CENTRAL ELECTRICITY REGULATORY COMMISSION **NEW DELHI**

Petition No. 226/2010

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

Date of Order: 15.2.2011 Date of Hearing: 23.12. 2010

In the matter of:

Approval under Regulation 86 of Central Electrical Regulatory Commission (Conduct of Business) Regulations, 1999 for determination of Transmission Tariff in respect of 400 kV D/C Ranchi-Sipat transmission line with associated bays at Ranchi and Sipat S/S (Asset 1) and 40% FSC on 400 kV Ranchi-Sipat Line at Ranchi S/S(Asset 2) under Kahalgaon Stage II Phase II Transmission System in Western Region for the period from 1.4.2009 to 31.3.2014.

In the matter of:

Power Grid Corporation of India Ltd., GurgaonPetitioner

Vs

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

.....Respondents

The following were present:

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

ORDER

This petition has been filed seeking approval of transmission tariff in respect of 400 kV D/C Ranchi-Sipat transmission line with associated bays at Ranchi and Sipat S/S (Asset -I) and 40% FSC on 400 kV Ranchi-Sipat Line at Ranchi S/S (Asset-II) (both the assets hereinafter collectively referred to as "the transmission assets") under Kahalgaon Stage II Phase II Transmission System in Western Region for the period from 1.4.2009 to 31.3.2014 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, (hereinafter referred to as "the 2009 regulations"). The petitioner has also sought the following reliefs:

- (a) Invoke the provisions of Regulation 44(Power to Relax) of the 2009 regulations, for relaxation of clause (3) of regulation 15 thereof so that grossing up the base rate of Return on Equity (ROE) may be allowed considering the revised rate of MAT, surcharge, any other cess, charges, levies etc. as per the relevant Finance Acts and accordingly allow consequential impact of tariff on account of truing up, to be billed and settled directly with the beneficiaries every year in the tariff block.
- (b) Allow the petitioner to recover full depreciation during the useful life of the assets which are combined to calculate transmission charges.
- (c) Approve the reimbursement, of expenditure, by the beneficiaries towards petition filing fee, and publishing of notices in newspapers in

terms of Regulation 42 of the 2009 regulations, and other expenditure (if any) in relation to the filing of petition.

- (d) Allow the petitioner to bill and 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
- (e) Allow the petitioner to bill and recover licence fee separately from the respondents
- (f) Pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.
- 2. The investment approval for the transmission assets was accorded by Government of India vide its letter No. 12/21/2003-PG dated 24.1.2005 at an estimated cost of ₹ 46402 lakh which included IDC of ₹ 2898 lakh based on second quarter 2004 price level. Subsequently, revised cost estimates were approved by the Board of Directors of the petitioner company vide Memorandum No. C/CP/RCE/Khalgaon-II Phase-II dated 16.2.2009 for an estimated cost of ₹ 57284 lakh including IDC of ₹ 5770 lakh based on 3rd quarter 2008 price level. The date of commercial operation of Asset 1 is 1.1.2009 and that of Asset 2 is 1.3.2009. The notional date of commercial operation of the assets has been taken as 1.3.2009.
- Transmission charges for the transmission assets for the period upto
 31.3.2009 were determined by the Commission vide order dated 13.5.2010

4. The petitioner has claimed the following transmission charges during the tariff period 2009-14:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	2837.87	2896.43	2911.22	2911.22	2911.22
Interest on Loan	3338.85	3142.35	2890.65	2619.38	2348.26
Return on equity	2817.63	2875.79	2890.48	2890.48	2890.48
Interest on Working Capital	215.91	215.88	212.97	209.14	205.40
O & M Expenses	568.82	601.43	635.87	672.20	710.48
Total	9779.08	9731.88	9541.19	9302.42	9065.84

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

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	85.32	90.21	95.38	100.83	106.57
O & M expenses	47.40	50.12	52.99	56.02	59.21
Receivables	1629.85	1621.98	1590.20	1550.40	1510.97
Total	1762.57	1762.31	1738.57	1707.25	1676.75
Interest	215.91	215.88	212.97	209.14	205.40
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%

6. At the time of hearing, reply to the petition was filed only by Maharashtra State Electricity Distribution Company viz. respondent No. 2. During the hearing of the case, respondent No. 1 viz. Madhya Pradesh Power Trading Company Ltd (MPPTCL) sought two weeks time to file its reply. Accordingly, the Commission allowed time till 5.1.2011 to the MPPTCL to file its reply. The reply however, was sent vide the respondents letter dated 11.1.2011 and received in the Commission on 13.1.2011. We would like to urge the parties in the proceedings before the Commission to adhere to the time limits prescribed in the Orders or Records of Proceedings of the Commission. In exceptional circumstances when the time limits could not be

complied with, the parties concerned are expected to manifest the minimum courtesy of seeking condonation of delay. Notwithstanding the above, in the interest of justice, we proceed to consider the submissions of MPPTCL.

- 7. MSEDCL in its reply has made the following submissions:
 - (a) The petitioner has claimed Rs.1657 lakh for 2009-10 and Rs.560.50 lakh for 2010-11 under balance and retention payment. The petitioner has not furnished category-wise detailed break-up for such claims. Final/retention payments basically consist of Security Deposits, Performance Deposits, Liquidated damages etc. (which are deposited by the party) alongwith balance payments if any. Excluding the balance payment, if any, there is no additional investment claimed by the petitioner and hence the claim should not be admitted.
 - (b) As transmission services have been exempted from Service Tax, the presumption of withdrawal of exemption of Service Tax and making future provision at this stage is not justified.
 - (c) The petitioner may be directed to clarify the claims towards recovery of depreciation after achieving useful life of an asset which is not in line with the Regulations.
 - (d) Prayers for payment of filing fees and licence fees have been opposed.
- 8. MPPTCL in its reply has made the following submissions:
 - (a) Additional capital expenditure of ₹. 551.5 lakh in respect of Asset 1 and ₹. 9 lakh in respect of Asset 2 are not admissible under regulation 9 of the 2009 regulations.

- (b) After considering the projected additional capital expenditure of ₹. 519.36 lakh during 2009-10, total estimated capital cost as on 31.3.2014 in respect of asset 2 comes to ₹.3840.67 lakh which will be exceeding the approved capital cost by ₹ 42.69 lakh.
- (c) The cut-off date is to be decided with respect to the date of commercial operation and in accordance with the tariff regulation prevailing at the time of date of commercial operation.
- 9. The petitioner in its rejoinder to the reply of MSEDCL has submitted that category wise details have been submitted in paras 6, 7 and 9 of the petition. The petitioner has clarified that only the final and retention payments which are permitted under Regulation 9(1) of 2009 regulations have been claimed. As regards the depreciation, the petitioner has clarified that even where the assets have been combined for the purpose of tariff, with a notional DOCO, the useful life of the equipments in Transmission Lines and Sub-stations and depreciation of individual assets shall continue to be governed by the actual DOCO of the asset and after completion of the technical life with reference to actual DOCO of the individual assets, full depreciation would be deemed to be recovered and balance depreciation will be applicable for the remaining assets. As regards the petition filing fees and publication expenses, it has been averred that the claim has been made as per Regulation 42 of 2009 regulations. As regards the licence fees, it has been submitted that licence fees have become incidental to the petitioner from 2008-09 and have not been captured in the O & M cost in 2009 regulations. The petitioner has not filed any rejoinder to the reply of MPPTCL. The issues raised by MSEDCL

and MPPTCL have been addressed in the respective paragraphs of this order.

CAPITAL COST

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

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

11. The Commission in order dated 13.05.2010 in Petition No. 247/2009 has approved the capital cost of ₹.52898.71 lakh as on31.3.2009 in respect of the transmission assets which been considered as the opening capital cost as on 1.4.2009 for tariff determination for 2009-14 period.

ADDITIONAL CAPITAL EXPENDITURE

- 12. Regulation 9 of the 2004 regulations provides as under:
 - "9. **Additional Capitalisation.** (1) The capital expenditure incurred or projected to 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.

- (2) The capital expenditure incurred on the following counts after the cut-off date may, in its discretion, be admitted by the Commission, subject to prudence check:
- (i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;
- (ii) Change in law;
- (iii) Deferred works relating to ash pond or ash handling system in the original scope of work;
- (iv) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) including due to geological reasons after adjusting for proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation; and
- (v) In case of transmission system any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement of switchyard equipment due to increase of fault level, emergency restoration system, insulators cleaning infrastructure, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system:

Provided that in respect sub-clauses (iv) and (v) above, any expenditure on acquiring the minor items or the assets like tools and tackles, furniture, airconditioners, voltage stabilizers, refrigerators, coolers, fans, washing machines, heat convectors, mattresses, carpets etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff w.e.f. 1.4.2009."

13. The petitioner has claimed the following projected additional capital expenditure during 2009-14 period:

(₹ in lakh)

Asset	Approved	Admitted		Proposed 9-14 period	Total Estimated
	cost as on 31.03.2009 as on 01.04.2009 2009-10 2010-11		Capital Cost as on 31. 3.2014		
400 kV D/C Ranchi- Sipat transmission line with associated bays at Ranchi and Sipat S/S	53485.98	49586.40	1138.13	551.50	51276.03
40% FSC on 400 kV Ranchi-Sipat Line at Ranchi S/S	3797.98	3312.31	519.36	9.00	3840.67

14. Category wise details of the projected additional capital expenditure are as under:

(₹ in lakh)

Name of the Asset	Year	Nature	Amount	Details of Expenditure
400 kV D/C Ranchi-Sipat transmission line with associated bays at Ranchi	2009-10	TL	918.13	Final/Retention
	2009-10	Substation	220.00	payment
	2010-11	TL	521.50	Final/Retention
and Sipat S/S	2010-11	Substation	30	payment
40% FSC on 400 kV Ranchi-	2009-10	Substation	519.36	Final/Retention payment
Sipat Line at Ranchi S/S	2010-11	Substation	9.00	Final/Retention payment

15. The petitioner has claimed projected capital expenditure of ₹.1657.49 lakh and ₹.560.50 lakh during 2009-10 and 2010-11 respectively on account of Balance and Retention payment. The petitioner was directed vide Commission's letter dated 5.10.2010 "to explain the admissibility of proposed additional capital expenditure for the year 2010-11 on affidavit with an advance copy to the respondents latest by 20.10.2010." In response to the above directions, the petitioner vide its affidavit dated 20.10.2010 has clarified that the notional date of commercial operation of the assets involved in the petition being 1.3.2009, the tariff block 2004-09 expired on 31.3.2009, before the expiry of the cut off date as per the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004, (hereinafter referred to as "the 2004 regulations") and has requested that the cut-off date of the transmission assets be considered in accordance with the definition of the term in the 2009 regulations. MPPTCL has opposed the capitalisation of projected capital expenditure due to balance and retention payment during 2010-11 on the ground that the same is not allowed under Regulation 9(1) of 2009 regulations as the cut-off date of the generating station expired on 31.3.2010 as per Central Electricity Regulatory

Commission(Terms and Conditions of Tariff), Regulations, 2004 (hereinafter "2004 regulations").

16. Clause 49 (viii) of the 2004 regulations defines 'cut-off' date as under:

"(viii) `Cut-off Date' means the date of first financial year closing after one year of the date of commercial operation of the transmission system."

Clause 3(11) of the 2009 regulations defines 'cut-off' date as under:

"(11) 'cut-off date' means 31st March of the year closing after two years of the year of commercial operation of the project, and in case the project is declared under commercial operation in the last quarter of a year, the cut-off date shall be 31st March of the year closing after three years of the year of commercial operation;"

17. It is evident from the above quoted provisions that the cut-off date as defined in the 2009 regulations will have a longer duration as compared to that defined under the 2004 regulations. While 2004 regulations provide for one clear financial year after the date of commercial operation as the cut-off date, Regulation 3(11) allows clear two/three years after the date of commercial operation as the cut-off date. The reasons for a cut-off date with a longer duration during 2009-14 period has been explained in the Statement of Reasons dated 3.2.2009 to the 2009 regulations as under:

"10.2.4 As regards the generators' demand to allow deferred liabilities and deferred works executed after the cut-off date, the Commission is of the view that all the works relating to the project within the original scope including colony etc should be completed as early as possible, but not later than cut-off date. In fact the cut-off date has been extended by one more year to take care of the concerns of the generating companies/transmission licensees. The Commission expects that all liabilities and deferred works which could not be settled or completed by the COD of the station, must be settled or completed by the cut-off date. A period of 2 to 3 years is considered reasonable enough to complete all works within the original scope except the works relating to ash pond and ash handling system. Any liability remaining unsettled or work remaining unfinished after the cut-off date could only be because of some dispute or otherwise before arbitration or pending before the court which shall be dealt as per the regulations dealing with additional capitalisation after cut-off date.(emphasis supplied)

- 18. The Statement of Reasons allows extended cut-off date to enable the generating companies or transmission licensees to complete all works or settle all liabilities within the original scope of work by the cut-off date as "the deferred liabilities within the original scope of work" which was allowed after the cut-off date under the 2004 regulations has been disallowed under the 2009 regulations after the cut-off date. However, applying Regulation 3(11) of the 2009 regulations to existing projects will result in retrospective application of the regulations and unsettle the settled position. For example, in case of the projects under commercial operation during the last guarter of 2006-07 and first three guarters of 2007-08, their cut-off dates which expired on 31.3.2008 and 31.3.2009 respectively, will get extended till 31.3.2010 if calculated according to Regulation 3(11) of 2009 regulations and the additional capitalization which was denied after the cut-off date under 2004 regulations will become eligible for capitalization within the cut-off date as per 2009 regulations. This will unsettle the settled tariff of many projects. In our view, "cut-off date" as defined in Regulation 3 (11) will not have retrospective applications in case of existing projects. The prayer of the petitioner to treat the additional capital expenditure incurred during 2010-11 as within the cut-off date as per the 2009 regulations cannot be accepted.
- 19. It is observed that the deferred liabilities within the original scope of work after the cut-off date were admissible under 2004 regulations. However, this expenditure has become inadmissible after the cut-off date under the 2009 regulations. This has adversely affected the interests of existing projects under commercial operation during 2007-09 as they would not be able to discharge such deferred liabilities after the cut-off date under 2009 regulations. The

Commission has decided in a number of petitions filed by the petitioner that in such cases, expenditure incurred on undischarged liabilities particularly for balance/retention payment shall be capitalized by relaxing Regulation 9(2) of 2009 regulations. In Petition No.176/2010, the Commission has granted a general relaxation of Regulation 9(2) of 2009 regulations to be applicable in other cases.

- 20. As regards MPPTCL's contention that the total estimated capital cost as on 31.3.2014 in respect of Asset II after considering the projected additional capital expenditure during 2009-10 exceeds the approved capital cost, it is clarified that as per the procedure/methodology followed for determining tariff for combined asset, the apportioned approved cost of both the assets taken together are compared with the total estimated capital cost. In the present case, the total estimated capital cost of both assets as on 31.3.2014 works out to ₹ 55116.70 lakhs as against the approved cost of ₹ 57283.96 lakhs for both the assets. Therefore, the estimated capital cost as on 31.3.2014 are within the approved capital cost for both the assets taken together which is admissible in tariff.
- 21. Additional capital expenditure amounting to ₹ 1689.63 lakh and 528.36 lakh in respect of Asset-I and Asset -II respectively as per the above details given in para 11 is allowed.

DEBT- EQUITY RATIO

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

"(2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Comission for determination of tariff for the period ending 31.3.2009 shall be considered."

23. Debt-equity based on the capital cost as on 1.4.2009 is as under:-

Asset I	Admitted as on 31.3.2009						
	Amount (₹ in lakh)	%					
Debt	34710.48	70.00%					
Equity	14875.92	30.00%					
Total	49586.40	100.00%					
Asset II	Admitted as on 3°	1.3.2009					
	Amount (₹ in lakh)	%					
Debt	2318.62	70.00%					
Equity	993.69	30.00%					
Total	3312.31	100.00%					
Combined	Admitted as on 3°	1.3.2009					
	Amount (₹ in lakh)	%					
Debt	37029.10	70.00%					
Equity	15869.61	30.00%					
Total	52898.71	100.00%					

24. Additional capital expenditure allowed during 2009-10 and 2010-11 has also been segregated in the ratio of 70:30.

RETURN ON EQUITY

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

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

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

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

Provided that return on equity with respect to the actual tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period

shall be trued up separately for each year of the tariff period along with the tariff petition filed for the next tariff period.

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

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

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

- 26. The petitioner has computed ROE on pre- tax basis on 11.33% MAT in accordance with the tax rate applicable for 2008-09 and has claimed return on equity @ 17.481%.
- 27. Petitioner's prayer to invoke the provisions of Regulation 44 of the 2009 regulations for relaxation of Regulation 15(3) thereof so that grossing up the base rate of ROE may be allowed considering the tax rates viz., MAT, surcharge, any other cess, charges, levies etc., as per the relevant Finance Acts, has already been taken cognizance of in the Commission's order dated 3.8.2010 in Petition No. 17/2010 wherein a decision has been taken to address the issue raised by the petitioner. Relevant portion of the said order is extracted as under:

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

- 28. Pending decision on revision of MAT rate, ROE has been computed as per Regulation 15 of the 2009 regulations, and pre-tax ROE of 17.481% has been considered.
- 29. Detailed calculation of the ROE in respect the transmission assets is as under:

(₹ in lakh)

		2009-10	2010-11	2011-12	2012-13	2013-14
Gross Notional Equity	15869.61					
Addition due to Additional Capitalisation	0.00					
Opening Equity	15869.61	15869.61	16366.86	16535.01	16535.01	16535.01
Addition due to Additional Capitalisation		497.25	168.15	0.00	0.00	0.00
Closing Equity		16366.86	16535.01	16535.01	16535.01	16535.01
Average Equity		16118.24	16450.94	16535.01	16535.01	16535.01
Return on Equity (Base Rate)		15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09		11.330%	11.330%	11.330%	11.330%	11.330%
Rate of Return on Equity (Pre Tax)		17.481%	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)		2817.63	2875.79	2890.49	2890.49	2890.49

INTEREST ON LOAN

- 30. 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."

- 31. In these calculations, interest on loan has been worked out as detailed below:
 - (a) Details of net outstanding loan as on 31.3.2009, cumulative repayment up to 31.3.2009, repayment schedule for the loans, rate of interest etc. have been taken from the order dated 13.05.2010 in petition no. 247/2009 for working out weighted average rate of interest.
 - (b) Tariff is worked out considering normative loan and normative repayments. Depreciation allowed has been taken as normative repayment for the tariff period 2009-14.

- (c) Weighted average rate of interest on actual loan worked out as above has been applied on the notional average loan during the year to arrive at the interest on loan.
- 32. Detailed calculation of Weighted Average Interest on Loan is enclosed to this order as **Annexure**. Interest on Loan has been computed as under:

(₹ in lakh)

		2009-10	2010-11	2011-12	2012-13	2013-14
Gross Notional Loan	37029.10					
Addition due to Additional Capitalisation	0.00					
Gross Normative Loan	37029.10	37029.10	38189.34	38581.69	38581.69	38581.69
Cumulative Repayment upto Previous Year		339.79	3177.66	6074.09	8985.31	11896.53
Net Loan-Opening		36689.31	35011.68	32507.60	29596.38	26685.16
Addition due to Additional Capitalisation		1160.24	392.35	0.00	0.00	0.00
Repayment during the year		2837.87	2896.43	2911.22	2911.22	2911.22
Net Loan-Closing		35011.68	32507.60	29596.38	26685.16	23773.94
Average Loan		35850.49	33759.64	31051.99	28140.77	25229.55
Weighted Average Rate of Interest on Loan		9.3133%	9.3080%	9.3091%	9.3081%	9.3076%
Interest		3338.85	3142.35	2890.65	2619.38	2348.26

DEPRECIATION

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

Provided that......

Provided further that.....

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

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

- (5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2009 from the gross depreciable value of the assets.
- (6) Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis."
- 34. Depreciation of the transmission assets have been calculated annually based on Straight Line Method and at rates specified in Appendix-III.
- 35. For the period 1.4.2009 to 31.3.2014 the depreciation worked out are as under:

(₹ in lakh)

		2009-10	2010-11	2011-12	2012-13	2013-14
Rate of Depreciation		5.2820%	5.2819%	5.2819%	5.2819%	5.2819%
Depreciable Value	90%	48354.71	49352.81	49605.03	49605.03	49605.03
Remaining Depreciable Value		48014.92	46175.14	43530.94	40619.72	37708.50
Depreciation		2837.87	2896.43	2911.22	2911.22	2911.22

OPERATION & MAINTENANCE EXPENSES

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

(₹ in lakhs)

Element	2009-10	2010-11	2011-12	2012-13	2013-14
405.772 Jn,m 400 kV D/C, twin	254.42	269.03	284.45	300.68	317.72
conductor transmission line					
6 Nos., 400 kV Bay	314.40	332.40	351.42	371.52	392.76
Total O&M for the Assets	568.82	601.43	635.87	672.20	710.48

37. The petitioner has stated that it reserves the right to approach the Commission for suitable revision in the norms for O&M expenses in case the impact of wage hike is more than 50%. We clarify that petition if any, filed by the petitioner shall be dealt with in accordance with law.

INTEREST ON WORKING CAPITAL

- 38. As per the 2009 regulations the components of the working capital and the interest thereon are discussed hereunder:
 - (i) Receivables: As per Regulation 18(1)(c)(i) of the 2009 regulations, receivables will be equivalent to two months' average billing calculated on target availability level. The petitioner has claimed the receivables on the basis of 2 months' transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis of 2 months' transmission charges.
 - (ii) Maintenance spares: Regulation 18(1)(c)(ii) of the 2009 regulations provides for maintenance spares @ 15% per annum of the O & M expenses from 1.4.2009. The value of maintenance spares has accordingly been worked out.
 - (iii) O & M expenses: Regulation 18(1) (c) (iii) of the 2009 regulations provides for operation and maintenance expenses for one month as a component of working capital. The petitioner has claimed O&M expenses for 1 month of the respective year as claimed in the petition. This has been considered in the working capital.

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

(₹ in lakh) 2-13 2013-

	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	85.32	90.21	95.38	100.83	106.57
O & M expenses	47.40	50.12	52.99	56.02	59.21
Receivables	1629.85	1621.98	1590.20	1550.40	1510.98
Total	1,762.57	1,762.31	1,738.57	1,707.25	1,676.75
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	215.92	215.88	212.97	209.14	205.40

TRANSMISSION CHARGES

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

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	2837.87	2896.43	2911.22	2911.22	2911.22
Interest on Loan	3338.85	3142.35	2890.65	2619.38	2348.26
Return on equity	2817.63	2875.79	2890.49	2890.49	2890.49
Interest on Working Capital	215.92	15.88	212.97	209.14	205.40
O & M Expenses	568.82	601.43	635.87	672.20	710.48
Total	9779.08	9731.88	9541.20	9302.43	9065.85

Application fee and the publication expenses

41. The petitioner has sought approval for the reimbursement of fee paid by it for filing the petition. This has been opposed by MSEDCL. The Commission in exercise of the discretion vested under Regulation 42 of 2009 regulations has already taken a decision in order dated 11.1.2010 in Petition No. 109/2009 to allow reimbursement of filing fee in main tariff petitions during 2009-14 period. Accordingly, the petitioner shall be entitled to recover the filing fee from the beneficiaries on pro-rata basis.

42. Expenses incurred by the petitioner on publication of notices in connection with the present petition shall be directly recovered from the beneficiaries on pro rata basis.

Service Tax

43. The petitioner has made a specific prayer in its rejoinder to the reply by respondent No, 2 that it be allowed to bill and recover the Service tax from the respondents if at any time exemption from service tax is withdrawn and transmission of Power is notified as a taxable service. The petitioner's prayer is hypothetical and premature. It is clarified that if the petitioner approached the Commission for reimbursement of service tax in future, the same shall be dealt with in accordance with law.

Licence Fees

44. The petitioner's prayer for reimbursement of licence fee is under consideration and a decision as and when taken will be applicable in this case.

- 45. The transmission charges allowed in this order shall be recovered on monthly basis in accordance with Regulation 23 and shall be shared by the respondents in accordance with Regulation 33 of the 2009 regulations.
- 46. The petitioner has also prayed for reimbursement of license fee. A view in this regard is yet to be taken. The same as and when evolved will apply to this petition as well.
- 47. This order disposes of Petition No. 226/2010.

Sd/- Sd/- Sd/-

(M.Deena Dayalan) (V.S.Verma) (S.Jayaraman)
Member Member Member

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

Annexure

(₹. in Lakhs)

		1				. in Lakhs)
<u> </u>	Details of Loan	2009-10	2010-11	2011-12	2012-13	2013-14
1	Bond XVIII					
	Gross loan opening	126.00	126.00	126.00	126.00	126.00
	Cumulative Repayment upto DOCO/previous	0.00	10.50	21.00	31.50	42.00
	year Net Lean Onesian	400.00	445.50	405.00	04.50	04.00
	Net Loan-Opening	126.00	115.50	105.00	94.50	84.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	10.50	10.50	10.50	10.50	10.50
	Net Loan-Closing	115.50	105.00	94.50	84.00	73.50
	Average Loan	120.75	110.25	99.75	89.25	78.75
	Rate of Interest	8.15%	8.15%	8.15%	8.15%	8.15%
	Interest	9.84	8.99	8.13	7.27	6.42
	Rep Schedule		12 Annual ir	stalments from	09.03.2010	
_	Bond XIX					
2	Gross loan opening	0260.00	9260.00	9260.00	9260.00	9260.00
		9260.00	0.00			
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	771.67	1543.33	2315.00
	Net Loan-Opening	9260.00	9260.00	8488.33	7716.67	6945.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	771.67	771.67	771.67	771.67
	Net Loan-Closing	9260.00	8488.33	7716.67	6945.00	6173.33
	Average Loan	9260.00	8874.17	8102.50	7330.83	6559.17
	Rate of Interest	9.25%	9.25%	9.25%	9.25%	9.25%
	Interest	856.55	820.86	749.48	678.10	606.72
	Rep Schedule		12 Annual in	stalments from	24.07.2010	
3	Bond XXI					
J	Gross loan opening	3010.00	3010.00	3010.00	3010.00	3010.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	250.83	501.67	752.50
	Net Loan-Opening	3010.00	3010.00	2759.17	2508.33	2257.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	g a s y a s					
	Repayment during the year	0.00	250.83	250.83	250.83	250.83
	Net Loan-Closing	3010.00	2759.17	2508.33	2257.50	2006.67
	Average Loan	3010.00	2884.58	2633.75	2382.92	2132.08
	Rate of Interest	8.73%	8.73%	8.73%	8.73%	8.73%
	Interest	262.77	251.82	229.93	208.03	186.13
	Rep Schedule		12 Annual in	stalments from	11.10.2010	
4	Bond XXII					
	Gross loan opening	4073.00	4073.00	4073.00	4073.00	4073.00

	Cumulative Repayment upto DOCO/previous year	0.00	0.00	339.42	678.83	1018.25		
	Net Loan-Opening	4073.00	4073.00	3733.58	3394.17	3054.75		
	Additions during the year	0.00	0.00	0.00	0.00	0.00		
	Repayment during the year	0.00	339.42	339.42	339.42	339.42		
	Net Loan-Closing	4073.00	3733.58	3394.17	3054.75	2715.33		
	Average Loan	4073.00	3903.29	3563.88	3224.46	2885.04		
	Rate of Interest	8.68%	8.68%	8.68%	8.68%	8.68%		
	Interest	353.54	338.81	309.34	279.88	250.42		
	Rep Schedule		12 Annual in	stalments from	07.12.2010			
5								
	Gross loan opening	5867.00	5867.00	5867.00	5867.00	5867.00		
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	488.92	977.83	1466.75		
	Net Loan-Opening	5867.00	5867.00	5378.08	4889.17	4400.25		
	Additions during the year	0.00	0.00	0.00	0.00	0.00		
	Repayment during the year	0.00	488.92	488.92	488.92	488.92		
	Net Loan-Closing	5867.00	5378.08	4889.17	4400.25	3911.33		
	Average Loan	5867.00	5622.54	5133.63	4644.71	4155.79		
	Rate of Interest	9.95%	9.95%	9.95%	9.95%	9.95%		
	Interest	583.77	559.44	510.80	462.15	413.50		
	Rep Schedule		12 Annual in	stalments from	26.03.2011			
6	Bond XXVII							
	Gross loan opening	9600.00	9600.00	9600.00	9600.00	9600.00		
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	800.00	1600.00		
	Net Loan-Opening	9600.00	9600.00	9600.00	8800.00	8000.00		
	Additions during the year	0.00	0.00	0.00	0.00	0.00		
	Repayment during the year	0.00	0.00	800.00	800.00	800.00		
	Net Loan-Closing	9600.00	9600.00	8800.00	8000.00	7200.00		
	Average Loan	9600.00	9600.00	9200.00	8400.00	7600.00		
	Rate of Interest	9.47%	9.47%	9.47%	9.47%	9.47%		
	Interest	909.12	909.12	871.24	795.48	719.72		
	Rep Schedule	12 Annual instalments from 31.03.2012						
7	Bond XXVIII							
	Gross loan opening	4423.00	4423.00	4423.00	4423.00	4423.00		
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	368.58		
	Net Loan-Opening	4423.00	4423.00	4423.00	4423.00	4054.42		
	Additions during the year	0.00	0.00	0.00	0.00	0.00		
	Repayment during the year	0.00	0.00	0.00	368.58	368.58		
	Net Loan-Closing	4423.00	4423.00	4423.00	4054.42	3685.83		
	Average Loan	4423.00	4423.00	4423.00	4238.71	3870.13		
	Rate of Interest	9.33%	9.33%	9.33%	9.33%	9.33%		

Interest	412.67	412.67	412.67	395.47	361.08		
Rep Schedule	12 Annual instalments from 15.12.2012						
Bonds XXX (AddCap for 2009-10 on 8 31.03.2010)							
Gross loan opening	0.00	277.00	277.00	277.00	277.00		
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00		
Net Loan-Opening	0.00	277.00	277.00	277.00	277.00		
Additions during the year	277.00	0.00	0.00	0.00	0.00		
Repayment during the year	0.00	0.00	0.00	0.00	23.08		
Net Loan-Closing	277.00	277.00	277.00	277.00	253.92		
Average Loan	138.50	277.00	277.00	277.00	265.46		
Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%		
Interest	12.19	24.38	24.38	24.38	23.36		
Rep Schedule	stalments from	alments from 29.09.2013					
Bonds XXXI (AddCap for 2009-10 on 31.03.2010)							
Gross loan opening	0.00	883.25	883.25	883.25	883.25		
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00		
Net Loan-Opening	0.00	883.25	883.25	883.25	883.25		
Additions during the year	883.25	0.00	0.00	0.00	0.00		
Repayment during the year	0.00	0.00	0.00	0.00	73.60		
Net Loan-Closing	883.25	883.25	883.25	883.25	809.6		
Average Loan	441.63	883.25	883.25	883.25	846.4		
Rate of Interest	8.90%	8.90%	8.90%	8.90%	8.90%		
Interest	39.30	78.61	78.61	78.61	75.33		
Rep Schedule		12 Annual ir	25.02.2014				
Total Loan							
Gross loan opening	36359.00	37519.25	37519.25	37519.25	37519.25		
Cumulative Repayment upto DOCO/previous year	0.00	10.50	1871.83	4533.17	7563.08		
Net Loan-Opening	36359.00	37508.75	35647.42	32986.08	29956.17		
Additions during the year	1160.25	0.00	0.00	0.00	0.00		
Repayment during the year	10.50	1861.33	2661.33	3029.92	3126.60		
Net Loan-Closing	37508.75	35647.42	32986.08	29956.17	26829.50		
Average Loan	36933.88	36578.08	34316.75	31471.13	28392.86		
Weighted Average Rate of Interest	9.3133%	9.3080%	9.3091%	9.3081%	9.3076%		
Interest	3439.75	3404.69	3194.57	2929.37	2642.69		