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. 129/2008

In the matter of

Determination of final transmission tariff and additional capitalization from the date of commercial operation to 31.3.2008 for (i) LILO of one Ckt. of 400 kV D/C Ballabgarh-Dadri transmission line at Maharanibagh GIS along with associated bays and 315 MVA 400/220/33 kV ICT-I at Maharanibagh GIS along with associated bays (ii) 315 MVA 400/220/33 kV ICT-II at Maharanibagh GIS along with associated bays under Tala HEP, East-North Inter-connector and Northern Region Transmission System for period up to 2009.

And in the matter of

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

- 1. Rajasthan Rajya Vidyut Prasaran Nigam Limited, Jaipur
- 2. Ajmer Vidyut Vitaran Nigam Ltd., Ajmer
- 3. Jaipur Vidyut Vitaran Nigam Ltd, Jaipur
- 4. Jodhpur Vidyut Vitaran Nigam Ltd, Jodhpur
- 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. Chief Engineer, Chandigarh Administration, Chandigarh
- 15. Uttaranchal Power Corporation Ltd, Dehradun
- 16. North Central Railway, AllahabadRespondents

The following were present:

- 1. Shri U.K.Tyaqi, PGCIL
- 2. Shri Prashant Sharma, PGCIL
- 3. Ms. Sangeeta Edwards, PGCIL
- 4. Shri R.Prasad, PGCIL
- 5. Shri Harmeet Singh, PGCIL
- 6. Shri M.M.Mondal, PGCIL
- 7. Shri S.N.Singh, UPPCL

ORDER (DATE OF HEARING: 26.3.2009)

This petition has been filed for approval of transmission charges for (i) LILO of one Ckt of 400 kV D/c Ballabgarh-Dadri transmission line at Maharanibagh GIS along with associated bays and 315 MVA 400/220/33 kV ICT-I at Maharanibagh GIS along with associated bays (ii) 315 MVA 400/220/33 kV ICT-II at Maharanibagh GIS along with associated bays (the transmission assets) under Tala HEP, East-North Inter-connector and Northern Region Transmission System (the transmission system) in Northern Region from the date of commercial operation of the respective transmission asset 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. 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 its letter dated 2.7.2003 at an estimated cost of Rs.198070 lakh, which includes IDC of Rs. 21792 lakh. Subsequently, the approval for revised cost estimate-I was accorded by Ministry of Power vide its letter dated 29.9.2005 at an estimated cost of Rs. 248388 lakh which included IDC of Rs. 14744 lakh. The transmission system has been implemented by the petitioner and Joint Venture company as under:
 - (i) PGCIL portion: 87210 lakh (including IDC of Rs. 2574 lakh)
 - (ii) JV portion Rs. 161178 lakh (including IDC of Rs. 12170 lakh)
- 3. The provisional transmission charges for the transmission assets were approved by the Commission in its order dated 13.3.2008 in Petition No.

6/2008. The details of transmission assets and their dates of commercial operation as indicated by the petitioner are as under:

| S. | Name of the assets | Date of commercial |
|-----|---|--------------------|
| No. | | operation |
| 1. | LILO of one Ckt. of 400 kV D/C Ballabgarh-Dadri | 1.9.2007 |
| | transmission line at Maharanibagh GIS along with | |
| | associated bays and 315 MVA 400/220/33 kV ICT-I at | |
| | Maharanibagh GIS along with associated bays (Asset-I) | |
| 2. | 315 MVA 400/220/33 kV ICT-II at Maharanibagh GIS | 1.10.2007 |
| | along with associated bays (Asset-II) | |

4. The details of the apportioned approved cost, the estimated completion cost, etc. of the transmission assets noted at para 3 above are as under:

(Rs. in lakh)

| Name of | Apportioned | Capital expenditure | Capital | Capital | Balance | Total |
|------------|--|--|--|-----------------------------------|--------------------------|---------------------------------|
| the assets | approved cost (as per revised cost estimate) | as on the date of commercial operation | Expenditure from the date of commercial operation to 31.3.2008 | expenditure up to 31.3.2008 | estimated Expenditure | estimated completion cost |
| Asset- I | 16063.04 | 12817.94 | 877.95 | 13695.89 | 3314.41 | 17010.30 |
| Asset-II | 5125.40 | 3004.24 | 198.55 | 3202.79 | 1689.87 | 4892.66 |

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

(Rs.in lakh)

| | Asse | t- I | Asset-II | | |
|------------------------------|-----------------|---------|------------|---------|--|
| | 2007-08 2008-09 | | 2007-08 | 2008-09 | |
| | (Pro rata) | | (Pro rata) | | |
| Depreciation | 230.51 | 409.56 | 54.90 | 113.35 | |
| Interest on Loan | 364.25 | 624.23 | 69.75 | 138.57 | |
| Return on Equity | 323.80 | 573.53 | 74.74 | 153.65 | |
| Advance against Depreciation | 19.08 | 0.00 | 0.00 | 0.00 | |
| Interest on Working Capital | 32.64 | 56.77 | 8.01 | 16.44 | |
| O & M Expenses | 119.88 | 213.81 | 63.26 | 131.60 | |
| Total | 1090.16 | 1877.90 | 270.66 | 553.61 | |

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

(Rs. in lakh)

| | Ass | et- I | Asset-II | |
|--------------------|-----------------|--------|------------|---------|
| | 2007-08 2008-09 | | 2007-08 | 2008-09 |
| | (Pro rata) | | (Pro rata) | |
| Maintenance Spares | 128.18 | 132.67 | 30.04 | 30.94 |
| O & M expenses | 17.13 | 17.82 | 10.54 | 10.97 |
| Receivables | 311.47 | 312.99 | 90.22 | 92.27 |
| Total | 456.78 | 463.48 | 130.80 | 134.18 |
| Rate of Interest | 12.25% | 12.25% | 12.25% | 12.25% |
| Interest | 32.64 | 56.77 | 8.01 | 16.44 |

7. The reply to the petition has been filed by Uttar Pradesh Power Corporation Ltd (UPPCL). 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 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.
- 9. The petitioner has claimed tariff after accounting for additional capitalization in respect of Asset-I and Asset-II from the date of commercial operation up to 31.3.2008 as given in the table below para 4 above.

ADDITIONAL CAPITALIZATION 2007-08

- 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 and Asset-II are given hereunder:

| | | Asset-I | | | Asset-II | |
|------------|---------|---|-----------------------------------|---------|---|-----------------------------------|
| SI. No. | Year | Amount (Rs. in lakh) | Nature and details of expenditure | Year | Amount (Rs. in lakh) | Nature and details of expenditure |
| | 2007-08 | Building and civil works= Rs. 6.48 lakh Sub-station=Rs. 611.96 lakh Transmission line= Rs.259.51 lakh | Balance and retention payments | 2007-08 | Building and civil works= Rs. 3.89 lakh 5ub-station= Rs. 194.66 lakh | Balance and retention payments |
| | Total | Rs. 877.95 lakh | | Total | Rs. 198.55 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 and Asset-II, respectively.

Time Over-run

13. As per the original approval, the transmission scheme was scheduled to be commissioned by June 2007. However, Asset- I and Asset-II was commissioned after 3 and 4 months of the scheduled date. The petitioner has submitted that only outlet of the transmission assets was at downstream system by DTL and all the efforts were made to match the commissioning of the Asset-I with the downstream system of DTL, which was commissioned with few months slippage in December 2007.

14. We have considered the matter. There is satisfactory explanation from the petitioner for the entire delay in completion of the transmission line. Therefore, the delay in commissioning of line is considered to be beyond the control of the petitioner and is condoned.

Cost over-run

- 15. As per original approval, the actual expenditure on the date of commercial operation was higher than the apportioned approved cost. The petitioner has explained following reasons for the cost over-run:
 - (i) Compensation payment made to UP irrigation department which was not envisaged earlier during FR;
 - (ii) High awarded cost in comparison of estimated cost; and
 - (iii) Change in type of sub-station from conventional A.C. to GIS.
- 16. As the cost on date of commercial operation is less than the apportioned approved cost based on the revised cost estimates approved by the Ministry of Power, cost of Rs. 15822.18 lakh as on the date of commercial operation has been considered for the purpose of tariff.
- 17. It is observed that the major packages of the Asset-I and Asset-II were awarded based on domestic competitive bidding or International competitive bidding with fair amount of participation by bidders. Number of bids received was as high as eight. As such, the increase in expenditure based on fair bidding process, change of scope etc. cannot be attributed to 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 woks as claimed by the petitioner, which is within the limits of apportioned approved cost:

(Rs.in lakh)

| Name of the Element | Admitted 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 | 12817.94 | 877.95 | 13695.89 |
| Asset-II | 3004.24 | 198.55 | 3202.79 |
| Total | 15822.18 | 1076.5 | 16898.68 |

.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 70.09:29.91 and 65.45:34.55 for Asset-I and Asset-II respectively, as actually deployed on the date of commercial operation. The petitioner has also prayed to consider the actual equity (34.55%) since the debt and equity ratio of transmission system as a whole has been worked out to 70.22:29.78. The petitioner vide its affidavit dated 18.3.2009 has submitted `consolidated debt and equity ratio for the transmission system`. The petitioner has further considered the amount of additional capitalization in the debt-equity ratio of 70:30. In our calculations, actual debt-equity ratio on the date of commercial operation has been considered since over all equity conforms to ceiling limit of 30%. 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)

| | | | | (113. 111 10111) |
|----------|---|---|----------------------------|-----------------------|
| | 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 | 3833.25 | 263.39 | 3964.94 | 4096.64 |
| Asset-II | 1037.95 | 59.57 | 1067.73 | 1097.52 |

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 1.4.2007 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 | Return on equity | | | |
|----------|----|-----|------------------|---------|--|--|
| asset | | | 2007-08 | 2008-09 | | |
| | | | (Pro rata) | | | |
| Asset-I | | | 323.80 | 573.53 | | |
| Asset-II | | | 74.74 153.65 | | | |

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. The petitioner has claimed interest on loan in the following manner:
 - (i) Gross loans opening has been considered from 2006-07;
 - (ii) On the basis of actual rate of interest on actual average loan, the weighted average rate of interest on loan is worked out for various years;
 - (iii) Gross loan at (i) above have been considered along with the loan utilised after date of commercial operation and the weighted average rate of interest on loan for respective years as per above has been has been multiplied to arrive at interest on loan, considering as repayment.
- 26. In our calculation, the interest on loan has been worked out as detailed below:
 - (i) Weighted rate of interest for the purpose of tariff has been calculated by considering actual interest payable by the petitioner on actual average loans during the years 2007-08 and 2008-09.
 - (ii) For repayment during the year, normative repayment or depreciation whichever is higher has been considered.
- 27. Based on the above, the year-wise details of interest worked out are given hereunder:

(Rs. in lakh)

| Details | Ass | set-l | Asset-II | |
|---|---------------------------|---------|---------------------------|---------|
| | 2007-08 (Pro rata) | 2008-09 | 2007-08 (Pro rata) | 2008-09 |
| Gross Normative Loan | 8984.69 | 9599.26 | 1966.29 | 2105.28 |
| Cumulative Repayment upto Previous Year/date of commercial operation | 227.45 | 457.96 | 26.85 | 81.76 |
| Net Loan-Opening | 8757.24 | 9141.30 | 1939.44 | 2023.52 |
| Addition due to Additional Capitalisation | 614.57 | - | 138.99 | • |
| Repayment during the year | 230.51 | 409.56 | 54.90 | 113.35 |
| Net Loan-Closing | 9141.30 | 8731.74 | 2023.52 | 1910.17 |
| Average Loan | 8949.27 | 8936.52 | 1981.48 | 1966.84 |
| Weighted Average Rate of Interest on Loan | 6.90% | 6.91% | 6.99% | 7.00% |
| Interest | 360.10 | 617.65 | 69.28 | 137.61 |

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

DEPRECIATION

- 29. 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.
- 30. Depreciation allowed has been worked out as below:

(Rs. in lakh)

| | Asse | et-I | Asset | t-II |
|---|-----------------------|----------|-----------------------|---------|
| | 2007-08 (Pro rata) | 2008-09 | 2007-08 (Pro rata) | 2008-09 |
| Gross block as on the date of commercial operation | 12817.94 | 13695.89 | 3004.24 | 3202.79 |
| Additional Capitalisation during 2007-08 | 877.95 | - | 198.55 | - |
| Gross Block at the end of the year | 13695.89 | 13695.89 | 3202.79 | 3202.79 |
| Rate of Depreciation | 2.9807% | 2.9904% | 3.5382% | 3.5390% |
| Depreciable Value | 11931.22 | 12326.30 | 2793.16 | 2882.51 |
| Balance Useful life of the asset | - | - | - | ı |
| Remaining Depreciable Value | 11931.22 | 12095.79 | 2793.16 | 2827.61 |
| Depreciation | 230.51 | 409.56 | 54.90 | 113.35 |
| Cumulative Depreciation/ Advance against Depreciation | 230.51 | 640.07 | 54.90 | 168.25 |

ADVANCE AGAINST DEPRECIATION

31. 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

32. 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.

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

OPERATION & MAINTENANCE EXPENSES

34. 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 |

35. The petitioner has claimed O & M expenses for 61.696 ckt km and six bays for Asset-I and 4 bays for Asset-II which have been allowed. Accordingly, the petitioner's entitlement to O & M expenses has been worked out as given hereunder:

(Rs. in lakh)

| | Ass | et-I | | Asse | t - II |
|-----------------------------------|------------|---------|-------------------------|------------|---------|
| | 2007-08 | 2008-09 | | 2007-08 | 2008-09 |
| | (Pro rata) | | | (Pro rata) | |
| O&M expenses for 61.696 ckt km | 9.18 | 16.41 | | - | - |
| O&M expenses for 6 bays | 110.71 | 197.40 | O&M expenses for 4 bays | 63.26 | 131.60 |
| Total | 119.88 | 213.81 | Total | 63.26 | 131.60 |

36. 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

37. 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. 30.04 lakh and Rs. 128.18 lakh for Asset-I and Asset-II, respectively as on date of commercial operation. The necessary details are given hereunder:

| Transmission assets | Date of Commercial Operation | Capital Expenditure (Rs. in lakh) on the date of | Cost of maintenance spares as on the date of commercial |
|---------------------|---------------------------------|---|---|
| 433013 | Operation | commercial operation | operation |
| | | | (Rs. in lakh) |
| Asset- I | 1.9.2007 | 12817.94 | 128.18 |
| Asset-II | 1.10.2007 | 3004.24 | 30.04 |

(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.

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

(Rs. in lakh)

| | Asset-I | | Asset-II | |
|--------------------|------------|---------|------------|---------|
| | 2007-08 | 2008-09 | 2007-08 | 2008-09 |
| | (Pro rata) | | (Pro rata) | |
| Maintenance Spares | 128.18 | 132.67 | 30.04 | 30.94 |
| O & M expenses | 17.13 | 17.82 | 10.54 | 10.97 |
| Receivables | 304.70 | 311.86 | 90.06 | 92.10 |
| Total | 450.00 | 462.35 | 130.65 | 134.02 |
| Rate of Interest | 12.25% | 12.25% | 12.25% | 12.25% |
| Interest | 32.16 | 56.64 | 8.00 | 16.42 |

TRANSMISSION CHARGES

39. The transmission charges being allowed for the two transmission assets are summarised below:

(Rs. in lakh)

| | Asset-I | | Asset-II | |
|------------------------------|---------------------------|---------|---------------------------|---------|
| | 2007-08 (Pro rata) | 2008-09 | 2007-08 (Pro rata) | 2008-09 |
| Depreciation | 230.51 | 409.56 | 54.90 | 113.35 |
| Interest on Loan | 360.10 | 617.65 | 69.28 | 137.61 |
| Return on Equity | 323.80 | 573.53 | 74.74 | 153.65 |
| Advance against Depreciation | 0.00 | 0.00 | 0.00 | 0.00 |
| Interest on Working Capital | 32.16 | 56.64 | 8.00 | 16.42 |
| O & M Expenses | 119.88 | 213.81 | 63.26 | 131.60 |
| Total | 1066.45 | 1871.19 | 270.19 | 552.63 |

- 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. 2, 79,936/- 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 has decided that the petitioner shall not be allowed reimbursement of the petition filing fee.
- 42. This order disposes of Petition No. 129/2008.

sd/- sd/- sd/- sd/-

(V.S.VERMA) (S.JAYARAMAN) (R.KRISHNAMOORTHY) (DR.PRAMOD DEO)
MEMBER MEMBER MEMBER CHAIRPERSON

New Delhi dated the 20th April 2009

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Annexure-I

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

LILO of one Ckt. of 400 kV D/C Ballabgarh-Dadri transmission line at Maharanibagh GIS along with associated bays and 315 MVA 400/220/33 kV ICT-I at Maharanibagh GIS along with associated bays

| | Details of Loan | 2007-08 | 2008-09 |
|----------|--|--------------------|---------------------|
| 1 | Bond-XX | | |
| - | Gross Loan opening | 0.00 | 0.00 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 0.00 | 0.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 0.00 | 0.00 |
| | Average Loan | 0.00 | 0.00 |
| | Rate of Interest | 8.93% | 8.93% |
| | Interest | 0.00 | 0.00 |
| | Repayment Schedule | 12 Annual instalm | ents from 7.9.2010 |
| 1 | Bond-XV | | |
| | Gross Loan opening | 206.00 | 206.00 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 17.17 |
| | Net Loan-Opening | 206.00 | 188.83 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 17.17 | 17.17 |
| | Net Loan-Closing | 188.83 | 171.67 |
| | Average Loan | 197.42 | 180.25 |
| | Rate of Interest | 6.68% | 6.68% |
| | Interest | 13.19 | 12.04 |
| | Repayment Schedule | 12 Annual instalme | ents from 23.2.2008 |
| 2 | Bond-XVI | | |
| | Gross Loan opening | 159.00 | 159.00 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 159.00 | 159.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 15.90 |
| | Net Loan-Closing | 159.00 | 143.10 |
| | Average Loan | 159.00 | 151.05 |
| | Rate of Interest | 7.10% | 7.10% |
| | Interest | 11.29 | 10.72 |
| | Repayment Schedule | 10 Annual instalme | ents from 18.2.2009 |
| 3 | Bond-XVII | | |
| | Gross Loan opening | 370.00 | 370.00 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 370.00 | 370.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 370.00 | 370.00 |
| | Average Loan | 370.00 | 370.00 |
| | Rate of Interest | 7.39% | 7.39% |
| | Interest | 27.34 | 27.34 |
| | Repayment Schedule | 10 Annual instalm | ents from 22.9.2009 |
| 4 | Bond-XVIII | | |
| | Gross Loan opening | 126.00 | 126.00 |
| ļ | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 126.00 | 126.00 |
| ļ | Additions during the year | 0.00 | 0.00 |
| ļ | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 126.00 | 126.00 |
| | Average Loan | 126.00 | 126.00 |
| | Rate of Interest | 8.15% | 8.15% |
| | Interest | 10.27 | 10.27 |
| | Repayment Schedule | 12 Annual Instalm | ents from 9.3.2010 |

| 5 | Bond-XIX | | |
|---|--|----------------------|------------------------|
| | Gross Loan opening | 475.00 | 475.00 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 475.00 | 475.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 475.00 | 475.00 |
| | Average Loan | 475.00 | 475.00 |
| | Rate of Interest | 9.25% | 9.25% |
| | Interest | 43.94 | 43.94 |
| | Repayment Schedule | 12 Annual instalme | |
| 6 | IBRD-II | | |
| | Gross Loan opening(\$131 LAKHS @RS.41.43) | 5427.33 | 5427.33 |
| | Cumulative Repayment upto DOCO/previous year | 227.45 | 345.53 |
| | Net Loan-Opening | 5199.88 | 5081.80 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 118.08 | 247.34 |
| | Net Loan-Closing | 5081.80 | 4834.47 |
| | Average Loan | 5140.84 | 4958.14 |
| | Rate of Interest | 6.70% | 6.70% |
| | Interest | 344.44 | 332.20 |
| | Repayment Schedule | 30 half yearly insta | alments from15.12.2006 |
| 7 | IBRD-III | | |
| | Gross Loan opening(\$52 LAKHS @RS.41.43) | 2154.36 | 2154.36 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 2154.36 | 2154.36 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 2154.36 | 2154.36 |
| | Average Loan | 2154.36 | 2154.36 |
| | Rate of Interest | 6.66% | 6.66% |
| | Interest | 143.48 | 143.48 |
| | Repayment Schedule | | Iments from15.9.2011 |
| 8 | Bond-XXVI @9.3% w.e.f. 07.03.2008(in replac | | |
| | bridge loan @8% from 20.8.2007 to 6.3 | | 07.00 |
| | Gross Loan opening | 67.00 | 67.00 |
| | Cumulative Repayment upto DOCO/previous year | 0.00 67.00 | 0.00 67.00 |
| | Net Loan-Opening Additions during the year | 0.00 | |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 67.00 | 67.00 |
| | Average Loan | 67.00 | 67.00 |
| | Rate of Interest | 8.14% | 9.30% |
| | Interest | 5.46 | 6.23 |
| | Repayment Schedule | | ents from 7.3.2012 |
| | Total Loan | ai iiiotaiiii | |
| | Gross Loan opening | 8984.69 | 8984.69 |
| | Cumulative Repayment upto DOCO/previous year | 227.45 | 362.69 |
| | Net Loan-Opening | 8757.24 | 8622.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 135.24 | 280.40 |
| | Net Loan-Closing | 8622.00 | 8341.59 |
| | Average Loan | 8689.62 | 8481.80 |
| | Rate of Interest | 6.90% | 6.91% |
| | Interest | 599.40 | 586.22 |

(Rs. in lakh)

| | Details of Loan | 2007-08 | 2008-09 |
|----------|------------------------------|--------------------------------|-----------------|
| 1 | Bond-XX | | |
| | Gross Loan opening | 0.00 | 0.00 |
| | Cumulative Repayment upto | 0.00 | 0.00 |
| | DOCO/previous year | | |
| | Net Loan-Opening | 0.00 | 0.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 0.00 | 0.00 |
| | Average Loan | 0.00 | 0.00 |
| | Rate of Interest | 8.93% | 8.93% |
| | Interest | 0.00 | 0.00 |
| | Repayment Schedule | 12 Annual instalments | s from 7.9.2010 |
| 1 | Bond-XV | | |
| | Gross Loan opening | 49.00 | 49.00 |
| | Cumulative Repayment upto | 0.00 | 4.08 |
| | DOCO/previous year | | |
| | Net Loan-Opening | 49.00 | 44.92 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 4.08 | 4.08 |
| | Net Loan-Closing | 44.92 | 40.83 |
| | Average Loan | 46.96 | 42.88 |
| | Rate of Interest | 6.68% | 6.68% |
| | Interest | 3.14 | 2.86 |
| | Repayment Schedule | 12 Annual instalments | |
| 2 | Bond-XVI | 12 / timadi metamona | 10111 20.2.2000 |
| | Gross Loan opening | 38.00 | 38.00 |
| | Cumulative Repayment upto | 0.00 | 0.00 |
| | DOCO/previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 38.00 | 38.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 3.80 |
| | Net Loan-Closing | 38.00 | 34.20 |
| | Average Loan | 38.00 | 36.10 |
| | Rate of Interest | 7.10% | 7.10% |
| | Interest | 2.70 | 2.56 |
| | Repayment Schedule | 10 Annual instalments | |
| 3 | Bond-XVII | 10 / tillidal ilistallilorita | |
| | Gross Loan opening | 88.00 | 88.00 |
| | Cumulative Repayment upto | 0.00 | 0.00 |
| | DOCO/previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 88.00 | 88.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 88.00 | 88.00 |
| | Average Loan | 88.00 | 88.00 |
| | Rate of Interest | 7.39% | 7.39% |
| <u> </u> | Interest | 6.50 | 6.50 |
| | Repayment Schedule | 10 Annual instalments | |
| 4 | Bond-XVIII | 10 / tillidal illistallilorita | |
| | Gross Loan opening | 30.00 | 30.00 |
| | Cumulative Repayment upto | 0.00 | 0.00 |
| | DOCO/previous year | 0.00 | 0.00 |
| <u> </u> | Net Loan-Opening | 30.00 | 30.00 |
| <u> </u> | Additions during the year | 0.00 | 0.00 |
| <u> </u> | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 30.00 | 30.00 |
| | Average Loan | 30.00 | 30.00 |
| | Rate of Interest | 8.15% | 8.15% |
| | Interest | 2.45 | 2.45 |
| | | | |
| 5 | Repayment Schedule Bond-XIX | 12 Annual instalments | |
| <u> </u> | | 112.00 | 110.00 |
| | Gross Loan opening | 112.00 | 112.00 |

| | Cumulative Repayment upto | 0.00 | 0.00 |
|---|--|--------------------------------|---------------------|
| | DOCO/previous year | | |
| | Net Loan-Opening | 112.00 | 112.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 112.00 | 112.00 |
| | Average Loan Rate of Interest | 112.00 | 112.00 |
| | | 9.25% | 9.25% |
| | Interest | 10.36 | 10.36 |
| _ | Repayment Schedule | 12 Annual instalments | s from 24.7.2010 |
| 6 | IBRD-II Gross Loan opening(\$16.04 LAKHS @RS.40.08) | 642.88 | 642.88 |
| | Cumulative Repayment upto | 26.85 | 40.88 |
| | DOCO/previous year | | |
| | Net Loan-Opening | 616.03 | 602.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 14.03 | 29.26 |
| | Net Loan-Closing | 602.00 | 572.74 |
| | Average Loan | 609.02 | 587.37 |
| | Rate of Interest | 6.70% | 6.70% |
| | Interest | 40.80 | 39.35 |
| | Repayment Schedule | 30 half yearly instalme | ents from15.12.2006 |
| 7 | IBRD-III Gross Loan opening(\$25.11 LAKHS | 1000 44 | 1000 44 |
| | @RS.41.43) | 1006.41 | 1006.41 |
| | Cumulative Repayment up to DOCO/previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 1006.41 | 1006.41 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 0.00 | 0.00 |
| | Net Loan-Closing | 1006.41 | 1006.41 |
| | Average Loan | 1006.41 | 1006.41 |
| | Rate of Interest | 6.86% | 6.86% |
| | Interest | 69.04 | 69.04 |
| | Repayment Schedule | 30 half yearly instalme | ents from15.9.2011 |
| 8 | Bond-XXVI @9.3% w.e.f. 07.03.2008(in r bridge loan @8% from 20.08.2007 | to 06.03.2008) | |
| | Gross Loan opening | 0.00 | 0.00 |
| | Cumulative Repayment up to | 0.00 | 0.00 |
| | DOCO/previous year | 0.00 | 0.00 |
| | Net Loan-Opening | 0.00 | 0.00 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year Net Loan-Closing | 0.00 | 0.00 |
| | Average Loan | 0.00 | 0.00 |
| | Rate of Interest | 8.14% | 9.30% |
| | Interest | 0.00 | 0.00 |
| | Repayment Schedule | 12 Annual instalments | |
| | Total Loan | 12 / triiridar iriotairriorita | 7.0.2012 |
| | Gross Loan opening | 1966.29 | 1966.29 |
| | Cumulative Repayment up to | 26.85 | 44.96 |
| | DOCO/previous year | | |
| | Net Loan-Opening | 1939.44 | 1921.33 |
| | Additions during the year | 0.00 | 0.00 |
| | Repayment during the year | 18.11 | 37.14 |
| | Net Loan-Closing | 1921.33 | 1884.19 |
| | Average Loan | 1930.38 | 1902.76 |
| | Rate of Interest | 6.99% | 7.00% |
| | Interest | 134.99 | 133.13 |