

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 175/2010**

**Coram: Shri S.Jayaraman, Member  
Shri V.S.Verma, Member  
Shri M. Deena Dayalan, Member**

**Date of Hearing: 23.12. 2010**

**Date of Order: 11.2.2011**

**In the matter of:**

Approval under Regulation 86 of Central Electrical Regulatory Commission (Conduct of Business) Regulations, 1999 for determination of Transmission Tariff for combined elements of (i) extension of 400/220 kV Kolhapur (MSEB) sub-station; (ii) 220 kV D/C Vapi- Magarwada transmission line; and (iii) 220 kV D/C Vapi-Khardpada transmission line along with associated bays with WRSS –III transmission system in Western Region from the period from 1.4.2009 to 31.3.2014

**In the matter of:**

Power Grid Corporation of India Ltd., Gurgaon

.....**Petitioner**

**Vs**

1. Madhya Pradesh Power Trading company Ltd., Jabalpur
2. Maharashtra State Electricity Distribution Company Ltd., Mumbai
3. Gujarat Urja Vikas Nigam Ltd. Vadodara
4. Electricity Department. Goa, Panaji
5. Electricity Deptt. Administration of Daman and Diu, Daman
6. Electricity Deptt., Govt. of UT of Dadra and Nagar Haveli, Silvassa
7. Chattisgarh State Electricity Board, Raipur.
8. Madhya Pradesh Audyogik Kendra Vikas Nigam Ltd., Indore

...**Respondents**

**The following was present:**

1. Shri.M M Mondal, PGCIL
2. Shri Rajeev Gupta, PGCIL
3. Shri Rakesh Prasad, PGCIL

**ORDER**

This petition has been filed seeking approval of transmission tariff in respect of combined elements of (i) extension of 400/220 kV Kolhapur



(MSEB) sub-station; (ii) 220 kV D/C Vapi- Magarwada transmission line; and (iii) 220 kV D/C Vapi-Khardpada transmission line along with associated bays with WRSS –III transmission system in Western Region (hereinafter called “the transmission assets”) for tariff block 2009-14 period based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, (hereinafter referred to as “the 2009 regulations”). The petitioner has also sought the following reliefs:

(a) Invoke the provisions of Regulation 44(Power to Relax) of the 2009 regulations, for relaxation of clause (3) of regulation 15 thereof so that grossing up the base rate of Return on Equity (ROE) may be allowed considering the revised rate of MAT, surcharge, any other cess, charges, levies etc. as per the relevant Finance Acts and accordingly allow consequential impact of tariff on account of truing up, to be billed and settled directly with the beneficiaries every year in the tariff block.

(b) Allow the petitioner to recover full depreciation (90% of the gross block) of the assets during its useful life.

(c) Approve the reimbursement, of expenditure, by the beneficiaries towards petition filing fee, and publishing of notices in newspapers in terms of Regulation 42 of the 2009 regulations, and other expenditure (if any) in relation to the filing of petition.

(d) Allow the petitioner to bill and recover Service Tax on Transmission charges separately from the respondents, if petitioner is subjected to such service tax.

(e) Allow the petitioner to bill and recover licence fee separately from the respondents

(f) Pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.

2. The investment approval for the transmission system was accorded by Board of Directors of the petitioner company vide memorandum dated 20.2.2006 at an estimated cost of ₹ 7565 lakh which included IDC of ₹ 219 lakh, at 3rd quarter, 2005 price level.

3. Transmission charges for the transmission assets for the period upto 31.3.2009 were approved by the Commission vide order dated 23.2.2010 in Petition No. 217/2009.

4. The petitioner has claimed the following transmission charges:

**(₹ in lakh)**

|                             | <b>2009-10</b> | <b>2010-11</b> | <b>2011-12</b> | <b>2012-13</b> | <b>2013-14</b> |
|-----------------------------|----------------|----------------|----------------|----------------|----------------|
| Depreciation                | 204.09         | 226.08         | 246.71         | 246.71         | 246.71         |
| Interest on Loan            | 232.80         | 239.99         | 243.52         | 220.46         | 197.42         |
| Return on equity            | 202.41         | 224.24         | 244.73         | 244.73         | 244.73         |
| Interest on Working Capital | 24.03          | 25.70          | 27.29          | 27.49          | 27.73          |
| O & M Expenses              | 214.01         | 226.25         | 239.24         | 252.89         | 267.34         |
| <b>Total</b>                | <b>877.34</b>  | <b>942.26</b>  | <b>1001.49</b> | <b>992.28</b>  | <b>983.93</b>  |

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

(₹ in lakh)

|                    | 2009-10       | 2010-11       | 2011-12       | 2012-13       | 2013-14       |
|--------------------|---------------|---------------|---------------|---------------|---------------|
| Maintenance Spares | 32.10         | 33.94         | 35.89         | 37.93         | 40.10         |
| O & M expenses     | 17.83         | 18.85         | 19.94         | 21.07         | 22.28         |
| Receivables        | 146.22        | 157.04        | 166.92        | 165.38        | 163.99        |
| <b>Total</b>       | <b>196.15</b> | <b>209.83</b> | <b>222.75</b> | <b>224.38</b> | <b>226.37</b> |
| Interest           | 24.03         | 25.70         | 27.29         | 27.49         | 27.73         |
| Rate of Interest   | 12.25%        | 12.25%        | 12.25%        | 12.25%        | 12.25%        |

6. No reply has been received from the general public in relation to public notice. Madya Pradesh Power Trading Company Limited (MPPTCL) in its reply affidavit dated 11.1.2011 has submitted that additional capital expenditure of ₹ 51.49 lakh during 2009-10 claimed by the petitioner on account of undischarged liability can be admitted under Regulation 9(1) of 2009 regulations being within the cut-off date and additional capital expenditure of ₹ 781.21 during 2010-11 being not in accordance with the 2009 regulations should not be admitted. The objection of MPPTCL has been dealt with in subsequently in this order.

7. Having heard the representatives of the parties and examined the material on record, we proceed to dispose of the petition.

### **CAPITAL COST**

8. Last Proviso to clause (2) of Regulation 7 of the 2009 regulations, provides as under:

*“Provided also that in case of the existing projects, the capital cost admitted by the Commission prior to 1.4.2009 and the additional capital expenditure projected to be incurred for the respective year of the tariff period 2009-14, as may be admitted by the Commission, shall form the basis for determination of tariff.”*



9. As per the Commission's order dated 23.2.2010 in Petition No. 217/2009, the Commission had admitted the capital cost of ₹ 3834.54 lakh as on 31.3.2009. Accordingly, capital expenditure of ₹ 3834.54 lakh as on 1.4.2009 has been considered for tariff determination for 2009-14 period.

### **ADDITIONAL CAPITAL EXPENDITURE**

10. Details of the projected additional capital expenditure (hereinafter referred to as "Add Cap") claimed by the petitioner are as under:

(₹ in lakh)

| 1                 | 2                         | 3  | 4               | 5               | 7                    |
|-------------------|---------------------------|--|-----------------|-----------------|----------------------|
| Name of the Asset | Apportioned approved cost | Actual capital cost incurred as on 31.3.2009 | Add cap 2009-10 | Add cap 2010-11 | Total Capital . Cost |
| <u>Asset-I</u>    | 1045.19                   | 478.47                                       | 0.00            | 0.00            | <b>478.47</b>        |
| <u>Asset-II</u>   | 3634.00                   | 1888.27                                      | 29.30           | 380.40          | <b>2297.97</b>       |
| <u>Asset-III</u>  | 2886.00                   | 1467.80                                      | 22.19           | 400.81          | <b>1890.80</b>       |

11. Category-wise breakup of the additional capital expenditure is as under:

| Name of Asset  | Year                             | Nature      | Amount (₹ in lakh)               | Details of Expenditure           |
|----------------|----------------------------------|-------------|----------------------------------|----------------------------------|
| <b>ASSET-1</b> | No Add-Cap during 2009-14 period |             |                                  |                                  |
| <b>ASSET-2</b> | 2009-10                          | TL          | 8.23                             | Final/Balance Retention Payments |
|                |                                  | Sub-Station | 20.44                            |                                  |
|                |                                  | PLCC        | 0.63                             |                                  |
| 2010-11        | TL                               | 380.30      | Final/Balance Retention Payments |                                  |
|                | Sub-Station                      | 0.10        |                                  |                                  |
| <b>ASSET-3</b> | 2009-10                          | TL          | 4.13                             | Final/Balance Retention Payments |
|                |                                  | Sub-Station | 17.51                            |                                  |
|                |                                  | PLCC        | 0.55                             |                                  |
|                | 2010-11                          | TL          | 400.73                           | Final/Balance Retention Payments |
| Sub-Station    |                                  | 0.08        |                                  |                                  |
| <b>Total</b>   |                                  |             | 832.7                            |                                  |

12. We find that ₹ 781.21 lakhs has been projected to be incurred during 2010-11 on account of balance and retention payments. MPPTCL has objected to the claim on the ground that undischarged liability incurred after the cutoff date is not

permissible under Regulation 9(2) of the 2009 regulations. The petitioner vide its affidavit dated 9.12.2010 has clarified that the notional date of commercial operation of the assets involved in the petition being 1.7.2008, the tariff block 2004-09 expired on 31.3.2009, before the expiry of the cut off date as per the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004, (hereinafter referred to as “the 2004 regulations”) and has requested that the cut-off date of the transmission assets be considered in accordance with the definition of the term in the 2009 regulations.

13. In our view, the cutoff date under Regulation 3(11) of the 2009 regulations cannot be given retrospective application in case of the generating stations which achieved their commercial operation during 2004-09. However, we have decided in our order dated 8.2.2011 in Petition No. 176/2010 to relax the provisions of Regulation 9(2) of the 2009 regulations to permit capitalization of expenditure incurred after the cutoff date on account of balance and retention payments. Accordingly, the projected expenditure of ₹ 781.21 lakh during 2010-11 in respect of Asset-II and III have been considered for determination of tariff.

### **DEBT- EQUITY RATIO**

14. Clause (2) of Regulation 12 of the 2009 regulations *inter alia* provides that,-

*“(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.”*

15. Details of debt-equity considered by the petitioner for the transmission assets with regard to the additional capital expenditure for the year 2009-10 is as under:-

| <b>Asset I</b>   | <b>Admitted as on 31.03.2009</b> |                |
|------------------|----------------------------------|----------------|
|                  | <b>(₹ in lakh)</b>               | <b>%</b>       |
| Debt             | 334.93                           | 70.00%         |
| Equity           | 143.54                           | 30.00%         |
| <b>Total</b>     | <b>478.47</b>                    | <b>100.00%</b> |
| <b>Asset II</b>  | <b>Admitted as on 31.03.2009</b> |                |
|                  | <b>(₹ in lakh)</b>               | <b>%</b>       |
| Debt             | 1321.99                          | 70.01%         |
| Equity           | 566.28                           | 29.99%         |
| <b>Total</b>     | <b>1888.27</b>                   | <b>100.00%</b> |
| <b>Asset III</b> | <b>Admitted as on 31.03.2009</b> |                |
|                  | <b>(₹ in lakh)</b>               | <b>%</b>       |
| Debt             | 1027.46                          | 70.00%         |
| Equity           | 440.34                           | 30.00%         |
| <b>Total</b>     | <b>1467.80</b>                   | <b>100.00%</b> |
| <b>Combined</b>  | <b>Admitted as on 31.03.2009</b> |                |
|                  | <b>(₹ in lakh)</b>               | <b>%</b>       |
| Debt             | 2684.38                          | 70.01%         |
| Equity           | 1150.16                          | 29.99%         |
| <b>Total</b>     | <b>3834.54</b>                   | <b>100.00%</b> |

16. Based on the above debt-equity ratio of 70.01:29.99 has been considered for the capital cost as on 1.4.2010. As regards the additional capital expenditure. Details of the normative debt-equity ratio as given below is applied:

| <b>2009-10</b> | <b>Normative</b>           |                |
|----------------|----------------------------|----------------|
|                | <b>Amount ( ₹ in lakh)</b> | <b>%</b>       |
| Debt           | 36.04                      | 69.99%         |
| Equity         | 15.45                      | 30.01%         |
| <b>Total</b>   | <b>51.49</b>               | <b>100.00%</b> |
| <b>2010-11</b> | <b>Normative</b>           |                |
|                | <b>Amount ( ₹ in lakh)</b> | <b>%</b>       |
| Debt           | 546.85                     | 70.00%         |
| Equity         | 234.36                     | 30.00%         |
| <b>Total</b>   | <b>781.21</b>              | <b>100.00%</b> |

## RETURN ON EQUITY

17. 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 normal tax rate for the year 2008-09 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.*

*.....”*

18. The petitioner has computed ROE on pre- tax basis on 11.33% MAT in accordance with the tax rate applicable for 2008-09 and has claimed return on equity @ 17.481%.

19. Petitioner’s prayer to invoke the provisions of Regulation 44 of the 2009 regulations for relaxation of Regulation 15(3) thereof so that grossing up the base rate of ROE may be allowed considering the tax rates viz., MAT,



surcharge, any other cess, charges, levies etc., as per the relevant Finance Acts, has already been taken cognizance of in the Commission's order dated 3.8.2010 in Petition No. 17/2010 wherein a decision has been taken to address the issue raised by the petitioner. Relevant portion of the said order is extracted as under:

*"We are of the view that this issue of 'grossing up the base rate with the normal tax rate for the year 2008-09' is generic in nature and therefore, it will be appropriate to make suitable provisions in the 2009 regulations to cater to any future changes in the tax rate. Accordingly, we direct the staff of the Commission to prepare and submit draft amendment to the 2009 regulations for allowing grossing up of base rate of return with the applicable tax rate as per the Finance Act for the relevant year and direct settlement of tax liability between the generating company/transmission licensee and the beneficiaries/long term transmission customers on year to year basis. Any under/over recovery on account of direct settlement of tax liability shall be subject to the final adjustment at the time of true up exercise."*

20. Pending decision on revision of MAT rate, ROE has been computed as per Regulation 15 of the 2009 regulations, and pre-tax ROE of 17.481% has been considered.

21. Detailed calculation of the ROE in respect the transmission assets is as under:

|   |         | (₹ in lakh) |         |         |         |         |
|---|---------|-------------|---------|---------|---------|---------|
|   |         | 2009-10     | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Gross Notional Equity                     | 1150.16 |             |         |         |         |         |
| Addition due to Additional Capitalisation | 0.00    |             |         |         |         |         |
| Opening Equity                            | 1150.16 | 1150.16     | 1165.61 | 1399.97 | 1399.97 | 1399.97 |
| Addition due to Additional Capitalisation |         | 15.45       | 234.36  | 0.00    | 0.00    | 0.00    |
| Closing Equity                            |         | 1165.61     | 1399.97 | 1399.97 | 1399.97 | 1399.97 |
| Average Equity                            |         | 1157.88     | 1282.79 | 1399.97 | 1399.97 | 1399.97 |
| Return on Equity (Base Rate )             |         | 15.50%      | 15.50%  | 15.50%  | 15.50%  | 15.50%  |
| Tax rate for the year 2008-09             |         | 11.330%     | 11.330% | 11.330% | 11.330% | 11.330% |
| Rate of Return on Equity (Pre Tax )       |         | 17.481%     | 17.481% | 17.481% | 17.481% | 17.481% |
| Return on Equity (Pre Tax)                |         | 202.41      | 224.24  | 244.73  | 244.73  | 244.73  |

## **INTEREST ON LOAN**

22. 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.”*

23. In these calculations, interest on loan has been worked out as detailed below:

(a) Details of net outstanding loan as on 31.3.2009, cumulative repayment up to 31.3.2009, repayment schedule for the loans, rate of interest etc. have been taken from the order dated 23.02.2010 in petition no: 217/2009 for working out weighted average rate of interest.

(b) Tariff is worked out considering normative loan and normative repayments. Depreciation allowed has been taken as normative repayment for the tariff period 2009-14.

(c) Weighted average rate of interest on actual loan worked out as above has been applied on the notional average loan during the year to arrive at the interest on loan.

24. Details of the calculation of Interest on Loan are as under:

|   |         | (₹ in lakh) |         |         |         |         |
|---|---------|-------------|---------|---------|---------|---------|
|   |         | 2009-10     | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Gross Notional Loan                       | 2684.38 |             |         |         |         |         |
| Addition due to Additional Capitalisation | 0.00    |             |         |         |         |         |
| Gross Normative Loan                      | 2684.38 | 2684.38     | 2720.42 | 3267.27 | 3267.27 | 3267.27 |
| Cumulative Repayment upto Previous Year   |         | 107.53      | 311.62  | 537.71  | 784.41  | 1031.12 |
| Net Loan-Opening                          |         | 2576.85     | 2408.80 | 2729.56 | 2482.86 | 2236.15 |
| Addition due to Additional Capitalisation |         | 36.04       | 546.85  | 0.00    | 0.00    | 0.00    |
| Repayment during the year                 |         | 204.09      | 226.08  | 246.71  | 246.71  | 246.71  |
| Net Loan-Closing                          |         | 2408.80     | 2729.56 | 2482.86 | 2236.15 | 1989.44 |
| Average Loan                              |         | 2492.82     | 2569.18 | 2606.21 | 2359.50 | 2112.79 |
| Weighted Average Rate of Interest on Loan |         | 9.3389%     | 9.3409% | 9.3437% | 9.3436% | 9.3441% |
| Interest                                  |         | 232.80      | 239.98  | 243.52  | 220.46  | 197.42  |

## DEPRECIATION

25. Regulation 17 of the 2009 regulations provides for computation of depreciation in the following manner, namely:

*“17. (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.....*

*Provided further that.....*

*(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.”*

26. Depreciation has been worked out on the admitted capital expenditure as on 1.4.2009 and projected additional capitalization thereafter.

27. For the period 1.4.2009 to 31.3.2014 the depreciation worked out are as under:

(₹ in lakh)

|                             |     | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|-----------------------------|-----|---------|---------|---------|---------|---------|
| Rate of Depreciation        |     | 5.2870% | 5.2865% | 5.2859% | 5.2859% | 5.2859% |
| Depreciable Value           | 90% | 3474.26 | 3848.97 | 4200.52 | 4200.52 | 4200.52 |
| Remaining Depreciable Value |     | 3366.73 | 3537.35 | 3662.81 | 3416.10 | 3169.40 |
| Depreciation                |     | 204.09  | 226.08  | 246.71  | 246.71  | 246.71  |

## OPERATION & MAINTENANCE EXPENSES

28. Clause (g) of Regulation 19 of the 2009 regulations prescribes the norms for operation and maintenance expenses based on the type of sub-station and line. The petitioner has calculated the operation and maintenance expenses in accordance with the above norms and the same are allowed as such. The O&M expenditure allowed for the transmission assets are as under:

| Elements   | (₹ in lakh)   |               |               |               |               |
|--|---------------|---------------|---------------|---------------|---------------|
|  | 2009-10       | 2010-11       | 2011-12       | 2012-13       | 2013-14       |
| 55.37 Km., 220 kV D/C, Single Conductor Transmission Lines | 14.89         | 15.73         | 16.67         | 17.61         | 18.60         |
| One No. 400 kV Bay   | 52.40         | 55.40         | 58.57         | 61.92         | 65.46         |
| 4 Nos. 220 kV Bays   | 146.72        | 155.12        | 164.00        | 173.36        | 183.28        |
| <b>Total O&amp;M for the Assets</b>                        | <b>214.01</b> | <b>226.25</b> | <b>239.24</b> | <b>252.89</b> | <b>267.34</b> |

## INTEREST ON WORKING CAPITAL

29. As per the 2009 regulations the components of the working capital and the interest thereon are discussed hereunder:

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

**(ii) 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 as claimed in the petition. This has been considered in the working capital.

**(iv) Rate of interest on working capital:** As per Regulation 18(3) of the 2009 regulations, rate of interest on working capital shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on 1.4.2009 or on 1st April of the year in which the project or part thereof (as the case may be) is declared under commercial operation, whichever is later. The interest on working capital is payable on normative basis notwithstanding that the transmission licensee has not taken working capital loan from any outside agency. The petitioner has claimed interest on working capital @ 12.25% based on SBI PLR as on 1.4.2009, which is in accordance with the 2009 regulations and has been allowed.

30. Necessary computations in support of interest on working capital are appended hereinbelow:

|                    | (₹ in lakh)   |               |               |               |               |
|--------------------|---------------|---------------|---------------|---------------|---------------|
|                    | 2009-10       | 2010-11       | 2011-12       | 2012-13       | 2013-14       |
| Maintenance Spares | 32.10         | 33.94         | 35.89         | 37.93         | 40.10         |
| O & M expenses     | 17.83         | 18.85         | 19.94         | 21.07         | 22.28         |
| Receivables        | 146.22        | 157.04        | 166.91        | 165.38        | 163.99        |
| <b>Total</b>       | <b>196.16</b> | <b>209.84</b> | <b>222.74</b> | <b>224.39</b> | <b>226.37</b> |
| Rate of Interest   | 12.25%        | 12.25%        | 12.25%        | 12.25%        | 12.25%        |
| <b>Interest</b>    | <b>24.03</b>  | <b>25.70</b>  | <b>27.29</b>  | <b>27.49</b>  | <b>27.73</b>  |

### **TRANSMISSION CHARGES**

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

|                             | (₹ in lakh)   |               |                |               |               |
|-----------------------------|---------------|---------------|----------------|---------------|---------------|
|                             | 2009-10       | 2010-11       | 2011-12        | 2012-13       | 2013-14       |
| Depreciation                | 204.09        | 226.08        | 246.71         | 246.71        | 246.71        |
| Interest on Loan            | 232.80        | 239.98        | 243.52         | 220.46        | 197.42        |
| Return on equity            | 202.41        | 224.24        | 244.73         | 244.73        | 244.73        |
| Interest on Working Capital | 24.03         | 25.70         | 27.29          | 27.49         | 27.73         |
| O & M Expenses              | 214.01        | 226.25        | 239.24         | 252.89        | 267.34        |
| <b>Total</b>                | <b>877.34</b> | <b>942.27</b> | <b>1001.48</b> | <b>992.27</b> | <b>983.93</b> |

### **APPLICATION FEE AND THE PUBLICATION EXPENSES**

32. The petitioner has sought approval for the reimbursement of fee paid by it for filing the petition. In accordance with our decision in order dated 11.1.2010 in Petition No. 109/2009, the petitioner shall be entitled to recover the filing fee from the beneficiaries.

33. Accordingly, expenses incurred by the petitioner on application filing fees and publication of notices in connection with the present petition shall be directly recovered from the beneficiaries on pro rata basis.

## **SERVICE TAX**

34. The petitioner has made a specific prayer to be allowed to bill and recover the Service tax on Transmission charges separately from the respondents, if it is subjected to service tax in future. The prayer of the petitioner is premature. If the petitioner approaches the Commission by a separate application the same shall be considered in accordance with law.

35. The transmission charges allowed in this order shall be recovered on monthly basis in accordance with Regulation 23 and shall be shared by the respondents in accordance with Regulation 33 of the 2009 regulations.

36. This order disposes of Petition No. 175/2010.

**Sd/-  
(M.Deena Dayalan)  
Member**

**Sd/-  
(V.S.Verma)  
Member**

**Sd/-  
(S.Jayaraman)  
Member**





**Annexure**

**CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN**

(₹ in Lakhs)

|          | <b>Details of Loan</b>                       | <b>2009-10</b>                        | <b>2010-11</b> | <b>2011-12</b> | <b>2012-13</b> | <b>2013-14</b> |
|----------|--|---------------------------------------|----------------|----------------|----------------|----------------|
| <b>1</b> | <b>Bond XXI</b>                              |                                       |                |                |                |                |
|          | Gross loan opening                           | 270.00                                | <b>270.00</b>  | <b>270.00</b>  | <b>270.00</b>  | <b>270.00</b>  |
|          | Cumulative Repayment upto DOCO/previous year | 0.00                                  | <b>0.00</b>    | <b>22.50</b>   | <b>45.00</b>   | <b>67.50</b>   |
|          | Net Loan-Opening                             | 270.00                                | 270.00         | 247.50         | 225.00         | 202.50         |
|          | Additions during the year                    | 0.00                                  | 0.00           | 0.00           | 0.00           | 0.00           |
|          | Repayment during the year                    | 0.00                                  | 22.50          | 22.50          | 22.50          | 22.50          |
|          | Net Loan-Closing                             | 270.00                                | 247.50         | 225.00         | 202.50         | 180.00         |
|          | Average Loan                                 | 270.00                                | 258.75         | 236.25         | 213.75         | 191.25         |
|          | Rate of Interest                             | 8.73%                                 | 8.73%          | 8.73%          | 8.73%          | 8.73%          |
|          | Interest                                     | 23.57                                 | 22.59          | 20.62          | 18.66          | 16.70          |
|          | Rep Schedule                                 | 12 Annual Instalments from 11.10.2010 |                |                |                |                |
| <b>2</b> | <b>Bond XXII</b>                             |                                       |                |                |                |                |
|          | Gross loan opening                           | 78.00                                 | <b>78.00</b>   | <b>78.00</b>   | <b>78.00</b>   | <b>78.00</b>   |
|          | Cumulative Repayment upto DOCO/previous year | 0.00                                  | <b>0.00</b>    | <b>6.50</b>    | <b>13.00</b>   | <b>19.50</b>   |
|          | Net Loan-Opening                             | 78.00                                 | 78.00          | 71.50          | 65.00          | 58.50          |
|          | Additions during the year                    | 0.00                                  | 0.00           | 0.00           | 0.00           | 0.00           |
|          | Repayment during the year                    | 0.00                                  | 6.50           | 6.50           | 6.50           | 6.50           |
|          | Net Loan-Closing                             | 78.00                                 | 71.50          | 65.00          | 58.50          | 52.00          |
|          | Average Loan                                 | 78.00                                 | 74.75          | 68.25          | 61.75          | 55.25          |
|          | Rate of Interest                             | 8.68%                                 | 8.68%          | 8.68%          | 8.68%          | 8.68%          |
|          | Interest                                     | 6.77                                  | 6.49           | 5.92           | 5.36           | 4.80           |
|          | Rep Schedule                                 | 12 Annual instalments from 07.12.2010 |                |                |                |                |
| <b>3</b> | <b>Bond XXVII</b>                            |                                       |                |                |                |                |
|          | Gross loan opening                           | 1902.05                               | <b>1902.05</b> | <b>1902.05</b> | <b>1902.05</b> | <b>1902.05</b> |
|          | Cumulative Repayment upto DOCO/previous year | 0.00                                  | <b>0.00</b>    | <b>0.00</b>    | <b>158.50</b>  | <b>317.01</b>  |
|          | Net Loan-Opening                             | 1902.05                               | 1902.05        | 1902.05        | 1743.55        | 1585.04        |
|          | Additions during the year                    | 0.00                                  | 0.00           | 0.00           | 0.00           | 0.00           |
|          | Repayment during the year                    | 0.00                                  | 0.00           | 158.50         | 158.50         | 158.50         |
|          | Net Loan-Closing                             | 1902.05                               | 1902.05        | 1743.55        | 1585.04        | 1426.54        |
|          | Average Loan                                 | 1902.05                               | 1902.05        | 1822.80        | 1664.29        | 1505.79        |
|          | Rate of Interest                             | 9.47%                                 | 9.47%          | 9.47%          | 9.47%          | 9.47%          |
|          | Interest                                     | 180.12                                | 180.12         | 172.62         | 157.61         | 142.60         |
|          | Rep Schedule                                 | 12 Annual Instalments from 31.03.2012 |                |                |                |                |
| <b>4</b> | <b>Bond XXIX</b>                             |                                       |                |                |                |                |
|          | Gross loan opening                           | 191.01                                | <b>224.00</b>  | <b>224.00</b>  | <b>224.00</b>  | <b>224.00</b>  |
|          | Cumulative Repayment upto DOCO/previous year | 0.00                                  | <b>0.00</b>    | <b>0.00</b>    | <b>0.00</b>    | <b>18.67</b>   |



|          |  |  |                |                |                |                |
|----------|--|--|----------------|----------------|----------------|----------------|
|          | Net Loan-Opening                               | 191.01                                 | 224.00         | 224.00         | 224.00         | 205.33         |
|          | Additions during the year                      | 32.99                                  | 0.00           | 0.00           | 0.00           | 0.00           |
|          | Repayment during the year                      | 0.00                                   | 0.00           | 0.00           | 18.67          | 18.67          |
|          | Net Loan-Closing                               | 224.00                                 | 224.00         | 224.00         | 205.33         | 186.67         |
|          | Average Loan                                   | 207.51                                 | 224.00         | 224.00         | 214.67         | 196.00         |
|          | Rate of Interest                               | 9.20%                                  | 9.20%          | 9.20%          | 9.20%          | 9.20%          |
|          | Interest                                       | 19.09                                  | 20.61          | 20.61          | 19.75          | 18.03          |
|          | Rep Schedule                                   | 10 Annual Instalments from 12.03.2013  |                |                |                |                |
|          |  |  |                |                |                |                |
| <b>5</b> | <b>Bond XXVIII</b>                             |  |                |                |                |                |
|          | Gross loan opening                             | 450.00                                 | <b>450.00</b>  | <b>450.00</b>  | <b>450.00</b>  | <b>450.00</b>  |
|          | Cumulative Repayment upto DOCO/previous year   | 0.00                                   | <b>0.00</b>    | <b>0.00</b>    | <b>0.00</b>    | <b>37.50</b>   |
|          | Net Loan-Opening                               | 450.00                                 | 450.00         | 450.00         | 450.00         | 412.50         |
|          | Additions during the year                      | 0.00                                   | 0.00           | 0.00           | 0.00           | 0.00           |
|          | Repayment during the year                      | 0.00                                   | 0.00           | 0.00           | 37.50          | 37.50          |
|          | Net Loan-Closing                               | 450.00                                 | 450.00         | 450.00         | 412.50         | 375.00         |
|          | Average Loan                                   | 450.00                                 | 450.00         | 450.00         | 431.25         | 393.75         |
|          | Rate of Interest                               | 9.33%                                  | 9.33%          | 9.33%          | 9.33%          | 9.33%          |
|          | Interest                                       | 41.99                                  | 41.99          | 41.99          | 40.24          | 36.74          |
|          | Rep Schedule                                   | 12 annual Instalments from 15.12.2012. |                |                |                |                |
|          |  |  |                |                |                |                |
| <b>6</b> | <b>Bond XXX (AddCap 2009-10 on 29.09.2009)</b> |  |                |                |                |                |
|          | Gross loan opening                             | 0.00                                   | <b>3.05</b>    | <b>3.05</b>    | <b>3.05</b>    | <b>3.05</b>    |
|          | Cumulative Repayment upto DOCO/previous year   | 0.00                                   | <b>0.00</b>    | <b>0.00</b>    | <b>0.00</b>    | <b>0.00</b>    |
|          | Net Loan-Opening                               | 0.00                                   | 3.05           | 3.05           | 3.05           | 3.05           |
|          | Additions during the year                      | 3.05                                   | 0.00           | 0.00           | 0.00           | 0.00           |
|          | Repayment during the year                      | 0.00                                   | 0.00           | 0.00           | 0.00           | 0.25           |
|          | Net Loan-Closing                               | 3.05                                   | 3.05           | 3.05           | 3.05           | 2.80           |
|          | Average Loan                                   | 1.53                                   | 3.05           | 3.05           | 3.05           | 2.92           |
|          | Rate of Interest                               | 8.80%                                  | 8.80%          | 8.80%          | 8.80%          | 8.80%          |
|          | Interest                                       | 0.13                                   | 0.27           | 0.27           | 0.27           | 0.26           |
|          | Rep Schedule                                   | 12 annual Instalments from 29.09.2013  |                |                |                |                |
|          |  |  |                |                |                |                |
|          | <b>Total Loan</b>                              |  |                |                |                |                |
|          | Gross loan opening                             | 2891.06                                | 2927.10        | 2927.10        | 2927.10        | 2927.10        |
|          | Cumulative Repayment upto DOCO/previous year   | 0.00                                   | 0.00           | 29.00          | 216.50         | 460.18         |
|          | Net Loan-Opening                               | 2891.06                                | 2927.10        | 2898.10        | 2710.60        | 2466.93        |
|          | Additions during the year                      | 36.04                                  | 0.00           | 0.00           | 0.00           | 0.00           |
|          | Repayment during the year                      | 0.00                                   | 29.00          | 187.50         | 243.67         | 243.93         |
|          | Net Loan-Closing                               | 2927.10                                | 2898.10        | 2710.60        | 2466.93        | 2223.00        |
|          | Average Loan                                   | 2909.08                                | 2912.60        | 2804.35        | 2588.76        | 2344.96        |
|          | <b>Weighted Average Rate of Interest</b>       | <b>9.3389%</b>                         | <b>9.3409%</b> | <b>9.3437%</b> | <b>9.3436%</b> | <b>9.3441%</b> |
|          | <b>Interest</b>                                | <b>271.68</b>                          | <b>272.06</b>  | <b>262.03</b>  | <b>241.88</b>  | <b>219.12</b>  |

