ii) of the 2009 Tariff Regulations provides for maintenance spares @ 15% per annum of the O&M Expenses from 1.4.2009. The value of maintenance spares has accordingly been worked out.

(iii) O & M Expenses

Regulation 18 (1) (c) (iii) of the 2009 Tariff Regulations provides for operation and maintenance expenses for one month to be included in the working capital. The petitioner has claimed O&M Expenses for 1 month of the respective year. This has been considered in the working capital.

(iv) Rate of Interest on Working Capital

In accordance with the 2009 Tariff Regulations, SBI Base Rate as on 1.4.2012 i.e. 10.00% Plus 350 bps (13.50%) 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.

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

(₹ in lakh)

Particulars	2012-13 (pro-rata)	2013-14
Maintenance Spares	9.29	9.82
O & M Expenses	5.16	5.46
Receivables	29.90	33.65
Total	44.35	48.92
Rate of Interest	13.50%	13.50%
Interest	3.49	6.60



Transmission charges

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

(₹ in lakh)

Particulars	2012-13	2013-14
Depreciation	28.59	57.52
Interest on Loan	7.55	14.33
Return on Equity	28.89	57.98
Interest on Working Capital	3.49	6.60
O & M Expenses	36.12	65.46
Total	104.64	201.90

Filing fee and the publication expenses

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

47. 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. 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

48. 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. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

Sharing of Transmission Charges

49. 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.

50. This order disposes of Petition No. 61/TT/2013.

sd/-
(A.S. Bakshi)
Member

sd/-
(A.K. Singhal)
Member

Annexure

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(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN			
	Details of Loan	2012-13	2013-14
1	IBRD-V		
	Gross loan opening	593.45	593.45
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	593.45	593.45
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	593.45	593.45
	Average Loan	593.45	593.45
	Rate of Interest	2.00%	2.00%
	Interest	11.87	11.87
	Rep Schedule	49 half yearly instalments from 15.01.2015	
	Total Loan		
	Gross loan opening	593.45	593.45
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	593.45	593.45
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	593.45	593.45
	Average Loan	593.45	593.45
	Rate of Interest	2.0000%	2.0000%
	Interest	11.87	11.87

