

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram:

- 1. Dr. Pramod Deo, Chairperson**
- 2. Shri R.Krishnamoorthy, Member**
- 3. Shri S.Jayaraman, Member**
- 4. Shri V.S.Verma, Member**

Petition No. 5/2009

In the matter of

Determination of final transmission tariff for (i) 50 MVAR Reactor at Narendra, (ii) Narendra- Devangiri transmission line and Bus Reactor at Mysore and (iii) 2nd 315 MVA Auto Transformer at Hiriyur sub-station along with associated bays under Transmission System associated with Kaiga-3 and 4 (2X235 MW) project in Southern Region from date of commercial operation to 31.3.2009 and approval of additional capitalization from date of commercial operation to 31.3.2008.

And in the matter of

Power Grid Corporation of India Limited, Gurgaon

..Petitioner

Vs

1. Karnataka Power Transmission Corporation Ltd., Bangalore
2. Transmission Corporation of Andhra Pradesh Ltd., Hyderabad
3. Kerala State Electricity Board, Thiruvananthapuram
4. Tamil Nadu Electricity Board, Chennai
5. Electricity Department, Govt. of Pondicherry, Pondicherry... **Respondents.**

The following were present:

1. Shri V.V.Sharma, PGCIL
2. Shri A.K.Nagpal, PGCIL
3. Shri B.C.Pant, PGCIL
4. Ms. Sangeeta Edwaros, PGCIL
5. Shri .M.M.Mondal, PGCIL
6. Mohmd Mohsin, PGCIL

**ORDER
(DATE OF HEARING: 21.4.2009)**

This petition has been filed for approval of transmission charges for 50 MVAR Reactor at Narendra (Asset-I), Narendra- Devangiri transmission line and Bus Reactor at Mysore (Asset-II) and 2nd 315 MVA Auto Transformer at Hiriyur sub-station along

with associated bays (Asset-III) (collectively referred to as “the transmission assets”) under transmission system associated with Kaiga-3 and 4 (2X235 MW) project (hereinafter referred to as “the transmission system”) in Southern Region from date of commercial operation to 31.3.2009, based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 (hereinafter referred to as “the 2004 regulations”) after accounting for additional capitalization during 2007-08 for the respective transmission asset. The petitioner has also prayed for reimbursement of expenditure from the beneficiaries incurred towards publishing of notices in newspapers and the petition filing fee.

2. The investment approval for the transmission system was accorded by Ministry of Power vide letter dated 29.3.2005 at an estimated cost of Rs. 58825 lakh, including IDC of Rs. 3072 lakh. Subsequently, the approval for revised cost estimate was accorded by the Board of Directors of the petitioner company vide its memorandum dated 29.12.2008 at an estimated cost of Rs. 100716 lakh including IDC of Rs. 9503 lakh.

3. The provisional transmission charges for the transmission assets were approved by the Commission in its order dated 30.9.2008 in Petition No. 93/2008. The date of commercial operation of each of the transmission assets, details of their apportioned approved cost, the estimated completion cost, etc. are as under:

(Rs in lakh)

| S.No. | Name of the Assets | Date of commercial operation | Apportioned approved cost (as per revised cost estimate) | Expenditure up to date of commercial operation | Expenditure from the date of commercial operation to 31.3.2008 | Expenditure up to 31. 3.2008 | Balance estimated Expenditure | Estimated completion Cost |
|-------|--------------------|------------------------------|--|--|--|------------------------------|-------------------------------|---------------------------|
| 1. | Asset-I | 1.1.2008 | 2193 | 1791 | 151 | 1942 | 177 | 2119 |
| 2. | Asset-II | 1.2.2008 | 19103 | 16061 | 83 | 16144 | 2177 | 18321 |
| 3. | Asset-III | 1.4.2008 | 2922 | 2242 | 0.00 | 2242 | 378 | 2620 |
| | Total | | 24218 | 20093 | 234 | 20328 | 2732 | 23060 |

4. The petitioner has claimed the transmission charges as under:

(Rs. in lakh)

| | Asset-I | | Asset-II | | Asset-III |
|------------------------------|--------------|---------------|---------------|----------------|---------------|
| | 2007-08 | 2008-09 | 2007-08 | 2008-09 | 2008-09 |
| Depreciation | 16.80 | 69.92 | 72.88 | 438.40 | 80.15 |
| Interest on Loan | 29.83 | 120.95 | 173.70 | 1021.50 | 142.10 |
| Return on Equity | 19.59 | 81.53 | 112.71 | 677.98 | 94.17 |
| Advance against Depreciation | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Interest on Working Capital | 2.19 | 8.98 | 12.24 | 73.62 | 13.51 |
| O & M Expenses | 7.91 | 32.90 | 44.93 | 280.66 | 131.60 |
| Total | 76.32 | 314.28 | 416.46 | 2492.16 | 461.53 |

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

(Rs. In lakh)

| | Asset-I | | Asset-II | | Asset-III |
|--------------------|-------------|-------------|--------------|--------------|--------------|
| | 2007-08 | 2008-09 | 2007-08 | 2008-09 | 2008-09 |
| Maintenance Spares | 17.91 | 18.18 | 160.61 | 162.21 | 22.42 |
| O & M expenses | 2.64 | 2.74 | 22.47 | 23.39 | 10.97 |
| Receivables | 50.88 | 52.38 | 416.46 | 415.36 | 76.92 |
| Total | 71.43 | 73.30 | 599.54 | 600.96 | 110.31 |
| Rate of Interest | 12.25% | 12.25% | 12.25% | 12.25% | 12.25% |
| Interest | 2.19 | 8.98 | 12.24 | 73.62 | 13.51 |

6. Reply to the petition has been filed by Tamil Nadu Electricity Board. In response to the public notices published by the petitioner in accordance with the procedure specified by the Commission, no comments have been received from the general public.

7. Tamil Nadu Electricity Board has vide its reply made the following prayers:

- (a) The petitioner be directed to furnish details in Form 5B based on revised cost estimates.
- (b) Cost of mandatory spares be restricted to 1.50% of the project cost in respect of Asset-I and Asset-III
- (c) Equity in respect of Asset-III be restricted to the ceiling norms of 30%.

(d) O&M expenses be allowed only for 5 bays in respect of Asset-II as against 6 bays claimed by the petitioner.

8. In reply to the above submissions, the petitioner has furnished the details in Form 5B as required by the respondent. As regards the requests at sub-paras (b) and (c) above, the petitioner has requested that the cost of initial spares and debt-equity ratio be considered in respect of the transmission system as a whole and not asset-wise. So far as the request at sub-para (d) above is concerned, it has been clarified that the petitioner had inadvertently claimed O&M expenses for 6 bays instead of 5 bays and the error has been rectified by furnishing the revised details vide affidavit dated 6.4.2009.

9. In the light of the above we consider that the objections raised by Tamil Nadu Electricity Board do not survive. The cost of initial spares has been worked out for the transmission system.

CAPITAL COST

10. As per clause (1) of Regulation 52 of the 2004 regulations, subject to prudence check, the actual expenditure incurred on completion of the project shall form the basis for determination of final tariff. The final tariff shall be determined based on the admitted capital expenditure actually incurred up to the date of commercial operation of the transmission system and shall include capitalised initial spares subject to a ceiling norm as 1.5% of original project cost. The regulation is applicable in case of the transmission system declared under commercial operation on or after 1.4.2004.

11. The petitioner has claimed tariff after accounting for additional capitalization in respect of the Asset-I and Asset-II from the respective date of commercial operation up to 31.3.2008 as given in the table below para 3 above.

ADDITIONAL CAPITALIZATION 2007-08

12. Clause (1) of Regulation 53 of the 2004 regulations provides-

“(1) The following capital expenditure within the original scope of work actually incurred after the date of commercial operation and up to the cut off date may be admitted by the Commission, subject to prudence check:

- (i) Deferred liabilities;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares in the original scope of works subject to the ceiling norm specified in regulation 52;
- (iv) Liabilities to meet award of arbitration or compliance of the order or decree of a court; and
- (v) On account of change in law:

Provided that original scope of work along with estimates of expenditure shall be submitted along with the application for provisional tariff:

Provided further that a list of the deferred liabilities and works deferred for execution shall be submitted along with the application for final tariff after the date of commercial operation of the transmission system.”

13. The details submitted by the petitioner in support of its claim for additional capital expenditure for Asset-I and Asset-II are given hereunder:

| Asset-I | | | | Asset-II | | |
|----------------|--------------|-------------------------------|---|-----------------|--|--|
| Sl. No. | Year | Amount | Nature and details of expenditure | Year | Amount | Nature and details of expenditure |
| 1. | 2007-08 | Sub-station = Rs. 151.40 lakh | Balance supply, erection and retention payments | 2007-08 | Transmission line = Rs. 67.64 lakh Sub-station=Rs. 15.41 lakh | Balance payment for compensation payments, and diverted material |
| 2. | Total | Rs. 151.40 lakh | | Total | Rs. 83.05 lakh | |

14. The additional capital expenditure claimed is within the original scope of work and is found to be in order as it was against the committed liability. Accordingly, capitalization of the additional expenditure claimed by the petitioner has been allowed for the transmission Asset-I and Asset-II.

Cost over-run

15. There is not cost over-run as the estimated completion cost is within the revised cost estimate approved by the Board of Directors of the petitioner company vide Memorandum dated 29.12.2008.

Time over-run

16. During the hearing on 21.4.2009, the petitioner submitted that there was a delay of about 3 months in commissioning of Asset-III because of the delayed supply of transformers due to acute shortage of raw material at the manufacture's end, especially Cold Rolled Grain Oriented (CRGO), an imported item in short supply worldwide. Accordingly the petitioner contended that the delay was beyond its control. The Commission directed the petitioner to furnish documentary evidence in support of its claim. The petitioner, vide its affidavit dated 5.5.2009 has submitted a copy of letter dated 6.12.2007 from BHEL, the transformer manufacturer. BHEL has, in the above letter stated there was a delay in delivery due to unavailability of CRGO in international market.

17. We have considered the matter. There is satisfactory explanation from the petitioner for the delay in completion of the Asset-III. Therefore, the delay in commissioning of Asset-III is considered to be for reasons beyond the control of the petitioner.

TOTAL CAPITAL COST

18. Based on the above, gross block as given below has been considered for the purpose of tariff for the transmission assets, after allowing additional capitalization on works as claimed by the petitioner, which is within the limits of apportioned approved cost:

(Rs.in lakh)

| Name of the assets | Capital cost as on the date of commercial operation | Additional capital expenditure up to 31.3.2008 | Total Capital expenditure as on 1.4.2008 |
|--------------------|---|--|--|
| Asset-I | 1790.95 | 151.40 | 1942.35 |
| Asset-II | 16060.82 | 83.05 | 16143.87 |
| Asset-III | 2241.67 | - | 2241.67 |

DEBT- EQUITY RATIO

19. Clause (1) of Regulation 54 of the 2004 regulations *inter alia* provides that,-

“(1) In case of the existing projects, debt–equity ratio Considered by the Commission for fixation of tariff for the period ending 31.3.2004 shall be considered for determination of tariff with effect from 01.04.2004:

Provided that in cases where the tariff for the period ending 31.3.2004 has not been determined by the Commission, debt-equity ratio shall be as may be decided by the Commission:

Provided further that in case of the existing projects where additional capitalisation has been completed on or after 1.4.2004 and admitted by the Commission under Regulation 53, equity in the additional capitalisation to be considered shall be :-

- (a) 30% of the additional capital expenditure admitted by the Commission, or
- (b) equity approved by the competent authority in the financial package, for additional capitalisation, or
- (c) actual equity employed,

whichever is the least:

Provided further that in case of additional expenditure admitted under the second proviso, the Commission may consider equity of more than 30% if the transmission licensee is able to satisfy the Commission that deployment of such equity of more than 30% was in the interest of general public.”

20. The Note 1 below Regulations 53 lays down that any expenditure on account of committed liabilities with the original scope of work is to be serviced in the normative debt-equity ratio specified in Regulation 54.

21. The petitioner has considered debt-equity ratio of 70.02:29.98, 70:30 and 69.99:30.01 for Asset-I, Asset-II and Asset-III respectively, as actually deployed on the date of commercial operation of the respective transmission asset. The petitioner has further considered the amount of additional capitalization in the debt-equity ratio of 70:30 and 69.99:30.01 for Asset-I and Asset-II, respectively. In our calculations, debt-equity ratio of 70:30 has been considered for the additional capital expenditure approved, in accordance with the 2004 regulations. Accordingly, for the purpose of tariff, equity considered for the transmission assets is as under:

(Rs. in lakh)

| | Equity as on date of commercial operation | Notional additional equity during 2007-08 | Average equity for 2007-08 | Equity as on 1.4.2008 |
|-----------|---|---|----------------------------|-----------------------|
| Asset- I | 536.95 | 45.52 | 559.66 | 582.37 |
| Asset-II | 4817.82 | 24.92 | 4830.28 | 4842.74 |
| Asset-III | 672.50 | - | - | 672.50 |

RETURN ON EQUITY

22. As per clause (iii) of Regulation 56 of the 2004 regulations, return on equity shall be computed on the equity base determined in accordance with regulation 54 @ 14% per annum. Equity invested in foreign currency is to be allowed a return in the same currency and the payment on this account is made in Indian Rupees based on the exchange rate prevailing on the due date of billing.

23. Equity has been considered as on the date of commercial operation and as on 1.4.2008 onwards as given in the table in para 21 above. However, tariff for the period

from date of commercial operation to 31.3.2008 has been allowed on average equity.

Accordingly, the petitioner shall be entitled to return on equity as under:

(Rs. in lakh)

| Name of the asset | Return on equity | |
|-------------------|-------------------|---------|
| | 2007-08 | 2008-09 |
| Asset-I | 19.59 (Pro rata) | 81.53 |
| Asset-II | 112.71 (Pro rata) | 677.98 |
| Asset-III | - | 94.15 |

INTEREST ON LOAN

24. Clause (i) of regulation 56 of the 2004 regulations *inter alia* provides that,-

“(a) Interest on loan capital shall be computed loan wise on the loans arrived at in the manner indicated in regulation 54.

(b) The loan outstanding as on 1.4.2004 shall be worked out as the gross loan in accordance with Regulation 54 minus cumulative repayment as admitted by the Commission or any other authority having power to do so, up to 31.3.2004. The repayment for the period 2004-09 shall be worked out on a normative basis.

(c) The transmission licensee shall make every effort to re-finance the loan as long as it results in net benefit to the beneficiaries. The costs associated with such re-financing shall be borne by the beneficiaries.

(d) The changes to the loan terms and conditions shall be reflected from the date of such re-financing and benefit passed on to the beneficiaries.

(e) In case of dispute, any of the parties may approach the Commission with proper application. However, the beneficiaries shall not withhold any payment ordered by the Commission to the transmission licensee during pendency of any dispute relating to re-financing of loan;

(f) In case any moratorium period is availed of by the transmission licensee, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly.

(g) The transmission licensee shall not make any profit on account of re-financing of loan and interest on loan;

(h) The transmission licensee may, at its discretion, swap loans having floating rate of interest with loans having fixed rate of interest, or vice versa, at its own cost and gains or losses as a result of such swapping shall accrue to the transmission licensee:

Provided that the beneficiaries shall be liable to pay interest for the loans initially contracted, whether on floating or fixed rate of interest.”

25. In our calculation, the interest on loan has been worked out as detailed below:

(a) Gross amount of loan, repayment of instalments and rate of interest submitted by the petitioner have been used to work out weighted average rate of interest on actual loan.

(b) Notional loan arising out of additional capitalisation from date of commercial operation to 31.3.2008 has been added in loan amount as on date of commercial operation to arrive at total Notional loan. This adjusted Gross loan is considered as normative loan for tariff calculations.

(c) Tariff has been worked out considering normative loan and normative repayment. Normative repayments are worked out by the following formula:

$$\frac{\text{Actual repayment of actual loan during the year}}{\text{Opening balance of actual loan during the year}} \times \text{Opening balance of normative loan during the year}$$

(d) Moratorium in repayment of loan is considered with reference to normative loan and if the normative repayment of loan during the year is less than the depreciation including Advance Against Depreciation during the year, then depreciation including Advance Against Depreciation during the year is deemed as normative repayment of loan during the year.

(e) Weighted average rate of interest on actual loan worked out as per (a) above is applied on the notional average loan during the year to arrive at the interest on loan.

(f) Short-term ICICI Bank loan was replaced by Bond XXVI. Weighted average rate of interest for 2007-08 has been considered based on number of days.

26. Based on the above, the year-wise details of interest worked out are given hereunder:

(Rs. in lakh)

| | Asset-I | | Asset-II | | Asset-III |
|---|-------------------------------|----------------|-------------------------------|----------------|------------------|
| | 2007-08 (Pro rata) | 2008-09 | 2007-08 (Pro rata) | 2008-09 | 2008-09 |
| Opening Gross Loan | 1254.00 | 1359.98 | 11243.00 | 11301.14 | 1569.17 |
| Cumulative Repayment up to date of commercial operation/Previous Year | 0.00 | 16.80 | 0.00 | 72.88 | 0.00 |
| Net Loan-Opening | 1254.00 | 1343.18 | 11243.00 | 11228.26 | 1569.17 |
| Additions including additions due to Additional Capital expenditure | 105.98 | - | 58.14 | - | - |
| Repayment during the year | 16.80 | 69.92 | 72.88 | 438.40 | 80.15 |
| Net Loan-Closing | 1343.18 | 1273.26 | 11228.26 | 10789.86 | 1489.01 |
| Average Loan | 1298.59 | 1308.22 | 11235.63 | 11009.06 | 1529.09 |
| Weighted Average Rate of Interest on Loan | 9.19% | 9.25% | 9.28% | 9.28% | 9.29% |
| Interest | 29.83 | 120.95 | 173.70 | 1021.50 | 142.11 |

27. The detailed calculations in support of the weighted average rate of interest are contained in Annexure-I, Annexure-II and Annexure-III attached.

DEPRECIATION

28. Sub-clause (a) of clause (ii) of Regulation 56 of the 2004 regulations provides for computation of depreciation in the following manner, namely:

- (i) The value base for the purpose of depreciation shall be the historical cost of the asset.
- (ii) Depreciation shall be calculated annually based on straight line method over the useful life of the asset and at the rates prescribed in Appendix II to these regulations. The residual value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the historical capital cost of the asset. Land is not a depreciable asset and its cost shall be excluded from the capital cost while computing 90% of the historical cost of the asset. The historical capital cost of the asset shall include additional capitalisation on account of Foreign Exchange Rate

Variation up to 31.3.2004 already allowed by the Central Government/Commission.

- (iii) On repayment of entire loan, the remaining depreciable value shall be spread over the balance useful life of the asset.
- (iv) Depreciation shall be chargeable from the first year of operation. In case of operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

29. Depreciation allowed has been worked out as below:

(Rs. in lakh)

| | Asset-I | | Asset-II | | Asset-III |
|--|-------------------------------|----------------|-------------------------------|----------------|------------------|
| | 2007-08 (Pro rata) | 2008-09 | 2007-08 (Pro rata) | 2008-09 | 2008-09 |
| Gross block as on the date of commercial operation | 1790.95 | 1942.35 | 16060.82 | 16143.87 | 2241.67 |
| Additional Capitalization during 2007-08 | 151.40 | - | 83.05 | - | - |
| Gross Block at the end of the year | 1942.35 | 1942.35 | 16143.87 | 16143.87 | 2241.67 |
| Rate of Depreciation | 3.60% | 3.60% | 2.7155% | 2.7156% | 3.5757% |
| Depreciable Value | 1679.99 | 1748.12 | 14492.11 | 14529.48 | 2017.50 |
| Balance useful life of the asset | - | - | - | - | - |
| Remaining Depreciable value | 1679.99 | 1731.32 | 14492.11 | 14456.61 | 2017.50 |
| Depreciation | 16.80 | 69.92 | 72.88 | 438.40 | 80.15 |

ADVANCE AGAINST DEPRECIATION

30. As per sub-clause (b) of clause (ii) of Regulation 56 of the 2004 regulations, in addition to allowable depreciation, the transmission licensee is entitled to Advance Against Depreciation, computed in the manner given hereunder:

AAD = Loan repayment amount as per regulation 56 (i) subject to a ceiling of 1/10th of loan amount as per regulation 54 minus depreciation as per schedule

31. It is provided that Advance Against Depreciation shall be permitted only if the cumulative repayment tip to a particular year exceeds the cumulative depreciation up to that year. It is further provided that Advance Against Depreciation in a year shall be restricted to the extent of difference between cumulative repayment and cumulative

depreciation up to that year.

32. The petitioner has not claimed Advance Against Depreciation and accordingly, Advance Against Depreciation has not been considered.

OPERATION & MAINTENANCE EXPENSES

33. In accordance with clause (iv) of Regulation 56 the 2004 regulations, the following norms are prescribed for O & M expenses

| | Year | | | | |
|---|--------------|--------------|--------------|--------------|--------------|
| | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 |
| O&M expenses (Rs in lakh per ckt-km) | 0.227 | 0.236 | 0.246 | 0.255 | 0.266 |
| O&M expenses (Rs in lakh per bay) | 28.12 | 29.25 | 30.42 | 31.63 | 32.90 |

34. The petitioner has claimed O & M expenses 234.931 ckt.km. and one bay for Asset-I and 313 ckt.km. and 5 bays for Asset-II, and 4 bays for Asset-III which have been allowed. Accordingly, the petitioner's entitlement to O & M expenses has been worked out as given hereunder:

(Rs. in lakh)

| | Asset-I | | | Asset -II | | Asset-III | |
|------------------------|--------------------|---------|-----------------------------|--------------------|---------|-------------------------|---------|
| | 2007-08 (Pro rata) | 2008-09 | | 2007-08 (Pro rata) | 2008-09 | | 2008-09 |
| | - | - | O&M expenses for 313 ckt km | 13.30 | 83.26 | | |
| O&M expenses for 1 bay | 7.91 | 32.90 | O&M expenses for 5 bays | 26.36 | 164.50 | O&M expenses for 4 bays | 131.60 |
| Total | 7.91 | 32.90 | Total | 39.66 | 247.76 | | 131.60 |

35. The petitioner has submitted that the wage revision of its employees is due with effect from 1.1.2007. Therefore, according to the petitioner, O&M expenses should be subject to revision on account of revision of employee cost from that date. In the alternative, it has been prayed that the increase in employee cost due to wage revision be allowed as per actuals for extra cost to be incurred consequent to wage

revision. We are not expressing any view, as this issue does not arise for consideration at this stage. The petitioner may approach for a relief in this regard at an appropriate stage in accordance with law.

INTEREST ON WORKING CAPITAL

36. The components of the working capital and the interest thereon are discussed hereunder:

(i) Maintenance spares

Regulation 56(v) (1) (b) of the 2004 regulations provides for maintenance spares @ 1% of the historical cost escalated @ 6% per annum from the date of commercial operation. In the present case, element wise capital expenditure on the date of commercial operation which has been considered as the historical cost for the purpose of the present petition and maintenance spares have been worked out accordingly by escalating 1% of the historical cost @ 6% per annum. In this manner, the value of maintenance spares works out to Rs. 17.91 lakh and Rs. 160.81 lakh and Rs. 22.42 lakh for Asset-I, Asset-II and Asset-III respectively as on the date of commercial operation. The necessary details are given hereunder:

| Transmission assets | Date of Commercial Operation | Capital Expenditure on the date of commercial operation (Rs. in lakh) | Cost of maintenance spares as on 1.4.2008 (Rs. in lakh) |
|---------------------|------------------------------|---|---|
| Asset-1 | 1.12008 | 1790.95 | 18.18 |
| Asset-II | 1.2.2008 | 16060.82 | 162.21 |
| Asset-III | 1:4.2008 | 2241.67 | 22.42 |

(ii) O & M expenses

Regulation 56(v)(1)(.a) of the 2004 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 O&M expenses of the

respective year as claimed in the petition. This has been considered in the working capital.

(iii) Receivables

As per Regulation 56(v)(1)(c) of the 2004 regulations, receivables will be equivalent to two months average billing calculated on target availability level. The petitioner has claimed the receivables on the basis 2 months' transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis 2 months' transmission charges.

(iv) Rate of interest on working capital

As per Regulation 56(v) (2) of the 2004 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 1.4.2004 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 1.4.2007, which is in accordance with the 2004 regulations and has been allowed.

37. The necessary computations in support of interest on working capital are appended herein below:

(Rs. in lakh)

| | Asset-I | | Asset-11 | | Asset-III |
|--------------------|-------------------------------|----------------|-------------------------------|----------------|------------------|
| | 2007-08 (Pro rata) | 2008-09 | 2007-08 (Pro rata) | 2008-09 | 2008-09 |
| Maintenance Spares | 17.91 | 18.18 | 160.61 | 162.21 | 22.42 |
| O & M expenses | 2.64 | 2.74 | 19.83 | 20.65 | 10.97 |
| Receivables | 50.88 | 52.38 | 411.02 | 409.71 | 76.92 |
| Total | 71.42 | 73.30 | 591.46 | 592.57 | 110.31 |
| Rate of Interest | 12.25% | 12.25% | 12.25% | 12.25% | 12.25% |
| Interest | 2.19 | 8.98 | 12.08 | 72.59 | 13.51 |

TRANSMISSION CHARGES

38. The transmission charges being allowed for the transmission assets are summarized below:

(Rs . in lakh)

| | Asset-I | | Asset-II | | Asset-III |
|------------------------------|-------------------------------|----------------|-------------------------------|----------------|------------------|
| | 2007-08 (Pro rata) | 2008-09 | 2007-08 (Pro rata) | 2008-09 | 2008-09 |
| Depreciation | 16.80 | 69.92 | 72.88 | 438.40 | 80.15 |
| Interest on Loan | 29.83 | 120.95 | 173.70 | 1021.50 | 142.11 |
| Return on Equity | 19.59 | 81.53 | 112.71 | 677.98 | 94.15 |
| Advance against Depreciation | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Interest on Working Capital | 2.19 | 8.98 | 12.08 | 72.59 | 13.51 |
| O & M Expenses | 7.91 | 32.90 | 39.66 | 247.76 | 131.60 |
| Total | 76.32 | 314.29 | 411.02 | 2458.23 | 461.53 |

39. The petitioner is already being paid the transmission charges for the transmission assets on provisional basis in terms of the order dated 30.9.2008 ibid. The transmission charges already recovered shall be adjusted against the final transmission charges approved now.

40. In addition to the transmission charges, the petitioner shall be entitled to other charges like income-tax, incentive, surcharge and other cess and taxes in accordance with the 2004 regulations.

41. The petitioner has sought approval for the reimbursement of expenditure of Rs. 1,52,883/- incurred on publication of notices in the newspapers. The petitioner shall claim reimbursement of the said expenditure directly from the respondents, in one installment in the ratio applicable for sharing of transmission charges. The Commission by its separate general order dated 11.9.2008 in Petition No. 129/2005 (Suo-motu) has decided that the petitioner shall not be allowed reimbursement of the petition filing fee.

42. This order disposes of Petition No. 5/2009.

Sd/-
(V.S.VERMA)
MEMBER

sd/-
(S.JAYARAMAN)
MEMBER

sd/-
(R.KRISHNAMOORTHY)
MEMBER

sd/-
(DR.PRAMOD DEO)
CHAIRPERSON

New Delhi, dated the 20th July 2009

Annexure-I

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

(Rs. in lakh)

| | Details of Loan | 2007-08 | 2008-09 |
|----------|--|--|---------|
| 1 | Bond-XIX | | |
| | Gross Loan opening | 130.00 | 130.00 |
| | Cumulative Repayment up to date of commercial operation /previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 130.00 | 130.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 130.00 | 130.00 |
| | Average Loan | 130.00 | 130.00 |
| | Rate of Interest | 9.25% | 9.25% |
| | Interest | 12.03 | 12.03 |
| | Repayment Schedule | 12 Annual installments from 24.7.2010 | |
| 2 | Bond-XX | | |
| | Gross Loan opening | 300.00 | 300.00 |
| | Cumulative Repayment up to date of commercial operation /previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 300.00 | 300.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year' | 0.00 | 0.00 |
| | Net Loan-Closing | 300.00 | 300.00 |
| | Average Loan | 300.00 | 300.00 |
| | Rate pf Interest | 8.93% | 8.93% |
| | Interest | 26.79 | 26.79 |
| | Repayment Schedule | 12 Annual installments from 7-9-2010 | |
| 3 | Bond-XXI | | |
| | Gross Loan opening | 200.00 | 200.00 |
| | Cumulative Repayment up to date of commercial operation /previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 200.00 | 200.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 200.00 | 200.00 |
| | Average Loan | 200.00 | 200.00 |
| | Rate of Interest | 8.73% | 8.73% |
| | Interest | 17.46 | 17.46 |
| | Repayment Schedule | 12 Annual installments from 11-10-2010 | |
| 4 | Bond-XXII | | |
| | Gross Loan opening | 200.00 | 200.00 |
| | Cumulative Repayment up to date of commercial operation /previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 200.00 | 200.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 200.00 | 200.00 |
| | Average Loan | 200.00 | 200.00 |
| | Rate of Interest | 8.68% | 8.68% |
| | Interest | 17.36 | 17.36 |

| | | | |
|---|--|---------------------------------------|---------|
| | Repayment Schedule | 12 Annual installments from 7-12-2010 | |
| 5 | Bond-XXIV | | |
| | Gross Loan opening | 400.00 | 400.00 |
| | Cumulative Repayment up to date of commercial operation /previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 400.00 | 400.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 400.00 | 400.00 |
| | Average Loan | 400.00 | 400.00 |
| | Rate of Interest | 9.95% | 9.95% |
| | Interest | 39.80 | 39.80 |
| | Repayment Schedule | 12 Annual installments from 26-3-2011 | |
| 6 | Bond-XXV | | |
| | Gross Loan opening | 24.00 | 24.00 |
| | Cumulative Repayment up to date of commercial operation /previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 24.00 | 24.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 24.00 | 24.00 |
| | Average Loan | 24.00 | 24.00 |
| | Rate of Interest | 10.10% | 10.10% |
| | Interest | 2.42 | 2.42 |
| | Repayment Schedule | 12 Annual installments from 12-6-2011 | |
| 7 | Bond XXVI (Bridge loan from ICICI 01.01.2008 to 06.03.2008 @ 8% Replaced by Bond XXVI @ 9.3% from 07.03.2008 (ADDCAP FOER 2007-2008)) | | |
| | Gross Loan opening | 0.00 | 151.00 |
| | Cumulative Repayment up to date of commercial operation /previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 0.00 | 151.00 |
| | Additions during the year | 151.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 151.00 | 151.00 |
| | Average Loan | 75.50 | 151.00 |
| | Rate of Interest | 8.36% | 9.30% |
| | Interest | 6.31 | 14.04 |
| | Repayment Schedule | 12 Annual installments from 7.3.2012 | |
| | Total Loan | | |
| | Gross Loan opening | 1254.00 | 1405.00 |
| | Cumulative Repayment up to date of commercial operation | 0.00 | 0.00 |
| | Net Loan-Opening | 1254.00 | 1405.00 |
| | Additions during the year | 151.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 1405.00 | 1405.00 |
| | Average Loan | 1329.50 | 1405.00 |
| | Rate of Interest | 9.1892% | 9.2457% |
| | Interest | 122.17 | 129.90 |

Annexure II

(Rs. in lakh)

| | Details of Loan | 2007-08 | 2008-09 |
|---|--|---|---------|
| 1 | Bond-XIX | | |
| | Gross Loan opening | 260.00 | 260.00 |
| | Cumulative Repayment up to date of commercial operation /previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 260.00 | 260.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 260.00 | 260.00 |
| | Average Loan | 260.00 | 260.00 |
| | Rate of Interest | 9.25% | 9.25% |
| | Interest | 24.05 | .24.05 |
| | Repayment Schedule | 12 Annual installments from | |
| 2 | Bond-XX | | |
| | Gross Loan opening | 930.00 | 930.00 |
| | Cumulative Repayment up to date of commercial operation /previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 930.00 | 930.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 930.00 | 930.00 |
| | Average Loan | 930.00 | 930.00 |
| | Rate of Interest | 8.93% | 8.93% |
| | Interest | 83.05 | 83.05 |
| | Repayment Schedule | 12 Annual installments from 7.9.2010 | |
| 3 | Bond-XXI | | |
| | Gross Loan opening | 1600.00 | 1600.00 |
| | Cumulative Repayment up to date of commercial operation /previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 1600.00 | 1600.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 1600.00 | 1600.00 |
| | Average Loan | 1600.00 | 1600.00 |
| | Rate of Interest | 8.73% | 8.73% |
| | Interest | 139.68 | 139.68 |
| | Repayment Schedule | 12 Annual installments from 11.10.2010 | |
| 4 | Bond-XXII | | |
| | Gross Loan opening | 3860.00 | 3860.00 |
| | Cumulative Repayment up to date of commercial operation /previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 3860.00 | 3860.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 3860.00 | 3860.00 |
| | Average Loan | 3860.00 | 3860.00 |
| | Rate of Interest | 8.68% | 8.68% |

| | | | |
|---|---|---------------------------------------|----------|
| | Interest | 335.05 | 335.05 |
| | Repayment Schedule | 12 Annual installments from | |
| 5 | Bond-XXIV | | |
| | Gross Loan opening | 1690.00 | 1690.00 |
| | Cumulative Repayment up to date of commercial operation /previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 1690.00 | 1690.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 1690.00 | 1690.00 |
| | Average Loan | 1690.00 | 1690.00 |
| | Rate of Interest | 9.95% | 9.95% |
| | Interest | 168.16 | 168.16 |
| | Repayment Schedule | 12 Annual installments from 26.3.2011 | |
| 6 | Bond-XXV | | |
| | Gross Loan opening | 2903.00 | 2903.00 |
| | Cumulative Repayment up to date of commercial operation /previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 2903.00 | 2903.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 2903.00 | 2903.00 |
| | Average Loan | 2903.00 | 2903.00 |
| | Rate of Interest | 10.10% | 10.10% |
| | Interest | 293.20 | • 293.20 |
| | Repayment Schedule | 12 Annual installments from 12.6.2011 | |
| 7 | Bond XXVI (Bridge loan from ICICI 01.02.2008 to 06.03.2008 @ 8% Replaced by Bond XXVI @ 9.3% from 07.03.2008 (Additional capital expenditure for 2007-2008)) | | |
| | Gross Loan opening | 0.00 | 83.00 |
| | Cumulative Repayment up to date of commercial operation /previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 0.00 | 83.00 |
| | Additions during the year | 83.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 83.00 | 83.00 |
| | Average Loan | 41.50 | 83.00 |
| | Rate of Interest | 8.54% | 9.30% |
| | Interest | 3.54 | 7.72 |
| | Repayment Schedule | 12 Annual installments from 7.3.2012 | |
| | Total Loan | | |
| | Gross Loan opening | 11243.00 | 11326.00 |
| | Cumulative Repayment up to date of commercial operation | 0.00 | 0.00 |
| | Net Loan-Opening | 11243.00 | 11326.00 |
| | Additions during the year | 83.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 11326.00 | 11326.00 |
| | Average Loan | 11284.50 | 11326.00 |
| | Rate of Interest | 9.2758% | 9.2787% |
| | Interest | 1046.73 | 1050.90 |

Annexure III

(Rs. In lakh)

| Details of Loan | | 2008-09 |
|-----------------|--|--|
| 1 | Bond-XIX | |
| | Gross Loan opening | 50.00 |
| | Cumulative Repayment up to date of commercial operation /previous year | 0.00 |
| | Net Loan-Opening | 50.00 |
| | Additions during the year | 0.00 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing . | 50.00 |
| | Average Loan | 50.00 |
| | Rate of Interest | 9.25% |
| | Interest | 4.63 |
| | Repayment Schedule | 12 Annual installments from 24.7.2010 |
| 2 | Bond-XX | |
| | Gross Loan opening | 200.00 |
| | Cumulative Repayment up to date of commercial operation /previous year | 0.00 |
| | Net Loan-Opening | 200.00 |
| | Additions during the year | 0.00 |
| | Repayment during the year . | 0.00 |
| | Net Loan-Closing | 200.00 |
| | Average Loan | 200.00 |
| | Rate of Interest " | 8.93% |
| | Interest | 17.86 |
| | Repayment Schedule | 12 Annual installments from 7.9.2010 |
| 3 | Bond-XXI | |
| | Gross Loan opening | 200.00 |
| | Cumulative Repayment up to date of commercial operation /previous year | 0.00 |
| | Net Loan-Opening | 200.00 |
| | Additions during the year | 0.00 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 200.00 |
| | Average Loan | 200.00 |
| | Rate of Interest | 8.73% |
| | Interest | 17.46 |
| | Repayment Schedule | 12 Annual installments from 11.10.2010 |
| 4 | Bond-XXII | |
| | Gross Loan opening | 200.00 |
| | Cumulative Repayment up to date of commercial operation /previous year | 0.00 |
| | Net Loan-Opening | 200.00 |
| | Additions during the year | 0.00 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 200.00 |
| | Average Loan | 200.00 |
| | Rate of Interest | 8.68% |
| | Interest | 17.36 |

| | | | |
|---|---|---|---------|
| | Repayment Schedule | 12 Annual installments from 7.12.2010 | |
| 5 | Bond-XXIV | | |
| | Gross Loan opening | | 100.00 |
| | Cumulative Repayment up to date of commercial operation /previous year | | 0.00 |
| | Net Loan-Opening | | 100.00 |
| | Additions during the year | | 0.00 |
| | Repayment during the year | | 0.00 |
| | Net Loan-Closing | | 100.00 |
| | Average Loan | | 100.00 |
| | Rate of Interest | | 9.95% |
| | Interest | | 9.95 |
| | Repayment Schedule | 12 Annual installments- from 26.3.2011 \ | |
| 6 | Bond-XXV | | |
| | Gross Loan opening | | .300.00 |
| | Cumulative Repayment up to-date of commercial operation /previous year | | 0.00 |
| | Net Loan-Opening | | 300.00 |
| | Additions during the year | | 0.00 |
| | Repayment during the year | | 0.00 |
| | Net Loan-Closing | | 300.00 |
| | Average Loan | | 300.00 |
| | Rate of Interest | | 10.10% |
| | Interest | | 30.30 |
| | Repayment Schedule | 12 Annual installments from 12.6.2011 ' | |
| 7 | Bond-XXVI | | |
| | Gross Loan opening | | 519.00 |
| | Cumulative Repayment up to date of commercial operation /previous year | | 0.00 |
| | Net Loan-Opening | | 519.00 |
| | Additions during the year | | 0.00 |
| | Repayment during the year | | 0.00 |
| | Net Loan-Closing | | 519.00 |
| | Average Loan | | 519.00 |
| | Rate of Interest | | 9.30% |
| | Interest | 0.00 | 48.27 |
| | Repayment Schedule | 12 Annual installments from 7.3.2012 | |
| | Total Loan | | |
| | Gross Loan opening | | 1569.00 |
| | Cumulative Repayment up to date of commercial operation | | 0.00 |
| | Net Loan-Opening | | 1569.00 |
| | Additions during the year | | 0.00 |
| | Repayment during the year | | 0.00 |
| | Net Loan-Closing | | 1569.00 |
| | Average Loan | | 1569.00 |
| | Rate of Interest | | 9.2939% |
| | Interest | | 145.82 |

| | | | |
|---|--|---------------------------------------|--------|
| | Repayment Schedule | 12 Annual installments from 7-12-2010 | |
| 5 | Bond-XXIV | | |
| | Gross Loan opening | 400.00 | 400.00 |
| | Cumulative Repayment up to date of commercial operation /previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 400.00 | 400.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 400.00 | 400.00 |
| | Average Loan | 400.00 | 400.00 |
| | Rate of Interest | 9.95% | 9.95% |
| | Interest | 39.80 | 39.80 |
| | Repayment Schedule | 12 Annual installments from 26-3-2011 | |
| 6 | Bond-XXV | | |
| | Gross Loan opening | 24.00 | 24.00 |
| | Cumulative Repayment up to date of commercial operation /previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 24.00 | 24.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 24.00 | 24.00 |
| | Average Loan | 24.00 | 24.00 |
| | Rate of Interest | 10.10% | 10.10% |
| | Interest | 2.42 | 2.42 |
| | Repayment Schedule | 12 Annual installments from 12-6-2011 | |