CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 238/2010

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

DATE OF HEARING: 25.1.2011 DATE OF ORDER: 8.6.2011

In the matter of

Approval under Regulation 86 of CERC (Conduct of Business) Regulations, 1999, and CERC (Terms and Conditions of Tariff) Regulations, 2009, for determination of transmission tariff for 765 kV S/C Seoni-Bina Transmission Line along with its associated bays under Barh Transmission System in Western Region for the period from 01.04.2009 to 31.03.2014.

And in the matter of

Power Grid Corporation of India Ltd., Gurgaon Petitioner Vs

- 1. Madhya Pradesh Power Trading Co. Ltd., Jabalpur
- 2. Maharashtra State Electricity Distribution Co. Ltd., Mumbai
- 3. Gujarat Urja Vikas Nigam Ltd., Vadodara
- 4. Electricity Department, Panaji, Goa
- 5. Electricity Department, Daman & Diu
- 6. Electricity Department, Silvassa
- 7. Chhatisgarh State Electricity Board, Raipur, Chhatisgarh
- 8. Madhya Pradesh Audyogik Kandra Vikas Nigam (Indore) Ltd., Indore

.....Respondents

The following were present:

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

ORDER

The petition has been filed for approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, (herein after referred to as "the 2009 regulations") for

determination of transmission tariff for 765 kV S/C Seoni-Bina transmission line along with its associated bays under Barh Transmission System in Western Region for the period from 01.04.2009 to 31.03.2014. The petitioner has made the following prayers:-

- (a) Approve the Transmission Tariff for assets covered under this petition;
- (b) Allow grossing up of base rate of return with the applicable tax rate as per the Finance Act for the relevant year and direct settlement of tax liability between the Transmission Licensee and the beneficiaries/ long term transmission customers on year to year basis;
- (c) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and publishing of notices in newspapers in terms of Regulation 42 CERC (Terms and Conditions of Tariff) Regulations, 2009, and other expenditure (if any) in relation to the filing of petition;
- (d) Allow the petitioner to bill and recover Service Tax on transmission charges separately from the respondents, if at any time exemption from service tax is withdrawn and transmission of power is notified as a taxable service;
- (e) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2009-14 period, if any, from the respondents;

- (f) Allow the petitioner to bill and recover Licensee fee separately from the respondents.
- 2. Approval for Barh Transmission system was accorded by Govt. of India, Ministry of Power vide their letter dated 12.12.2005 at estimated cost of ₹ 3779.46 crores including IDC of ₹ 179.41 crores (based on 2nd Quarter, 2005 price level). The present petition covers determination of tariff of 765 kV Seoni-Bina transmission line under Barh Transmission System.
- 3. The petitioner has claimed the transmission charges during 2009-14 as under:

(₹ in lakh)

| | | | | (* 111 10111 |
|-----------------------------|---------|---------|---------|---------------|
| | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| Depreciation | 2099.64 | 2136.22 | 2150.80 | 2160.45 |
| Interest on Loan | 997.62 | 1016.04 | 937.50 | 856.53 |
| Return on Equity | 2084.45 | 2120.67 | 2135.16 | 2144.74 |
| Interest on Working Capital | 116.78 | 119.35 | 119.18 | 118.79 |
| O & M Expenses | 276.91 | 292.61 | 309.55 | 327.15 |
| Total | 5575.40 | 5684.89 | 5652.19 | 5607.66 |

4. The details submitted by the petitioner in support of its claim for Interest on Working Capital are given hereunder:

(₹ in lakh)

| | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|--------------------|---------|---------|---------|---------|
| Maintenance Spares | 41.54 | 43.89 | 46.43 | 49.07 |
| O & M expenses | 23.08 | 24.38 | 25.80 | 27.26 |
| Receivables | 929.23 | 947.48 | 942.03 | 934.61 |
| Total | 993.85 | 1015.75 | 1014.26 | 1010.94 |
| Interest | 116.78 | 119.35 | 119.18 | 118.79 |
| Rate of Interest | 11.75% | 11.75% | 11.75% | 11.75% |

5. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under section 64 of the Electricity Act, 2003. Maharashtra State Electricity Distribution Company Limited (MSEDCL),

Respondent No. 2 herein, has filed its reply vide affidavit dated 18.9.2010. MSEDCL has raised the following objections:-

- (a) The approval from forest division was received on 18.2.2010 and it is not practically possible to construct/ erect a length of 47.5 km of 765 KV line, involving 47 nos. of towers, within one month from the date of receipt of above approval. Thus, work was not held up for want of permission from various forest offices. MSEDCL has further contended that consideration of reason of delay would result in increase in IDC and in turn there will be unwanted increase in the AFC.
- (b) The details of expenditure covered under IEDC are not available and further the expenditure towards IEDC, claimed by PGCIL will add further burden on beneficiaries, thereby to the end consumers, whereas there are no specific norms/ conditions in the regulation of CERC for consideration of IEDC. Hence, IEDC expenses may not be considered.
- (c) Whether the amount towards 50% wage hike of employees has already been considered while computing the O&M charges for 2009-14 is not clear. Further, all the components of wage revision should not form part of the Additional Capital Expenditure and needs to be specifically declared and intimated to the beneficiaries. The Commission is therefore requested not to consider the impact of wage hike at present unless and until the exact quantum of the wage hike is declared by the Power Grid.

- (d) Reimbursement of expenditure towards petition filing fees and other expenditures (if any) in relation to filing of petition should be declined in view of the Commission's order dated 11.9.2008 in petition no. 129/2005.
- 6. The petitioner in its rejoinder, filed vide affidavit dated 31.1.2011, clarified the position of the above points as under:-
 - (a) The petitioner had inadvertently mentioned 47.5 km of forest stretch which was actually 17.497 kms in five forest divisions. The foundation, erection and stringing work started in the forest area immediately after getting stage II clearance from forest divisions. However, tree looping work was taken up only after approval from concerned DFO.
 - (b) IEDC is a part of the capital cost which is covered under 2009 regulations.
 - (c) 50% of wage hike of employees has already been considered while computing the O & M charges for 2009-14 and computation of actual wage hike is under consideration.
 - (d) Reimbursement of expenditure on filing fee, publishing of notices and other expenditure has been claimed in line with Regulation 42 of 2009 regulations.

- 7. Having heard the parties and on perusal of material on record, we proceed to determine the tariff of the transmission line in the succeeding paragraphs.
- 8. The petitioner has submitted that as per the investment approval the transmission system was scheduled for commissioning by September, 2009. However, the same was put under commercial operation on 1.4.2010. The commissioning of this asset has been declared by the Petitioner and agreed by all the constituents of West Region in 13th WRPC meeting dated 9.4.2010. There was a delay of about 6 months from the schedule as per the investment approval.
- 9. The petitioner has explained that the reasons for delay are mainly due to non-receipt of forest clearance approval of Ministry of Environment and Forests in time. As a result of which construction activities were blocked for length of 17.497 kms stretching over five forest divisions involving 47 no. of locations in forest, for foundation and tower erection activities. The petitioner has also explained that the proposal for forest clearance was submitted to respective DFO's on 30.8.2006. The Forest Assessment Committee was reconstituted by the Hon'ble Supreme Court in February, 2008 and thereafter, the Ministry of Environment and Forests has granted in principle clearance (Stage I) vide its letter dated 9.12.2008. After complying with the various requirements, the petitioner submitted the case for final clearance (Stage II) which was granted vide letter dated 28.5.2009. Subsequently, after follow-up with various levels in Forest Department, permission to start the work was granted progressively as given overleaf:

| SI. No. | Forest Division | Date of approval |
|---------|--------------------|------------------|
| 1. | CF/DFO-Narsinghpur | 18.2.2010 |
| 2. | DFO-Sagar(North) | 12.1.2010 |
| 3. | DFO-Chindwara | 8.2.2010 |
| 4. | DFO-Narsinghpur | 4.8.2009 |
| 5. | CF-Seoni | 13.7.2009 |

The petitioner has submitted that after getting final permission, the transmission system was commissioned on 30.3.2010.

- 10. We have considered the matter. The reasons for delay were on account of the time taken in getting forest clearance which is not attributable to the petitioner. Accordingly, the expenditure towards IDC and IEDC has been allowed up to the scheduled date of commercial operation.
- 11. The details of apportioned approved cost as on date of commercial operation (1.4.2010) and additional capitalization from the date of commercial operation till 31.3.2011 and projected expenditure to be incurred for the above years 2011-12 and 2012-13 is given hereunder:-

(₹ in lakh)

| S. No. | Name of the Asset | Apportioned approved Cost | Actual Exp. incurred up to DOCO | Add. Cap. Exp. during 2010-11 | Projected Exp. during 2011-12 | Projected Exp. during 2012-13 | Total estimated expenditure |
|-----------|--------------------------------------|---------------------------|---|---|--|--|-----------------------------------|
| 1 | 765 kV Seoni – Bina TL under Barh TS | 41559.66 | 39149.94* | 1194.18 | 187.31 | 365.30 | 40896.73 |

^{*} The Capital Cost as on DOCO is inclusive of initial spares of ₹ 202.42 lakh which is within the ceiling limit as specified in Regulation 8 of the 2009 regulations.

CAPITAL COST

12. As per Regulation 7(1)(a) of the 2009 regulations:

"The expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during

construction on the loan – (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii)being equal to the actual amount of loan in the event of the actual equity less than 30% of the fund deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check."

13. Capital Cost as on 1.4.2010 of ₹ 39149.94 lakh as per CA certificate dated24.6.2010 has been considered for the purpose of tariff calculation.

PROJECTED ADDITIONAL CAPITALISATION

14. As per Regulation 9(1) of the 2009 regulations:

"The capital expenditure incurred or projected be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

(i)Undischarged liabilities;

(ii)Works deferred for execution;

(iii)Procurement of initial capital spares within the original scope of work, subject to the provisions of regulation 8;

(iv)Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and

(v)Change in law:

Provided that the details of works included in the original scope of work along with estimates of expenditure, undischarged liabilities and the works deferred for execution shall be submitted along with the application for determination of tariff"

15. As per Regulation 3(11) of 2009 regulations:

"cut-off date means 31st March of the year closing after 2 years of the year of commercial operation of the project, and in case of the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31st March of the year closing after 3 years of the year of commercial operation".

Therefore, cut-off date for the above mentioned asset is 31.3.2013.

16. The Petitioner has claimed Additional Capital Expenditure of ₹ 1194.18, ₹ 187.31 and ₹ 365.30 for the years 2010-11, 2011-12 and 2012-13, respectively on account of balance and retention payments which fall within the cut-off date. Therefore, the same has been considered for the purpose of tariff calculation.

DEBT- EQUITY RATIO

- 17. Regulation 12 of the 2009 regulations provides as under:-
 - "(1) For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff:

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

Explanation.- The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

- (2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered.
- (3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause(1) of this regulation".
- 18. The petitioner has claimed tariff based on debt-equity ratio of 70:30. The debt equity of the transmission asset as on 31.3.2009 as per the approved debt equity ratio works out as under:

(₹ in lakh)

| | Approved | | Financial Package as on DOCO | | |
|-------------|-----------------|--------|------------------------------|--------|--|
| Particulars | Amount (₹ lakh) | % | Amount (₹Lakh) | % | |
| Debt | 29091.76 | 70.00 | 27404.99 | 70.00 | |
| Equity | 12467.90 | 30.00 | 11744.95 | 30.00 | |
| Total | 41559.66 | 100.00 | 39149.94 | 100.00 | |

RETURN ON EQUITY

- 19. Regulation 15 of the 2009 regulations provides as under:
 - "15. (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.
 - (2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up as per clause (3) of this regulation:

Provided that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in **Appendix-II**:

Provided further that the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever.

(3) The rate of return on equity shall be computed by grossing up the base rate with the normal tax rate for the year 2008-09 applicable to the concerned generating company or the transmission licensee, as the case may be:

Provided that return on equity with respect to the actual tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up separately for each year of the tariff period along with the tariff petition filed for the next tariff period.

(4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

Where t is the applicable tax rate in accordance with clause (3) of this regulation."

- 20. The Petitioner has prayed for grossing up of base rate of return with applicable tax rate as per the Finance Act. The Commission vide its order dated 3.8.2010 in Petition No. 17/2010 has already taken a decision to amend the 2009 regulations for allowing grossing up of the base rate of return with the applicable tax rate as per the Finance Act for the relevant year and for direct settlement of tax liability between the generating company/transmission licensee and the beneficiaries/long term transmission customers on year to year basis. The process of amendment to the 2009 regulations is under way and will address the concern of the petitioner with regard to the grossing up of base rate of return with the applicable tax rate as per the Finance Act.
- 21. Return on equity in respect of the transmission line has been calculated as under:-

(₹ in lakh)

| | As on DOCO | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|----------------------------|------------|----------|-----------|----------|----------|
| Opening equity | 11744.95 | 11744.95 | 12103.20 | 12159.40 | 12268.99 |
| Addition due to Additional | | 358.25 | 56.19 | 109.59 | 0.00 |
| Capitalisation | | | | | |
| Closing Equity | | 12103.20 | 121059.40 | 12268.99 | 12268.99 |
| Average Equity | | 11924.08 | 12131.30 | 12214.19 | 12268.99 |
| Return on Equity (Base | | 15.50% | 15.50% | 15.50% | 15.50% |
| Rate) | | | | | |
| Tax Rate for the year | | 11.33% | 11.33% | 11.33% | 11.33% |
| 2008-09(MAT) | | | | | |
| Rate of Return on Equity | | 17.481% | 17.481% | 17.481% | 17.481% |
| (Pre Tax) | | | | | |
| Return on Equity (Pre Tax) | | 2084.45 | 2120.67 | 2135.16 | 2144.74 |

INTEREST ON LOAN

- 22. Regulation 16 of the 2009 regulations provides that,-
 - "16. (1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.
 - (2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.
 - (3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year:
 - (4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.
 - (5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project:
 - Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:
 - Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.
 - (6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.
 - (7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.
 - (8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.
 - (9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute:

Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan."

- 23. The Interest on loan capital has been worked out as per Regulation 16 of the 2009 regulations as detailed below:
 - (a) Gross amount of loan, repayment of instalments and rate of interest and weighted average rate of interest on actual average loan have been considered as per the petition.
 - (b) The repayment for the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that period.

- (c) If the moratorium period has been availed by the transmission licensee, the repayment of the loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.
- (d) Weighted average rate of interest on actual average loan worked out as per (i) above is applied on the notional average loan during the year to arrive at the interest on loan.
- 24. The methodology followed for the calculation of weighted average Rate of Interest in case of floating interest loans in Petition 132/2010, the same has been adopted in the instant petition. Accordingly, the interest on Loan has been calculated on the basis of rate prevailing as on 1.4.2010. Any change in rate of Interest subsequent to 1.4.2010 will be considered at the time of truing up.
- 25. Based on the above, interest on loan has been worked out for the period 2009-14 as under:

(₹ in lakh)

| | As on DOCO | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|---|------------|----------|----------|----------|----------|
| Gross Normative Loan | 27404.99 | 27404.99 | 28240.92 | 28372.03 | 28627.74 |
| Cumulative Repayment up to Previous Year | | 0.00 | 2099.64 | 4235.85 | 6386.66 |
| Net Loan-Opening | | 27404.99 | 26141.28 | 24136.18 | 22241.09 |
| Addition due to Additional Capitalization | | 835.93 | 131.12 | 255.71 | 0.00 |
| Repayment during the year | | 2099.64 | 2136.22 | 2150.80 | 2160.45 |
| Net Loan-Closing | | 26141.28 | 24136.18 | 22241.09 | 20080.64 |
| Average Loan | | 26773.14 | 25138.73 | 23188.64 | 21160.86 |
| Weighted Average Rate of Interest on Loan | | 3.7262% | 4.0418% | 4.0429% | 4.0477% |
| Interest | | 997.62 | 1016.05 | 937.50 | 856.53 |

26. The detailed calculations in support of the weighted average rates of interest on loan have been computed as per the **Annexure** to this order.

DEPRECIATION

- 27. Regulation 17 of the 2009 regulations provides for computation of depreciation in the following manner, namely:
 - "17. (1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.
 - (2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.

Provided that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site: Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciable value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff.

- (3) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.
- (4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III to these regulations for the assets of the generating station and transmission system:

Provided that, the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets.

- (5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2009 from the gross depreciable value of the assets.
- (6) Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis."
- 28. The assets covered in the petition were put under commercial operation on 1.04.2010 and accordingly, will complete 12 years beyond 2013-14 and therefore depreciation during the tariff block has been calculated as per straight line method and at the rates as specified in Appendix-III of the 2009 regulations.
- 29. The depreciation of the transmission assets for the period 2009-14 has been worked out as overleaf:

(₹ in lakh)

| Details of Depreciation | As on DOCO | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|---|---------------|----------|----------|----------|----------|
| Gross block Opening | 39149.94 | 39149.94 | 40344.12 | 40531.43 | 40896.73 |
| Addition during 2009-14 due to projected Additional Capital Expenditure | | 1194.18 | 187.31 | 365.30 | 0.00 |
| Gross block Closing | | 40344.12 | 40531.43 | 40896.73 | 40896.73 |
| Average gross block | | 39747.03 | 40437.78 | 40714.08 | 40896.73 |
| Rate of Depreciation | | 5.2825% | 5.2827% | 5.2827% | 5.2827% |
| Depreciable Value (90%) | | 35772.33 | 36394.00 | 36642.67 | 36807.06 |
| Remaining Depreciable Value | | 35772.33 | 34294.36 | 32406.82 | 30420.40 |
| Depreciation | · | 2099.64 | 2136.22 | 2150.80 | 2160.45 |

OPERATION & MAINTENANCE EXPENSES

30. In accordance with of Regulation 19(g) of the 2009 regulations, the following norms have been specified for operation and maintenance expenses:

(₹ in lakh)

| Transmission Line/Bays: | Year | | | | |
|--|---------|---------|---------|---------|---------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| 765 kV S/C, Quad Conductor, Seoni- Bina (Charged at 400 kV) (` in lakh/per kms.) | 0.537 | 0.568 | 0.600 | 0.635 | 0.671 |
| 400 KV bay (₹ lakh/bay) | 52.40 | 55.40 | 58.57 | 61.92 | 65.46 |

31. As per the norms of 2009 regulations, allowable O&M expenses for assets covered in the petition are as under:

(₹ in lakh)

| Element | Year | | | | |
|--|---------|---------|---------|---------|---------|
| | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
| 233.652 Kms., 765 kV S/C, Quad Conductor, Bina- Gwalior-II (Charged at 400 kV) | - | 166,11 | 175.47 | 185.71 | 196.23 |
| 2 nos. 400 KV bays | - | 110.80 | 117.14 | 123.84 | 130.92 |
| Total | - | 276.91 | 292.61 | 309.55 | 327.15 |

32. The petitioner has further submitted that it reserves the right to approach the Commission for suitable revision in the norms for O & M expenditure in case the impact of wage hike w.e.f 1.1.2007 is more than 50%. MSEDCL has opposed the claim of the petitioner on the ground that 2009 regulations do not have any

provision for revision of O&M expenses. It is clarified that any application filed by the petitioner for revision of O&M norms on account of pay revision will be dealt with in accordance with law.

INTEREST ON WORKING CAPITAL

- 33. The components of the working capital and the interest thereon are discussed hereunder:
 - (i) Receivables: As per Regulation 18(1)(c)(i) of the 2009 regulations, receivables will be equivalent to two months of fixed cost. The petitioner has claimed the receivables on the basis of two months of annual transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis two months annual transmission charges.
 - (ii) Maintenance spares: Regulation 18(1)(c)(ii) of the 2009 regulations provides for maintenance spares @ 15% per annum of the O & M expenses from 1.4.2009.
 - (iii) O & M expenses: Regulation 18(1)(c)(iii) of the 2009 regulations provides for operation and maintenance expenses for one month as a component of working capital. The petitioner has claimed O&M expenses for one month of O&M expenses of the respective year which has been considered in the working capital.
 - (iv) Rate of interest on working capital: As per Regulation 18(3) of the 2009 regulations, rate of interest on working capital shall be on normative

basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on 1.4.2009 or on 1st April of the year in which the project or part thereof (as the case may be) is declared under commercial operation, whichever is later. The interest on working capital is payable on normative basis notwithstanding that the transmission licensee has not taken working capital loan from any outside agency. The petitioner has claimed interest on working capital @ 11.75% based on State Bank India PLR as on 1.4.2010, which is in accordance with the 2009 regulations and has been allowed.

34. The necessary computations in support of interest on working capital are as under:

(₹ in lakh)

| | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|--------------------|---------|---------|---------|---------|
| Maintenance Spares | 41.54 | 43.89 | 46.43 | 49.07 |
| O & M expenses | 23.08 | 24.38 | 25.80 | 27.26 |
| Receivables | 929.23 | 947.48 | 942.03 | 934.61 |
| Total | 993.84 | 1015.76 | 1014.26 | 1010.94 |
| Rate of interest | 11.75% | 11.75% | 11.75% | 11.75% |
| Interest | 116.78 | 119.35 | 119.18 | 118.79 |

TRANSMISSION CHARGES

35. The transmission charges being allowed for the transmission asset are summarised as under:

(₹ in lakh)

| | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|-----------------------------|---------|---------|---------|---------|
| Depreciation | 2099.64 | 2136.22 | 2150.80 | 2160.45 |
| Interest on Loan | 997.62 | 1016.05 | 937.50 | 856.53 |
| Return on Equity | 2084.45 | 2120.67 | 2135.16 | 2144.74 |
| Interest on Working Capital | 116.78 | 119.35 | 119.18 | 118.79 |
| O & M Expenses | 276.91 | 292.61 | 309.55 | 327.15 |
| Total | 5575.39 | 5684.90 | 5652.19 | 5607.66 |

APPLICATION FEE AND THE PUBLICATION EXPENSES

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

SERVICE TAX

37. The petitioner has prayed for reimbursement of service tax if it is subjected to such tax in future. MSEDCL has submitted that since transmission of electricity has been exempted from payment of service tax in public interest, the petitioner's presumption of withdrawal of exemption of service tax and making provision at this stage is not justified. In our view, the petitioner's prayer is premature at this stage and cannot be entertained.

LICENCE FEE

- 38. The petitioner has claimed reimbursement of licence fees on the ground that the cost on account of licence fee has not been captured under O&M norms in the 2009 regulations. MSEDCL has submitted that the Commission may pass such order in the circumstances as deemed proper in order to avoid unnecessary burden on the beneficiaries and ultimate end consumers.
- 39. The transmission charges allowed shall be recovered on monthly basis in accordance with Regulation 23 and shall be shared by the respondents in accordance with Regulation 33 of the 2009 regulations.

40. This order disposes of Petition No. 238/2010.

Sd/-(M.DEENA DAYALAN) MEMBER Sd/-(V.S.VERMA) MEMBER Sd/-(S.JAYARAMAN) MEMBER

Annexure

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

| | | (₹ in Lakhs | | | | |
|----------|--|--|---------|---------|---------|--|
| | Details of Loan | 2010-11 | 2011-12 | 2012-13 | 2013-14 | |
| 1 | Bond XIX | | | | | |
| | Gross loan opening | 71.00 | 71.00 | 71.00 | 71.00 | |
| | Cumulative Repayment upto | 0.00 | 5.92 | 11.83 | 17.75 | |
| | DOCO/previous year | | | | | |
| | Net Loan-Opening | 71.00 | 65.08 | 59.17 | 53.25 | |
| | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 | |
| | Repayment during the year | 5.92 | 5.92 | 5.92 | 5.92 | |
| | Net Loan-Closing | 65.08 | 59.17 | 53.25 | 47.33 | |
| | Average Loan | 68.04 | 62.13 | 56.21 | 50.29 | |
| | Rate of Interest | 9.25% | 9.25% | 9.25% | 9.25% | |
| | Interest | 6.29 | 5.75 | 5.20 | 4.65 | |
| | Rep Schedule | 12 Equal Annual Installments from 24.07.2010 | | | | |
| 2 | Bond XX | | | | | |
| _ | Gross loan opening | 7.00 | 7.00 | 7.00 | 7.00 | |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.58 | 1.17 | 1.75 | |
| | Net Loan-Opening | 7.00 | 6.42 | 5.83 | 5.25 | |
| | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 | |
| | Repayment during the year | 0.58 | 0.58 | 0.58 | 0.58 | |
| | Net Loan-Closing | 6.42 | 5.83 | 5.25 | 4.67 | |
| | Average Loan | 6.71 | 6.13 | 5.54 | 4.96 | |
| | Rate of Interest | 8.93% | 8.93% | 8.93% | 8.93% | |
| | Interest | 0.60 | 0.55 | 0.49 | 0.44 | |
| | Rep Schedule | 12 Equal Annual Installments from 07.09.2010 | | | | |
| 3 | Bond XXI | | | | | |
| <u> </u> | Gross loan opening | 32.00 | 32.00 | 32.00 | 32.00 | |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 2.67 | 5.33 | 8.00 | |
| | Net Loan-Opening | 32.00 | 29.33 | 26.67 | 24.00 | |
| | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 | |
| | Repayment during the year | 2.67 | 2.67 | 2.67 | 2.67 | |
| | Net Loan-Closing | 29.33 | 26.67 | 24.00 | 21.33 | |
| | Average Loan | 30.67 | 28.00 | 25.33 | 22.67 | |
| | Rate of Interest | 8.73% | 8.73% | 8.73% | 8.73% | |
| | Interest | 2.68 | 2.44 | 2.21 | 1.98 | |
| | Rep Schedule | 12 Equal Annual Installments from 11.10.2010 | | | | |
| 4 | Bond XXII | | | | | |
| 4 | -V.I.W ///III | | 1 | | l | |

| | Gross loan opening | 89.00 | 89.00 | 89.00 | 89.00 | |
|---|--|--|---------------|--------------|----------|--|
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 7.42 | 14.83 | 22.25 | |
| | Net Loan-Opening | 89.00 | 81.58 | 74.17 | 66.75 | |
| | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 | |
| | Repayment during the year | 7.42 | 7.42 | 7.42 | 7.42 | |
| | Net Loan-Closing | 81.58 | 74.17 | 66.75 | 59.33 | |
| | Average Loan | 85.29 | 77.88 | 70.46 | 63.04 | |
| | Rate of Interest | 8.68% | 8.68% | 8.68% | 8.68% | |
| | Interest | 7.40 | 6.76 | 6.12 | 5.47 | |
| | Rep Schedule | 12 Equal Ann | ual Installme | ents from 07 | .12.2010 | |
| | | | | | | |
| 5 | Bond XXIV | | | | | |
| | Gross loan opening | 857.00 | 857.00 | 857.00 | 857.00 | |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 71.42 | 142.83 | 214.25 | |
| | Net Loan-Opening | 857.00 | 785.58 | 714.17 | 642.75 | |
| | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 | |
| | Repayment during the year | 71.42 | 71.42 | 71.42 | 71.42 | |
| | Net Loan-Closing | 785.58 | 714.17 | 642.75 | 571.33 | |
| | Average Loan | 821.29 | 749.88 | 678.46 | 607.04 | |
| | Rate of Interest | 9.95% | 9.95% | 9.95% | 9.95% | |
| | Interest | 81.72 | 74.61 | 67.51 | 60.40 | |
| Rep Schedule 12 Equal Annual Installments from 26 | | | | .03.2011 | | |
| 6 | Bond XXV | | | | | |
| | Gross loan opening | 2246.00 | 2246.00 | 2246.00 | 2246.00 | |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 187.17 | 374.33 | |
| | Net Loan-Opening | 2246.00 | 2246.00 | 2058.83 | 1871.67 | |
| | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 | |
| | Repayment during the year | 0.00 | 187.17 | 187.17 | 187.17 | |
| | Net Loan-Closing | 2246.00 | 2058.83 | 1871.67 | 1684.50 | |
| | Average Loan | 2246.00 | 2152.42 | 1965.25 | 1778.08 | |
| | Rate of Interest | 10.10% | 10.10% | 10.10% | 10.10% | |
| | Interest | 226.85 | 217.39 | 198.49 | 179.59 | |
| | Rep Schedule | 12 Equal Annual Installments from 12.06.2011 | | | | |
| 7 | Bond XXVI | | | | | |
| | Gross loan opening | 639.00 | 639.00 | 639.00 | 639.00 | |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 53.25 | 106.50 | |
| | Net Loan-Opening | 639.00 | 639.00 | 585.75 | 532.50 | |
| | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 | |
| | Repayment during the year | 0.00 | 53.25 | 53.25 | 53.25 | |
| | Net Loan-Closing | 639.00 | 585.75 | 532.50 | 479.25 | |
| | Net Loan-Closing | 000.00 | 000.70 | 002.00 | | |

| | Rate of Interest | 9.30% | 9.30% | 9.30% | 9.30% | |
|---|--|---|---------------|---------------|----------|--|
| | Interest | 59.43 | 56.95 | 52.00 | 47.05 | |
| | Rep Schedule | 12 Equal Annual Installments from 07.03.2012 | | | | |
| | · | • | | | | |
| 8 | IBRD III | | | | | |
| | Gross loan opening | 19844.99 | 19844.99 | 19844.99 | 19844.99 | |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 965.71 | 1973.58 | |
| | Net Loan-Opening | 19844.99 | 19844.99 | 18879.28 | 17871.40 | |
| | Additions during the year | 0.00 | 0.00 | 0.00 | 0.00 | |
| | Repayment during the year | 0.00 | 965.71 | 1007.88 | 1051.54 | |
| | Net Loan-Closing | 19844.99 | 18879.28 | 17871.40 | 16819.87 | |
| | Average Loan | 19844.99 | 19362.13 | 18375.34 | 17345.63 | |
| | Rate of Interest | 2.07% | 2.07% | 2.07% | 2.07% | |
| | Interest | 410.79 | 400.80 | 380.37 | 359.05 | |
| | Rep Schedule | 30Half year | lly Installme | nts from 15.0 | 09.2011 | |
| | | , | , | | | |
| 9 | Bond XXXIII | | | | | |
| | Gross loan opening | 0.00 | 3619.00 | 3619.00 | 3619.00 | |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 0.00 | 0.00 | 0.00 | |
| | Net Loan-Opening | 0.00 | 3619.00 | 3619.00 | 3619.00 | |
| | Additions during the year | 3619.00 | 0.00 | 0.00 | 0.00 | |
| | Repayment during the year | 0.00 | 0.00 | 0.00 | 0.00 | |
| | Net Loan-Closing | 3619.00 | 3619.00 | 3619.00 | 3619.00 | |
| | Average Loan | 1809.50 | 3619.00 | 3619.00 | 3619.00 | |
| | Rate of Interest | 8.64% | 8.64% | 8.64% | 8.64% | |
| | Interest | 156.34 312.68 312.68 312.68 12 Equal Annual Installments from 12.09.2014 | | | | |
| | Rep Schedule | | | | | |
| | | | T | T | | |
| | Total Loan | 22725 22 | 0740400 | 0740400 | 0740400 | |
| | Gross loan opening | 23785.99 | 27404.99 | 27404.99 | 27404.99 | |
| | Cumulative Repayment upto DOCO/previous year | 0.00 | 88.00 | 1382.12 | 2718.42 | |
| | Net Loan-Opening | 23785.99 | 27316.99 | 26022.86 | 24686.57 | |
| | Additions during the year | 3619.00 | 0.00 | 0.00 | 0.00 | |
| | Repayment during the year | 88.00 | 1294.12 | 1336.29 | 1379.95 | |
| | Net Loan-Closing | 27316.99 | 26022.86 | 24686.57 | 23306.62 | |
| | Average Loan | 25551.49 | 26669.92 | 25354.71 | 23996.59 | |
| | Rate of Interest | 3.7262% | 4.0418% | 4.0429% | 4.0477% | |
| | Interest | 952.10 | 1077.93 | 1025.07 | 971.32 | |