

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 163/2009

Coram:

- 1. Shri S.Jayaraman, Member**
- 2. Shri V.S.Verma, Member**

DATE OF HEARING: 19.11.2009

DATE OF ORDER: 15.2.2010

In the matter of

Determination of final transmission tariff and additional capital expenditure up to 31.3.2009 for (i) ICT-I along with associated bays at Ludhiana sub-station; (ii) Total Upstream system including Malerkotla-Ludhiana-Jalandhar transmission line along with associated bays at Ludhiana sub-station, Malerkotla sub-station and Jalandhar sub-station and shunt reactor along with associated bays at Ludhiana sub-station; (iii) ICT-II along with associated bays at Ludhiana sub-station under Northern Region System Strengthening Scheme-III in Northern Region from the date of commercial operation to 31.3.2009.

And in the matter of

Power Grid Corporation of India Limited, Gurgaon **..Petitioner**

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited, Jaipur
2. Ajmer Vidyut Vitaran Nigam Ltd., Jaipur
3. Jaipur Vidyut Vitaran Nigam Ltd, Jaipur
4. Jodhpur Vidyut Vitaran Nigam Ltd, Jaipur
5. Himachal Pradesh State Electricity Board, Shimla
6. Punjab State Electricity Board, Patiala
7. Haryana Power Purchase Centre, Panchkula
8. Power Development Department, Govt. of J&K, Jammu
9. Uttar Pradesh Power Corporation Ltd, Lucknow
10. Delhi Transco Ltd, New Delhi
11. BSES Yamuna Power Limited, New Delhi
12. BSES Rajdhani Power Ltd., New Delhi
13. North Delhi Power Ltd., New Delhi
14. Chandigarh Administration, Chandigarh
15. Uttarakhand Power Corporation Ltd, Dehradun
16. North Central Railway, Allahabad
17. New Delhi Municipal Council, New Delhi **.....Respondents**

The following were present:

1. Shri U.K.Tyagi, PGCIL
2. Shri M.M.Mondal, PGCIL
3. Shar Rakesh Prasad, PGCIL

ORDER

This petition has been filed seeking approval of transmission charges for (i) ICT-I along with associated bays at Ludhiana sub-station (Asset-I); (ii) Total Upstream system including Malerkotla-Ludhiana-Jalandhar transmission line along with associated bays at Ludhiana sub-station, Malerkotla sub-station and Jalandhar sub-station and shunt reactor along with associated bays at Ludhiana sub-station (Asset-II); (iii) ICT-II along with associated bays at Ludhiana sub-station (Asset-III) under Northern Region System Strengthening Scheme-III (the transmission scheme) in Northern Region from the 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 2008-09. The petitioner has also prayed for reimbursement, from the beneficiaries, of the expenditure incurred towards publishing of notices in newspapers, petition filing fee and licence fee.

2. The investment approval for the transmission scheme was accorded by Board of Directors of the petitioner company vide its letter dated 13.7.2004 at an estimated cost of Rs.23052 lakh, which includes IDC of Rs. 1477 lakh (at 4th quarter 2003 price level). Subsequently, approval for the revised cost estimate for the transmission scheme was accorded by Board of Directors vide letter

dated 26.2.2008 at an estimated cost of Rs.32690 lakh, including IDC of Rs. 1826 lakh (2nd quarter 2007 price level).

3. The provisional transmission charges for the transmission assets were approved by the Commission vide order dated 9.1.2009 in Petition No. 150/2008.

4. The date of commercial operation of the transmission assets, their apportioned approved cost and estimated completion cost, etc. are as under:

(Rs in lakh)

| S. No. | Name of Asset | Date of commercial operation | Apportioned approved cost | Expenditure up to the date of commercial operation | Expenditure from the date of commercial operation to 31.3.2009 | Balance Estimated Expenditure |
|--------|---------------|------------------------------|---------------------------|--|--|-------------------------------|
| 1. | Asset-I | 1.6.2008 | 3679.90 | 2648.14 | 411.99 | 300.83 |
| 2. | Asset-II | 1.6.2008 | 11769.97 | 9740.51 | 852.50 | 543.08 |
| 3. | Asset-III | 1.7.2008 | 3679.90 | 2675.32 | 387.13 | 301.05 |

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

(Rs. in lakh)

| | Asset- I 2008-09 (Pro rata) | Asset-II 2008-09 (Pro rata) | Asset-III 2008-09 (Pro rata) |
|------------------------------|--|--|---|
| Depreciation | 75.36 | 241.70 | 68.22 |
| Interest on Loan | 153.23 | 542.84 | 147.61 |
| Return on Equity | 99.86 | 355.99 | 90.34 |
| Advance against Depreciation | 0.00 | 0.00 | 0.00 |
| Interest on Working Capital | 11.32 | 39.04 | 13.52 |
| O & M Expenses | 54.83 | 163.80 | 148.05 |
| Total | 394.60 | 1343.37 | 467.74 |

6. 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 |
|--------------------|-----------------------|-----------------------|-----------------------|
| | 2008-09 (Pro rata) | 2008-09 (Pro rata) | 2008-09 (Pro rata) |
| Maintenance Spares | 26.48 | 97.41 | 26.75 |
| O & M expenses | 5.48 | 16.38 | 16.45 |
| Receivables | 78.92 | 268.67 | 103.94 |
| Total | 110.88 | 382.46 | 147.14 |
| Rate of Interest | 12.25% | 12.25% | 12.25% |
| Interest | 11.32 | 39.04 | 13.52 |

7. The reply to the petition has been filed by Ajmer Vidyut Vitran Nigam Limited(AVVNL), Jaipur Vidyut Vitran Nigam Limited (JVNL) and Jodhpur Vidyut Vitran Nigam Limited (JdVNL). 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.

CAPITAL COST

8. 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 of 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.

9. The petitioner has claimed tariff after accounting for additional capital expenditure in respect of Asset-I, Asset-II and Asset-III from the date of

commercial operation up to 31.3.2009 as given in the table below para 4 above.

ADDITIONAL CAPITALIZATION 2008-09

10. 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.”

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

| Asset-I | | | Asset-II | | | Asset-III | | |
|---------|---|-----------------------------------|----------|---|-----------------------------------|-----------|---|-----------------------------------|
| Year | Amount (Rs. in lakh) | Nature and details of expenditure | Year | Amount (Rs. in lakh) | Nature and details of expenditure | Year | Amount (Rs. in lakh) | Nature and details of expenditure |
| 2008-09 | Building, sub-station and PLCC: Rs. 411.99 lakh | Final/retention payments | 2008-09 | Building, Transmission line, sub-station and PLCC: Rs 852.50 lakh | Final/retention payments | 2008-09 | Building, sub-station and PLCC: Rs. 387.13 lakh | Final/retention payments |
| Total | Rs. 411.99 lakh | | Total | Rs. 852.50 lakh | | | Rs. 387.13 lakh | |

12. 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, Asset-II and Asset-III, respectively.

Initial spares

13. Clause (1) of the Regulation 52 of the 2004 regulations *inter alia* provides that,-

“(1) Subject to prudence check by the Commission, 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 capitalized initial spares subject to a ceiling norm as 1.5% of original project cost”.

14. The details of actual expenditure incurred and spares included therein by the petitioner as per original scope of project up to 31.3.2009 are as under:-

| | Particulars | Capital Expenditures (Rs in lakh) | | | | | Remarks |
|----|--|------------------------------------|---|-----------------------------|---------|---------------------------------|--|
| | | Up to date of commercial operation | From the date of commercial operation to 31-03-2008 | From 1-4-2008 to 31-03-2009 | Total | Initial Spares included therein | |
| 1 | 50 MVAR Bus Reactor at Hissar sub-station (date of commercial operation 1.7.2007) | 118.74 | 19.09 | ----- | 137.83 | - | Final transmission tariff up to date of commercial operation and add cap up to 31.03.2008 allowed vide petition No. 134/2008 |
| 2 | LILO of 400 kV Moga-Hissar line, ICT-I at Fatehabad sub-station, 4 No.s 220kV line bays(feeders from Fatehabad-1 and Fatehabad-2) and 50 MVAR Bus Reactor bay along with associated bays at Fatehabad sub-station (date of commercial operation 1.02.08) | 9227.36 | 216.62 | ----- | 9443.98 | Not shown in CA certificate | |
| 3. | 315 MVA, 400/220 kV ICT-II along with associated bays at 400/220kV Fatehabad sub-station. (date of commercial operation 1.04.08) | 1001.53 | 0 | ----- | 1001.53 | Not shown in CA certificate | |

| | | | | | | | |
|----|---|---------|-------|--------|----------|--------|----------------------------------|
| 4. | ICT-I along with associated bays at Ludhiana Sub-station (date of commercial operation 01.06.2008) | 2648.14 | ----- | 411.99 | 3060.13 | 56.29 | Included in this tariff Petition |
| 5. | Malerkotla-Ludhiana-Jalandhar Transmission line along with associated bays at Ludhiana sub-station, Malerkotla sub-station & Shunt Reactor along with associated bays at Ludhiana sub-station (date of commercial operation 1.6.2008) | 9740.51 | ----- | 852.5 | 10593.01 | 133.33 | |
| 6. | ICT-II along with associated bays at Ludhiana sub-station (date of commercial operation 1.7.2008) | 2675.32 | ----- | 387.13 | 3062.45 | 56.33 | |

15. The total actual expenditure incurred by petitioner for assets at Sl. No. 1, 2, and 3 up to 31.3.2008 is Rs. 10583.34 lakh and Nil value of spares has been included therein. The final transmission tariff for these assets for the period from the date of commercial operation to 31.3.2008 was awarded vide petition No. 134/2008. Regarding assets at Sl. No. 3, 4 and 5 above which have now been claimed under this petition, the total actual expenditure incurred by the petitioner up to 31.3.2009 is Rs. 16715.59 lakh and spares of value Rs. 245.95 lakh have been included therein. The cost without initial spares is Rs. 27052.98 and cost of spares included therein of Rs. 245.95 lakh is found within the ceiling of 1.5% as per the 2004 regulations.

Time over-run

16. As per the investment approval, the transmission assets were scheduled to be commissioned by April 2008. However, transmission Asset-I and Asset-II have been declared under commercial operation on 1.6.2008 and Asset-III 1.7.2009. Therefore, there is a time delay of about 2 and 3 months in the commissioning of the transmission assets. The petitioner has submitted that the delay was due to late handing over of Ludhiana sub-station.

17. During the hearing, the representative of the petitioner submitted that there was delay of 10 -11 months in handing over the land against 2-3 months delay in completion of said assets. The Commission pointed out that the above data indicates that there would have been substantial cushion in the implementation schedule to absorb 11 months delay in handing over the land by the concerned authorities. Accordingly, the petitioner was directed to submit justification of project implementation schedule of 33 months.

18. The petitioner vide its affidavit dated 11.12.2009 has submitted the justification with implementation schedule. The petitioner has submitted that the key milestones as planned and actually performed for Ludhiana sub-station as under:

- | | |
|--|---|
| (a) Date of Investment approval: | 13.7.2004 |
| (b) Completion schedule: | 33 months from 1 st LOA of Sub-station package dated 29/6/2005 for Fatehabad sub-station under the same project) |
| (c) Completion date: | March 2008 |
| (d) Schedule date of land handing over: To the executing agency as per terms of LOA for Ludhiana sub-station | May 2006 |
| (e) Actual date of land handing over: | July 2006 |
| (f) Delay in handing over: | 3 months (May 2006 to July 2006) |

19. The petitioner has mentioned that as per the PERT net work (Gantt. Chart), the project had an implementation period of 33 months from the date of first letter of award, i.e 29.6.2005 for sub-station package with a consideration of 24 moths for execution of sub-station works. The petitioner

has further submitted that the activities were so scheduled to complete the tendering and awards matching with planned acquisition of land and the levelling of land before its hand-over to the executing agency for taking up the site activities.

20. The petitioner had earlier stated that there was a delay of 11 months in land handling over on the basis of the time difference between the LOA dated 25.8.2005 of Ludhiana sub-station to actual handing over the land in July 2006. However, as per LOA the executing agency needed land in May 2006 and actually it was handed over in July 2006. Thus, actual delay in land handing over, affecting the execution at site was only 2-3 months not 11 months as earlier stated. The petitioner further submitted that there was a time lag (depending upon availability of working season) between the award of contract and commencement of site activities (actual requirement of land) which is for finalization of civil designs, appointment of civil agency, finalisation of source of construction materials, procurement and mobilization.

21. The petitioner has submitted that the 33 months period was from 1st LOA of sub-station package dated 20.6.2005 for Fatehabad sub-station under the same project. Thus, the scheduled completion was March 2008. This indicates delay of 2-3 months. It appears that about 11 months (June 2005 to May 2006) were kept for acquisition of land and its levelling etc. before handing over to the executing agency in May 2006 and other parallel activities of award for the sub-station finalization of design, manufacturing and mobilization etc. This period would differ from project to project based on

the likelihood of availability of land, working season and other factors affecting the parallel activities. In this case, the land was actually handed over in July 2006 instead of May 2006 leading to minor delay of 2-3 months.

22. The Justification submitted by the petitioner has been found in order. Hence delay is condoned.

TOTAL CAPITAL COST

23. Based on the above, gross block as given below has been considered for the purpose of tariff in respect of 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 asset | Admitted capital cost as on the date of commercial operation | Additional capital expenditure up to 31.3.2009 | Total Capital expenditure as on 1.4.2009 |
| Asset-I | 2648.14 | 411.99 | 3060.13 |
| Asset-II | 9740.51 | 852.50 | 10593.01 |
| Asset-III | 2675.32 | 387.13 | 3062.45 |

24. AVVNL, JVVNL and JdVVNL vide their replies have raised the issue of higher cost etc. In this regard it is mentioned that there has been increase in the estimated cost as per the revised cost estimate from the investment approval. The contracts for various packages under the transmission scheme was awarded to the lowest evaluated and responsive bidder, on the basis of the competitive bidding after publication of the NITs in leading news papers. Thus, the awarded price represents the lowest prices available at the time of bidding of various packages.

25. It is mentioned that the price variation observed during execution of the scheme is attributable to the inflationary trend prevailing during execution of the scheme and also market forces prevailing at the time of bidding process of various packages for execution of project. Due to these reasons, the estimated cost as per revised cost estimate has increased.

DEBT- EQUITY RATIO

26. 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.”

27. Note 1 below Regulation 53 of the 2004 regulations lays down that any expenditure on account of committed liabilities within the original scope of

work is to be serviced in the normative debt-equity ratio specified in Regulation 54.

28. The petitioner has considered debt-equity ratio of 70.01:29.99, 70:30 and 70.01:29.99 for Asset-I, Asset-II and Asset-III, respectively, as actually deployed on the date of commercial operation. The petitioner has further considered the amount of additional capitalization in the debt-equity ratio of 70:30 for both Asset-I, Asset-II and Asset-III. As per the petition, in case of Asset-II equity claimed by the petitioner as on date of the commercial operation is slightly in excess of 30% (i.e. 30.01%). The same has been restricted to 30% for the purpose of tariff calculations. The additional capital expenditure approved in the ratio of 70:30 has been considered in accordance with the 2004 regulations. Accordingly, for the purpose of tariff, equity considered for the transmission assets is as under:

(Rs. in lakh)

| Assets | Equity on the date of commercial operation | Notional equity due to additional capital expenditure for the period 2008-09 | Average equity for 2008-09 |
|-----------|--|--|----------------------------|
| Asset-I | 794.14 | 123.60 | 917.74 |
| Asset-II | 2922.15 | 255.75 | 3177.90 |
| Asset-III | 802.32 | 116.14 | 918.46 |

RETURN ON EQUITY

29. 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.

30. Equity has been considered as on the date of commercial operation as given in the table in para 28 above. However, tariff for the period from date of commercial operation to 31.3.2009 has been allowed on average equity. Accordingly, the petitioner shall be entitled to return on equity of Rs. 99.86 lakh , Rs.355.84 lakh and Rs.90.34 lakh on pro rata basis for Asset-I, Asset-II and Asset-III respectively.

INTEREST ON LOAN

31. 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."

32. 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 31.3.2009 has been added to the 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 Bank of Baroda loan was replaced by Bond XXVIII w.e.f. 15.12.2008. Weighted average rate of interest for 2008-09 has been considered based on number of days on actual loans.

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

| | (Rs. in lakh) | | |
|---|-----------------------|-----------------------|-----------------------|
| | Asset-I | Asset-II | Asset-III |
| | 2008-09 (Pro rata) | 2008-09 (Pro rata) | 2008-09 (Pro rata) |
| Gross Normative Loan | 1854.00 | 6818.36 | 1873.00 |
| Cumulative Repayment up to Previous Year/date of commercial operation | 0.00 | 0.00 | 0.00 |
| Net Loan-Opening | 1854.00 | 6818.36 | 1873.00 |
| Addition due to Additional Capitalisation | 288.39 | 596.75 | 270.99 |
| Repayment during the year | 75.36 | 241.70 | 68.22 |
| Net Loan-Closing | 2067.04 | 7173.41 | 2075.77 |
| Average Loan | 1960.52 | 6995.88 | 1974.39 |
| Weighted Average Rate of Interest on Loan | 9.38% | 9.31% | 9.97% |
| Interest | 153.23 | 542.95 | 147.61 |

34. The detailed calculations in support of the weighted average rate of interest in respect of Asset-I, Asset-II and Asset-III are contained in Annexure-I, Annexure-II and Annexure-III respectively attached to this order.

DEPRECIATION

35. 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.”

36. Based on the above, depreciation allowed has been worked out as below:

| | (Rs. in lakh) | | |
|--|-----------------------|-----------------------|-----------------------|
| | Asset-I | Asset-II | Asset-III |
| | 2008-09 (Pro rata) | 2008-09 (Pro rata) | 2008-09 (Pro rata) |
| Gross block as on the date of commercial operation | 2648.14 | 9740.51 | 2675.32 |
| Addition due to Additional Capitalisation during 2008-09 | 411.99 | 852.50 | 387.13 |
| Gross Block at the end of the year | 3060.13 | 10593.01 | 3062.45 |
| Rate of Depreciation | 3.1683% | 2.8528% | 3.1705% |
| Depreciable Value | 2305.44 | 8952.61 | 2318.71 |
| Balance Useful life of the asset | - | - | - |
| Remaining Depreciable Value | 2305.44 | 8952.61 | 2318.71 |
| Depreciation | 75.36 | 241.70 | 68.22 |

ADVANCE AGAINST DEPRECIATION

37. 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

38. It is provided that Advance Against Depreciation shall be permitted only if the cumulative repayment up 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.

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

OPERATION & MAINTENANCE EXPENSES

40. 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 |

41. The petitioner has claimed O & M expenses for two bays for Asset-I, 120.505 ckt.km and five bays for Asset- II and six 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 | | Asst-III | |
|-------------------------|--------------------|---|--------------------|-------------------------|--------------------|
| | 2008-09 (Pro rata) | | 2008-09 (Pro rata) | | 2008-09 (Pro rata) |
| | | Allowable O & M expenses for 120.505 ckt.km | 26.71 | | |
| O&M expenses for 2 bays | 54.83 | O&M expenses for 5 bay | 137.08 | O&M expenses for 6 bays | 148.05 |
| Total | 54.83 | Total | 163.80 | Total | 148.05 |

42. 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 actual based on the auditor's certificate for such extra employee cost. We are not expressing any view, as this issue does not arise for consideration at this stage. The petitioner may approach for relief in this regard at an appropriate stage in accordance with law.

INTEREST ON WORKING CAPITAL

43. 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. 26.48 lakh, Rs. 97.41 lakh and Rs. 26.75 lakh for Asset-I, Asset-II and Asset-III, respectively as on 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 the date of commercial operation (Rs. in lakh) |
|---------------------|------------------------------|---|---|
| Asset- I | 1.6.2008 | 2648.14 | 26.48 |
| Asset-II | 1.6.2008 | 9740.51 | 97.41 |
| Asst-III | 1.7.2008 | 2675.32 | 26.75 |

(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 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.

(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 1.4.2008, which is in accordance with the 2004 regulations and has been allowed.

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

(Rs. in lakh)

| | Asset- I | Asset-II | Asset-III |
|--------------------|-----------------------|-----------------------|-----------------------|
| | 2008-09 (Pro rata) | 2008-09 (Pro rata) | 2008-09 (Pro rata) |
| Maintenance Spares | 26.48 | 97.41 | 26.75 |
| O & M expenses | 5.48 | 16.38 | 16.45 |
| Receivables | 78.92 | 268.66 | 103.94 |
| Total | 110.88 | 382.45 | 147.15 |
| Rate of Interest | 12.25% | 12.25% | 12.25% |
| Interest | 11.32 | 39.04 | 13.52 |

TRANSMISSION CHARGES

45. The transmission charges being allowed for the three transmission assets are summarised below:

(Rs. in lakh)

| | Asset-I | Asset-II | Asset-III |
|------------------------------|-----------------------|-----------------------|-----------------------|
| | 2008-09 (Pro rata) | 2008-09 (Pro rata) | 2008-09 (Pro rata) |
| Depreciation | 75.36 | 241.70 | 68.22 |
| Interest on Loan | 153.23 | 542.95 | 147.61 |
| Return on Equity | 99.86 | 355.84 | 90.34 |
| Advance against Depreciation | 0.00 | 0.00 | 0.00 |
| Interest on Working Capital | 11.32 | 39.04 | 13.52 |
| O & M Expenses | 54.83 | 163.80 | 148.05 |
| Total | 394.60 | 1343.31 | 467.74 |

46. 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.

47. The petitioner has sought approval for the reimbursement of expenditure of Rs. 3,58,165/- 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.

48. The reimbursement of filing fee is not being allowed in terms of the Commission's order dated 11.9.2008 in Petition No. 129/2005. The decision on reimbursement of licence fee will be communicated separately.

49. Transmission charges for Asset-I and Asset-III shall be shared by the local beneficiaries as per order dated 9.1.2009 in petition No. 150/2008 in line with order dated 28.3.2008 in Petition No. 85/2007 and charges for Asset-II shall be shared by all the Northern Regional beneficiaries as per the provisions of the 2004 regulations.

50. This order disposes of Petition No. 163/2009.

Sd/-
(V.S.VERMA)
MEMBER

sd/-
(S.JAYARAMAN)
MEMBER

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

ASSET-I

| | Details of Loan | 2008-09 |
|----------|--|---------------------------------------|
| 1 | Bond-XX | |
| | Gross Loan opening | 600.00 |
| | Cumulative Repayment up to the date of commercial operation/previous year | 0.00 |
| | Net Loan-Opening | 600.00 |
| | Additions during the year | 0.00 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 600.00 |
| | Average Loan | 600.00 |
| | Rate of Interest | 8.93% |
| | Interest | 53.58 |
| | Repayment Schedule | 12 Annual instalments from 7-9-2010 |
| 2 | Bond-XXI | |
| | Gross Loan opening | 25.00 |
| | Cumulative Repayment up to the date of commercial operation /previous year | 0.00 |
| | Net Loan-Opening | 25.00 |
| | Additions during the year | 0.00 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 25.00 |
| | Average Loan | 25.00 |
| | Rate of Interest | 8.73% |
| | Interest | 2.18 |
| | Repayment Schedule | 12 Annual instalments from 11.10.2010 |
| 3 | Bond-XXII | |
| | Gross Loan opening | 200.00 |
| | Cumulative Repayment up to the 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 instalments from 07.12.2010 |
| 4 | Bond-XXIV | |
| | Gross Loan opening | 129.00 |
| | Cumulative Repayment up to the date of commercial operation /previous year | 0.00 |
| | Net Loan-Opening | 129.00 |
| | Additions during the year | 0.00 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 129.00 |
| | Average Loan | 129.00 |

| | | |
|----------|--|---------------------------------------|
| | Rate of Interest | 9.95% |
| | Interest | 12.84 |
| | Repayment Schedule | 12 Annual instalments from 2.6.2011 |
| 5 | Bond- XXV | |
| | Gross Loan opening | 200.00 |
| | Cumulative Repayment up to the 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 | 10.10% |
| | Interest | 20.20 |
| | Repayment Schedule | 12 Annual instalments from 12.6.2011 |
| 6 | Bond- XXVI | |
| | Gross Loan opening | 700.00 |
| | Cumulative Repayment up to the date of commercial operation /previous year | 0.00 |
| | Net Loan-Opening | 700.00 |
| | Additions during the year | 0.00 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 700.00 |
| | Average Loan | 700.00 |
| | Rate of Interest | 9.30% |
| | Interest | 65.10 |
| | Repayment Schedule | 12 Annual instalments from 7.3.2012 |
| 7 | STBL from BOB 29.09.2008 to 14.12.2008 @12.5% replaced by BOND XXVIII @ 9.33% from 15.12.2008 | |
| | Gross Loan opening | 0.00 |
| | Cumulative Repayment up to the date of commercial operation /previous year | 0.00 |
| | Net Loan-Opening | 0.00 |
| | Additions during the year | 411.99 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 411.99 |
| | Average Loan | 206.00 |
| | Rate of Interest | 10.66% |
| | Interest | 21.95 |
| | Repayment Schedule | 12 Annual instalments from 15.12.2012 |
| 1 | Total Loan | |
| | Gross Loan opening | 1854.00 |
| | Cumulative Repayment up to the date of commercial operation | 0.00 |
| | Net Loan-Opening | 1854.00 |
| | Additions during the year | 411.99 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 2265.99 |
| | Average Loan | 2060.00 |
| | Rate of Interest | 9.38% |
| | Interest | 193.21 |

ASSET-II

| | | (Rs. in lakh) |
|--|---------------------------------------|---------------|
| Details of Loan | 2008-09 | |
| 1 Bond-XX | | |
| Gross Loan opening | 2100.00 | |
| Cumulative Repayment up to the date of commercial operation /previous year | 0.00 | |
| Net Loan-Opening | 2100.00 | |
| Additions during the year | 0.00 | |
| Repayment during the year | 0.00 | |
| Net Loan-Closing | 2100.00 | |
| Average Loan | 2100.00 | |
| Rate of Interest | 8.93% | |
| Interest | 187.53 | |
| Repayment Schedule | 12 Annual instalments from 7-9-2010 | |
| 2 Bond-XXI | | |
| Gross Loan opening | 167.00 | |
| Cumulative Repayment up to the date of commercial operation /previous year | 0.00 | |
| Net Loan-Opening | 167.00 | |
| Additions during the year | 0.00 | |
| Repayment during the year | 0.00 | |
| Net Loan-Closing | 167.00 | |
| Average Loan | 167.00 | |
| Rate of Interest | 8.73% | |
| Interest | 14.58 | |
| Repayment Schedule | 12 Annual instalments from 11.10.2010 | |
| 3 Bond-XXII | | |
| Gross Loan opening | 750.00 | |
| Cumulative Repayment up to the date of commercial operation /previous year | 0.00 | |
| Net Loan-Opening | 750.00 | |
| Additions during the year | 0.00 | |
| Repayment during the year | 0.00 | |
| Net Loan-Closing | 750.00 | |
| Average Loan | 750.00 | |
| Rate of Interest | 8.68% | |
| Interest | 65.10 | |
| Repayment Schedule | 12 Annual instalments from 7.12.2010 | |
| 4 Bond-XXIV | | |
| Gross Loan opening | 700.00 | |
| Cumulative Repayment up to the date of commercial operation /previous year | 0.00 | |
| Net Loan-Opening | 700.00 | |
| Additions during the year | 0.00 | |
| Repayment during the year | 0.00 | |
| Net Loan-Closing | 700.00 | |
| Average Loan | 700.00 | |
| Rate of Interest | 9.95% | |
| Interest | 69.65 | |

| | |
|---|---------------------------------------|
| Repayment Schedule | 12 Annual instalments from 26-3-2011 |
| 5Bond- XXV | |
| Gross Loan opening | 500.00 |
| Cumulative Repayment up to the date of commercial operation /previous year | 0.00 |
| Net Loan-Opening | 500.00 |
| Additions during the year | 0.00 |
| Repayment during the year | 0.00 |
| Net Loan-Closing | 500.00 |
| Average Loan | 500.00 |
| Rate of Interest | 10.10% |
| Interest | 50.50 |
| Repayment Schedule | 12 Annual instalments from 12-6-2011 |
| 6Bond- XXVI | |
| Gross Loan opening | 2600.00 |
| Cumulative Repayment up to the date of commercial operation /previous year | 0.00 |
| Net Loan-Opening | 2600.00 |
| Additions during the year | 0.00 |
| Repayment during the year | 0.00 |
| Net Loan-Closing | 2600.00 |
| Average Loan | 2600.00 |
| Rate of Interest | 9.30% |
| Interest | 241.80 |
| Repayment Schedule | 12 Annual instalments from 7-3-2012 |
| 7STBL from BOB 29.09.2008 to 14.12.2008 @12.5% replaced by BOND XXVIII @ 9.33% from 15.12.2008 (Add Cap for 2008-09) | |
| Gross Loan opening | 0.00 |
| Cumulative Repayment up to the date of commercial operation /previous year | 0.00 |
| Net Loan-Opening | 0.00 |
| Additions during the year | 852.00 |
| Repayment during the year | 0.00 |
| Net Loan-Closing | 852.00 |
| Average Loan | 426.00 |
| Rate of Interest | 10.66% |
| Interest | 45.39 |
| Repayment Schedule | 12 Annual instalments from 15.12.2012 |
| Total Loan | |
| Gross Loan opening | 6817.00 |
| Cumulative Repayment up to the date of commercial operation | 0.00 |
| Net Loan-Opening | 6817.00 |
| Additions during the year | 852.00 |
| Repayment during the year | 0.00 |
| Net Loan-Closing | 7669.00 |
| Average Loan | 7243.00 |
| Rate of Interest | 9.3132% |
| Interest | 674.55 |

ASSET-III

| | | (Rs. in lakh) |
|----------|--|--------------------------------------|
| | Details of Loan | 2008-09 |
| 1 | Bond-XXII | |
| | Gross Loan opening | 47.00 |
| | Cumulative Repayment up to the date of commercial operation /previous year | 0.00 |
| | Net Loan-Opening | 47.00 |
| | Additions during the year | 0.00 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 47.00 |
| | Average Loan | 47.00 |
| | Rate of Interest | 8.68% |
| | Interest | 4.08 |
| | Repayment Schedule | 12 Annual instalments from 7.12.2010 |
| 2 | Bond-XXIV | |
| | Gross Loan opening | 38.00 |
| | Cumulative Repayment up to the date of commercial operation /previous year | 0.00 |
| | Net Loan-Opening | 38.00 |
| | Additions during the year | 0.00 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 38.00 |
| | Average Loan | 38.00 |
| | Rate of Interest | 9.95% |
| | Interest | 3.78 |
| | Repayment Schedule | 12 Annual instalments from 26-3-2011 |
| 3 | Bond- XXV | |
| | Gross Loan opening | 73.00 |
| | Cumulative Repayment up to the date of commercial operation /previous year | 0.00 |
| | Net Loan-Opening | 73.00 |
| | Additions during the year | 0.00 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 73.00 |
| | Average Loan | 73.00 |
| | Rate of Interest | 10.10% |
| | Interest | 7.37 |
| | Repayment Schedule | 12 Annual instalments from 12-6-2011 |
| 4 | Bond- XXVI | |
| | Gross Loan opening | 663.00 |
| | Cumulative Repayment up to the date of commercial operation /previous year | 0.00 |
| | Net Loan-Opening | 663.00 |
| | Additions during the year | 0.00 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 663.00 |
| | Average Loan | 663.00 |
| | Rate of Interest | 9.30% |
| | Interest | 61.66 |

| | | |
|---|--|---------------------------------------|
| | Repayment Schedule | 12 Annual instalments from 7-3-2012 |
| 5 | Bond- XXVIII (Short term bridge loan from BOB w.e.f. 29.9.2008 @ 12.5% which was replaced by Bond XXVIII on 15.12.2008) | |
| | Gross Loan opening | 0.00 |
| | Cumulative Repayment up to the date of commercial operation /previous year | 0.00 |
| | Net Loan-Opening | 0.00 |
| | Additions during the year | 1052.00 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 1052.00 |
| | Average Loan | 526.00 |
| | Rate of Interest | 10.66% |
| | Interest | 56.05 |
| | Repayment Schedule | 12 Annual instalments from 15.12.2012 |
| 6 | STBL from BOB 29.09.2008 to 14.12.2008 @12.5% replaced by BOND XXVIII @ 9.33% from 15.12.2008 (Add Cap for 2008-09) | |
| | Gross Loan opening | 0.00 |
| | Cumulative Repayment up to the date of commercial operation /previous year | 0.00 |
| | Net Loan-Opening | 0.00 |
| | Additions during the year | 387.00 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 387.00 |
| | Average Loan | 193.50 |
| | Rate of Interest | 10.66% |
| | Interest | 20.62 |
| | Repayment Schedule | 12 Annual instalments from 15.12.2012 |
| | Total Loan | |
| | Gross Loan opening | 821.00 |
| | Cumulative Repayment up to the date of commercial operation | 0.00 |
| | Net Loan-Opening | 821.00 |
| | Additions during the year | 1439.00 |
| | Repayment during the year | 0.00 |
| | Net Loan-Closing | 2260.00 |
| | Average Loan | 1540.50 |
| | Rate of Interest | 9.97% |
| | Interest | 153.56 |