CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 132/TT/2011

Coram: Dr. Pramod Deo, Chairperson Shri S. Jayaraman, Member Shri V.S. Verma, Member Shri M. Deena Dayalan, Member

Date of Hearing: 18.8.2011 Date of Order: 23.1.2012

In the matter of:

Approval under Regulation 86 of CERC (Conduct of Business) Regulations 1999, and CERC (Terms and Conditions of Tariff) Regulations 2009, for determination of transmission tariff for 315MVA, 400/220kV ICT II at Misa Sub-station along with associated bays under North East/Northern Western Interconnector-I and Transmission system of Kameng HEP in NER for tariff block 2009-14 period.

And

In the matter of:

PowerGrid Corporation of India Ltd., GurgaonPetitioner

Vs

- 1. Assam State Electricity Board, Guwahati
- 2. Meghalaya Energy Corporation Ltd., Shillong
- 3. Government of Arunachal Pradesh, Itanagar
- 4. Power of Electricity Department, Mizoram
- 5. Electricity Department, Imphal
- 6. Department of Power, Nagaland
- 7. Tripura State Electricity Corporation Ltd., TripuraRespondents

The following were present:

- 1. Shri S.S. Raju, PGCIL
- 2. Shri M.M. Mondal, PGCIL

<u>ORDER</u>

The petition has been filed by PGCIL for determination of transmission

tariff for 315 MVA, 400/220kV ICT II at Misa Sub-station along with associated

bays under North East/Northern Western Interconnector-I and Transmission system of Kameng HEP in NER (hereinafter referred to as "transmission asset") for tariff block 2009-14 period under CERC (Terms and Conditions of Tariff) Regulations 2009 (hereinafter referred to as "2009 regulations").

2. Investment approval for the Transmission project was accorded by the Board of Directors of POWERGRID vide Memorandum ref C/CP/NER-NR.WR Intr-I dated 27.2.2009 for ₹ 1113019 lakh including an IDC of ₹ 106605 lakh based on 4th Quarter, 2008 price level.

3. The details of assets covered in the petition and their date of commercial operation are as under:-

| Sr. No. | Assets | Anticipated date of commercial operation |
|------------|-------------------------------|---------------------------------------------------|
| | Sub-Station/ Bay: | |
| | 400/220 kV Sub-Station, Misa: | |
| 1 | 400 kV ICT-II bay | 1.11.2011 |
| 2 | 220 kV ICT-II bay | 1.11.2011 |

4. The instant petition covers determination of transmission tariff for the transmission asset based on expenditure expected to be incurred up to anticipated date of commercial operation (1.11.2011) and additional capitalization projected to be incurred from anticipated date of commercial operation to 31.3.2014. The details of apportioned approved cost of the transmission asset are given overleaf:-



| Apportioned approved cost | Expenditure upto anticipated date of commercial operation | Expenditure from anticipated date of commercial operation to 31.3.2012 | Total Estimated completion Cost |
|---------------------------------|--------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------|
| 3015.76 | 1948.86 | 142.51 | 2091.37 |

The capital cost as on the anticipated date of commercial operation is inclusive of initial spares of ₹ 96.04 lakh pertaining to Sub-station.

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

| | | | (₹ in lakh) |
|-----------------------------|-----------------------|---------|-------------|
| | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| Depreciation | 44.44 | 110.42 | 110.42 |
| Interest on Loan | 51.27 | 120.60 | 110.84 |
| Return on equity | 45.56 | 113.21 | 113.21 |
| Interest on Working Capital | 5.33 | 13.22 | 13.32 |
| O & M Expenses | 41.49 | 105.26 | 111.28 |
| Total | 188.09 | 462.71 | 459.07 |

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

| | | | (₹ in lakh) |
|--------------------|-----------------------|---------|-------------|
| | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| Maintenance Spares | 14.94 | 15.79 | 16.69 |
| O & M expenses | 8.30 | 8.77 | 9.27 |
| Receivables | 75.24 | 77.12 | 76.51 |
| Total | 98.48 | 101.68 | 102.48 |
| Interest | 5.33 | 13.22 | 13.32 |
| Rate of Interest | 13.00% | 13.00% | 13.00% |

7. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under section 64 of the Electricity Act, 2003. None of the respondents have filed any reply.

8. Having heard the representatives of the parties and perused the material on records, we proceed to dispose of the petition.

CAPITAL COST

9. As regards capital cost, Regulation 7(1)(a) of the 2009 regulations

provides that-

"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."

10. Capital cost of ₹ 1948.86 has been claimed by the petitioner up to the anticipated date of commercial operation.

ADDITIONAL RETURN ON EQUITY

11. The petitioner has claimed 0.5% additional return on equity for timely

completion of the transmission asset. The details of assets as mentioned in

the scope of the project are as under:-

- Part-A: North East-Northern/ Western Interconnector-I : Expected by March, 2013
- Part-B: Transmission system for immediate evacuation of power from Kameng HEP: Expected by March, 2014
- Part-C : Transmission system for immediate evacuation of power from Lower Subansiri HEP: Expected by March, 2013



12. The transmission asset is covered under part-B of the scheme and its completion schedule is 48 months from the date of investment approval, i.e. 27.2.2009. The petitioner has submitted that as per Appendix-II of the 2009 regulations, in case a scheme has various types of projects, the gualifying time schedule of the activity having maximum time period shall be considered for the scheme as a whole. The timeline for this project is same as for HVDC Bipole terminal i.e. 36 months for plain area from the date of investment approval, which is March, 2012. Hence, it has claimed additional return on equity of 0.5% for the subject asset. The petitioner, vide affidavit dated 13.07.2011, has submitted that the 2009 regulations do not stipulate that additional return on equity is applicable only if the total project is completed. If part of the project is completed within the eligible timelines, the beneficiaries would be benefited by reduced IDC and IEDC components of the project cost and the Utility would also be incentivized for early completion of given asset(s).

13. The petitioner has submitted that there are constraints in evacuation of power, particularly during the high hydro period, from 220 kV Balipara-Samaguri Transmission Line when the only 315 MVA, 400/220 kV ICT available at Misa gets overloaded. To overcome this constraint it was planned to commission the second 315 MVA, 400/220 kV ICT at Misa Sub-station. It was also agreed in the NERPC meeting to commission the ICT ahead of schedule as it would strengthen the grid, increase the reliability and give immediate benefit to the system. As per the decision in the NERPC meeting, the petitioner planned to commission the second 315 MVA, 400/220 kV ICT at Misa Sub-station ahead of schedule.

14. In response to our observation during the hearing that the ICT has been commissioned in an existing sub-station for which no time line has been specified in Appendix-II of the 2009 regulations for the purpose of admissibility of 0.5% additional return on equity, the representative of the petitioner submitted that in many cases, the sub-stations have already been commissioned and due to the expansion of transmission system, these sub-stations require expansion. The petitioner was directed to submit the detailed justification for claiming additional return on equity.

15. The Petitioner in its affidavit dated 31.10.2011 has explained the following:-

a) In accordance with Regulation 15(2) of 2009 regulations, additional return of 0.5% shall be allowed, if such elements of projects are completed within the time line specified in Appendix-II to the Regulations. The provisions of Appendix-II do not stipulate that the additional ROE would be applicable only in cases where whole scheme is completed within the stipulated time schedule. Even if, part of the project is being completed within the eligible time line, the beneficiaries would be benefited by the reduced IDC and IEDC components of the project cost and the utilities would be incentivized for early completion of the given assets.

b) Para 2(c) Appendix-II of the 2009 Regulations contains the qualifying time schedule in months for different elements of a project.
Combined reading of Paras 1 and 2(c) of Appendix-II establishes that different elements would be eligible for additional return on equity, if

they are completed within the eligible time lines to be worked out in accordance with the 2009 regulations.

c) Regulations 4(1) and 4(2) of 2009 regulations allow filing of petitions for determination of tariff for units and blocks of assets.

d) The 2009 regulations recognizes through its various provisions that a transmission project is allowed to be completed gradually by commissioning different identifiable elements leading to the completion of the entire project. It is essential that the transmission project should be completed in different elements or stages as those would bring all assets into gradual utilization as and when completed instead of waiting for all the assets to be commissioned at one go. The prudence of gradual commissioning has been envisaged in various provisions of 2009 regulations.

e) As many elements are completed before the time line allowed by the Commission, there will be reduction in the overall completion cost of project as a whole, due to reduction in IDC/IEDC. The beneficiaries would also start utilizing these assets. Therefore, the stage-wise commissioning of transmission projects is in the interest of the power sector as a whole in terms of reduction in the cost as well as socio-economic benefits due to early beneficial use.

f) With regard to considering time line of new sub-station, it has been submitted that all the activities right from preparation of FR, investment approval, NIT, award of work, supply, erection, commissioning etc. have to be done independently and these would



have to be carried out as if a new project is being commissioned. Even the mandatory clearance from CEA before the date of commercial operation has to be obtained. Even though the work is carried out in an existing sub-station, the work in the sub-station is part of the new project and all activities from concept to commissioning are essentially part of the new project. Therefore, the time line applicable to the new sub-station may be considered for the purpose of additional return of equity in case of expansion of existing sub-station

g) In case, the qualifying time line as per Appendix-II is not applicable in this case, the Commission may invoke the provision of Regulations 44 of 2009 regulations for relaxation of Regulation 15(2) of 2009 regulations, so that the timeline for expansion of sub-station is considered as the time line for new sub-station for the purpose of additional return on equity.

16. We have considered the submission of the petitioner. We find that 315 MVA, 400/220 kV ICT II is to be commissioned in an existing sub-station at Misa as one element of Part 'B' of the project. The time line specified in the 2009 regulations is for new AC sub-station only and no timeline has been specified for extension of the existing lines/sub-station. The construction of new sub-station involves activities like land acquisition, construction of control room, construction of line bays and installation of auxiliaries like power supply arrangement, fire fighting equipments for the sub-station. Therefore, we are of the view the time line for installation of an ICT in an existing sub-station.



Secondly, the petitioner has assumed the qualifying time line of 36 months for the ICT, based on time schedule specified for HVDC Bipole. As per the Investment Approval, the ICT is part of the Project 'B'. As submitted in the affidavit dated 13.7.2011, the Part 'B' of the project i.e., Transmission System associated with evacuation of power from Kameng HEP is expected to be completed by March, 2014. On the other hand, the subject element has been commissioned on 1.11.2011. Therefore, an element of Project 'B' cannot be considered in isolation for the purpose of additional return before completion of the entire project, which is likely to be commissioned beyond the time line specified in Appendix II to the 2009 regulations.

TREATMENT OF INITIAL SPARES

17. Capital cost as on anticipated the date of commercial operation is inclusive of Initial Spares amounting to ₹ 96.04 lakh which is in excess of ₹ 44.88 lakh as per the ceiling limit defined in Regulation 8 of 2009 regulations. Details of the Initial Spares allowed are as under:-

| Description | Project Cost pertaining to Sub-station as on cut- off date | Initial Spares claimed | Ceiling limit as per Regulation 8 of 2009 regulations | Initial Spares worked out | (₹ in lakh) Excess Initial Spares claimed |
|-------------|------------------------------------------------------------------------|---------------------------|-------------------------------------------------------------------|---------------------------------|-------------------------------------------------------|
| | (a) | (b) | (c) | (d)=*((a-b)*c) /(100-c)% | (e)=(b)-(d) |
| S/S | 2091.37 | 96.04 | 2.50% | 51.16 | 44.88 |

18. Accordingly, capital cost has been considered for the purpose of tariff calculation after deducting excess Initial Spares. However, some more assets are yet to be commissioned under transmission system associated with East West Transmission Corridor in Western Region, the ceiling limit of Initial Spares will be recalculated as per Regulation 8 of 2009 regulations at the time



of commissioning of last asset of the project or at the time of truing up, whichever is earlier. Capital cost considered for the purpose of calculation of tariff is as follows:-

| | | (₹ in lakh) |
|------------------------|----------------|----------------------------------|
| Capital Cost claimed | Initial Spares | Capital cost considered for the |
| by the petitioner as | disallowed | purpose of tariff calculation on |
| on anticipated date of | | the anticipated date of |
| commercial operation | | commercial operation |
| 1948.86 | 44.88 | 1903.98 |

PROJECTED ADDITIONAL CAPITAL EXPENDITURE

19. As per Regulation 9(1) of 2009 regulations-

"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) XXX
- (iii) XXX
- (iv) XXX
- (v) XXX"

20. As per 2009 regulations,

"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". Therefore, cut-off date for the above mentioned assets is 31.3.2014.

21. Petitioner has claimed additional capital expenditure of ₹ 142.51 lakh

for the year 2011-12. Additional capital expenditure claimed falls within the

cut-off date. Hence, the same has been considered for the purpose of tariff

calculation. The additional capital expenditure claimed is as follows:-

| | | | | (₹ in lakh) |
|-----------|---------|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|---------------------------------|
| SI. No | Year | Work/Equipment proposed to be added after commercial operation up to cut-off date/beyond cut-off date | Additional capital expenditure proposed to be capitalised | Justification as per purpose |
| 1 | 2011-12 | Sub Station | 142.51 | Final/Retention Payments |
| | | Total | 142.51 | |



22. Capital cost as on the anticipated date of commercial operation (excluding excess initial spares claimed) and projected additional capital expenditure claimed has been considered for the purpose of determination of annual fixed charges. However, same will be reviewed at the time of truing up.

DEBT- EQUITY RATIO

23. Regulation 12 of the 2009 regulations provides that,

"(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.

(2) XXX."

24. Detail of debt-equity considered for the purpose of tariff calculation as on the anticipated date of commercial operation i.e. 1.11.2011, after deducting excess Initial Spares claimed is as follows:-

| | | | | (₹ in lakh) |
|-------------|-------------|----------|-------------|------------------------------------------|
| | Appro | oved | anticipat | cost as on ed date of al operation |
| Particulars | Amount | int % Am | | % |
| | (₹ in lakh) | | (₹ in lakh) | |
| Debt | 2111.03 | 70.00 | 1332.79 | 70.00 |
| Equity | 904.73 | 30.00 | 571.19 | 30.00 |
| Total | 3015.76 | 100.00 | 1903.98 | 100.00 |



25. Details of projected additional capital expenditure claimed by the petitioner are as follows:-

 Particulars
 Normative

 Add for 2011-12
 %

 Debt
 99.76
 70.00

 Equity
 42.75
 30.00

 Total
 142.51
 100.00

26. Details of debt-equity ratio as on 31.3.2014 are as under:-

| | | (₹ in lakh) |
|-------------|--------------------|-------------|
| | Capital cost as on | 31.3.2014 |
| Particulars | Amount | % |
| Debt | 1432.54 | 70.00 |
| Equity | 613.95 | 30.00 |
| Total | 2046.49 | 100.00 |

RETURN ON EQUITY

27. Regulation 15 of the 2009 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% to 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:

Provided that return on equity with respect to the actual 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 year during the tariff period shall be trued up separately for each year of the tariff period along with the tariff petition filed for the next tariff period.

(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"

28. Return on equity has been calculated as per Regulation 15 of the 2009 regulations with pre-tax ROE of 17.481%.

29. Petitioner's prayer to allow grossing up the base rate of ROE based on the tax rates viz., MAT, surcharge, any other cess, charges, levies etc., as per the relevant Finance Act, shall be settled in accordance with the provisions of Regulation 15 of 2009 regulations as amended by Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2011.

30. The following amount of equity has been considered for the calculation of return of equity:-

| | | | | (₹ in lakh) |
|-------------------------------------------------------------------|---------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Equity as on Anticipated date of commercial operation | Notional equity due to ACE for the period 2011-12 | Total equity considered for tariff calculations for the period 2011-12 | Notional equity due to ACE for the period 2012-14 | Total equity considered for tariff calculations for the period 2012- 14 |
| 571.19 | 42.75 | 592.57 | 0.00 | 613.95 |

31. Average equity corresponding to additional capital expenditure has been considered for working out return of equity. Return on equity has been



calculated as follows- Base rate/(1-t), where Base Rate is 15.5% and 't' is normal tax rate for the period 2008-09 applicable to PowerGrid which is under MAT i.e. 10%+ surcharge@10%+3%Education Cess.

32. In view of the above, the following amount of equity has been considered for calculation of return of equity:-

| | | | (₹ in lakh) |
|-------------------------------------------|-----------------------|---------|-------------|
| | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| Opening Equity | 571.19 | 613.95 | 613.95 |
| Addition due to Additional Capitalisation | 42.75 | 0.00 | 0.00 |
| Closing Equity | 613.95 | 613.95 | 613.95 |
| Average Equity | 592.57 | 613.95 | 613.95 |
| Return on Equity (Base Rate) | 15.50% | 15.50% | 15.50% |
| Tax rate for the year 2008-09 (MAT) | 11.33% | 11.33% | 11.33% |
| Rate of Return on Equity (Pre Tax) | 17.481% | 17.481% | 17.481% |
| Return on Equity (Pre Tax) | 43.16 | 107.32 | 107.32 |

INTEREST ON LOAN

33. Regulation 16 of the 2009 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."

34. In the calculations, the interest on loan has been worked out as detailed below:-

- (i) Gross amount of loan, repayment of instalments and rate of interest and weighted average rate of interest on average loan have been considered as per the petition.
- (*ii*) The repayment for the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that period.
- (iii) Moratorium period availed by the transmission licensee, the repayment of the loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.
- (iv) 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.



35. The methodology followed for the calculation of weighted average rate of interest in case of floating interest loans in Petition 132/2010, has been adopted in the instant petition. Accordingly, the interest on loan has been calculated on the basis of rate prevailing as on the 1.4.2009/DOCO. Any change in rate of Interest subsequent to 1.4.2009/DOCO will be considered at the time of truing up. As no actual loan has been allocated to the assets, interest rate (8.84%) of last loan drawn by the petitioner i.e. Bond XXXIV has been considered for the purpose of computation of weighted rate of interest on loan. As the date of commercial operation of the said asset is anticipated, same will be reviewed at the time of truing up.

36. Detailed calculations of the weighted revised average rate of interest have been given in Annexure to this order.

37. Details of the interest on loan worked on the above basis are as under:-

| | | (₹ in | (₹ in lakh) | |
|-------------------------------------------|-----------------------|---------|-------------|--|
| | 2011-12 (pro-rata) | 2012-13 | 2013-14 | |
| Gross Normative Loan | 1332.79 | 1432.54 | 1432.54 | |
| Cumulative Repayment upto Previous Year | 0.00 | 43.46 | 151.51 | |
| Net Loan-Opening | 1332.79 | 1389.09 | 1281.03 | |
| Addition due to Additional Capitalisation | 99.76 | 0.00 | 0.00 | |
| Repayment during the year | 43.46 | 108.05 | 108.05 | |
| Net Loan-Closing | 1389.09 | 1281.03 | 1172.98 | |
| Average Loan | 1360.94 | 1335.06 | 1227.01 | |
| Weighted Average Rate of Interest on Loan | 8.8400% | 8.8400% | 8.8400 % | |
| Interest | 50.13 | 118.02 | 108.47 | |



DEPRECIATION

38. Petitioner has claimed actual depreciation as a component of Annual Fixed Charges. However, Regulation 17 (4) of the 2009 regulations provides as given overleaf:-

"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 31th 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 asset".

39. The asset covered in the instant petition is anticipated to be commissioned on 1.11.2011 and accordingly it 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 of the 2009 regulations.

| | | | (₹ in lakh) |
|-----------------------------------------------------------------------|-----------------------|---------|-------------|
| | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| Gross Block | 1903.98 | 2046.49 | 2046.49 |
| Addition during 2009-14 due to Projected Additional Capitalisation | 142.51 | 0.00 | 0.00 |
| Gross Block | 2046.49 | 2046.49 | 2046.49 |
| Average Gross Block | 1975.24 | 2046.49 | 2046.49 |
| Rate of Depreciation | 5.2800% | 5.2800% | 5.2800% |
| Depreciable Value | 1777.71 | 1841.84 | 1841.84 |
| Remaining Depreciable Value | 1777.71 | 1798.39 | 1690.33 |
| Depreciation | 43.46 | 108.05 | 108.05 |

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

OPERATION & MAINTENANCE EXPENSES

41. Clause (g) of Regulation 19 of the 2009 regulations prescribes the norms for operation and maintenance expenses based on the type of substation and line. Norms prescribed in respect of the elements covered in the instant petition are given overleaf:-



| Element | 2011-12 | 2012-13 | 2013-14 |
|----------------------------------|---------|---------|---------|
| 400 kV, bay (₹ in lakh / bay) | 58.57 | 61.92 | 65.46 |
| 220 kV bay (₹ in lakh/bay.) | 41.00 | 43.34 | 45.82 |

42. As per the above mentioned norms the allowable O&M expenses for the assets covered in this petition are as under:-

| | | (₹ in lakh) | | |
|-----------------------|------------------------------------------|-------------|---------|--|
| Element | 2011-12 (Pro-rata for 5 months) | 2012-13 | 2013-14 | |
| One no. 400 kV bay | 24.40 | 61.92 | 65.46 | |
| One no. 220 kV bay | 17.08 | 43.34 | 45.82 | |
| Total O&M Expenditure | 41.48 | 105.26 | 111.28 | |

43. The Petitioner has stated that O&M expenditure for 2009-14 tariff block had been arrived on the basis of normalized actual O&M expenses of the petitioner during the year 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking was also considered while calculating the O&M charges for tariff period 2009-14. The petitioner has submitted that it would approach the Commission for suitable revision in the norms for O&M expenditure in case the impact of wage hike w.e.f 1.1.2007 is more than 50%. The petitioner has further 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.

44. It is clarified that, if any, such application is filed in future, it will be dealt with in accordance with law. As regards licence fee, it is clarified that licence



fee will be dealt in accordance with order dated 25.10.2011 in Petition No.21/2011 and 22/2011.

INTEREST ON WORKING CAPITAL

45. As per the 2009 regulations the components of the working capital and the interest thereon are discussed are given as under:-

(i) **Receivables**: As per Regulation 18(1) (c) (i) of the 2009 regulations, receivables will be equivalent to two months of fixed cost. 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) Maintenance spares: Regulation 18(1)(c)(ii) of the 2009 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 regulations provides for operation and maintenance expenses for one month as a component of 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 these calculations, interest rate of 11.75% (SBI Base Rate 8.25% as on 1.4.2011 plus 350



bps) has been considered in accordance with the 2009 regulations, as amended vide the second amendment regulations notified in June 2011, for calculating interest on working capital.

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

| | | | (₹ in lakh) |
|--------------------|-----------------------|---------|-------------|
| | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| Maintenance Spares | 14.93 | 15.79 | 16.69 |
| O & M expenses | 8.30 | 8.77 | 9.27 |
| Receivables | 73.18 | 75.06 | 74.49 |
| Total | 96.41 | 99.62 | 100.45 |
| Rate of Interest | 11.75% | 11.75% | 11.75% |
| Interest | 4.72 | 11.71 | 11.80 |

TRANSMISSION CHARGES

47. The transmission charges being allowed for the transmission lines are summarized below:-

| | | | (₹ in lakh) |
|-----------------------------|-----------------------|---------|-------------|
| | 2011-12 (pro-rata) | 2012-13 | 2013-14 |
| Depreciation | 43.56 | 108.05 | 108.05 |
| Interest on Loan | 50.13 | 118.02 | 108.47 |
| Return on equity | 43.16 | 107.32 | 107.32 |
| Interest on Working Capital | 4.72 | 11.71 | 11.80 |
| O & M Expenses | 41.48 | 105.26 | 111.28 |
| Total | 182.94 | 450.36 | 446.93 |

FILING FEE AND THE PUBLICATION EXPENSES

48. The petitioner has claimed reimbursement of application filing fee and the expenses incurred on publication of notices. The Commission has allowed reimbursement of filing fee in its order dated 11.1.2010 in Petition No. 109/2009. Accordingly, the petitioner shall be entitled to recover the filing fee and publication expenses from the beneficiaries on pro-rata basis.



LICENCE FEE

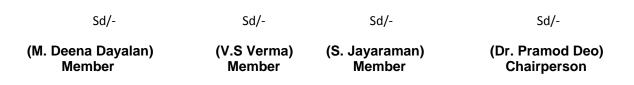
49. The petitioner's prayer for reimbursement of licence fee the same shall be dealt with in accordance with our order dated 25.10.2011 in Petition No.21/2011 and 22/2011.

SERVICE TAX

50. The petitioner has made a prayer 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 the prayer pre-matureand therefore the petitioner's prayer is rejected.

51. The transmission charges allowed shall be recovered on monthly basis in accordance with Regulation 23 and shared by the beneficiaries in accordance with Regulation 33 of the 2009 regulations upto 30.6.2011. With effect from 1.7.2011, the billing collection and disbursement of the transmission charges shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010.

52. This order disposes Petition No. 132/2011





| | Details of Loan | 2011-12 | 2012-13 | 2013-14 |
|---|----------------------------------------------|----------------------------------------|---------|---------|
| 1 | Proposed Domestic Loan | | | |
| | Gross loan opening | 1364.20 | 1364.20 | 1364.20 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 0.00 |
| | Net Loan-Opening | 1364.20 | 1364.20 | 1364.20 |
| | Additions during the year | 0.00 | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 | 0.00 |
| | Net Loan-Closing | 1364.20 | 1364.20 | 1364.20 |
| | Average Loan | 1364.20 | 1364.20 | 1364.20 |
| | Rate of Interest | 8.84% | 8.84% | 8.84% |
| | Interest | 120.60 | 120.60 | 120.60 |
| | Rep Schedule | 12 annual installments from 25.10.2014 | | |
| | Total Loan | | | |
| | Gross loan opening | 1364.20 | 1364.20 | 1364.20 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 0.00 |
| | Net Loan-Opening | 1364.20 | 1364.20 | 1364.20 |
| | Additions during the year | 0.00 | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 | 0.00 |
| | Net Loan-Closing | 1364.20 | 1364.20 | 1364.20 |
| | Average Loan | 1364.20 | 1364.20 | 1364.20 |
| | Rate of Interest | 8.8400% | 8.8400% | 8.8400% |
| | Interest | 120.60 | 120.60 | 120.60 |

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

