## CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

## Petition No.167/2010

Coram:

- 1. Dr. Pramod Deo, Chairperson
- 2. Shri V.S.Verma, Member
- 3. Shri M.Deena Dayalan, Member

## DATE OF HEARING: 12.8.2010

#### DATE OF ORDER: 17.9.2010

#### In the matter of

Approval of transmission tariff for 400 kV S/C Vindhyachal-Korba Ckt-II along with associated bay equipment at Vindhyachal and Korba in Western Region for the period from 1.4.2009 to 31.3.2014.

## And in the matter of

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

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

## The following were present:

- 1. Shri U.K.Tyagi, PGCIL
- 2. Shri M.M. Mondal, PGCIL
- 3. Shri R.Prasad, PGCIL
- 4. Shri R.K.Gupta, PGCIL
- 5. Shri V.Vamsi, PGCIL

## ORDER

The petition has been filed seeking approval of tariff for 400 kV S/C Vindhyachal-Korba Ckt-II along with associated bay equipment at Vindhyachal and Korba (the transmission line) in Western Region for the period 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") after accounting for addition capital expenditure incurred during 2009-10 and 2010-11. The petitioner has made the following additional prayers:-

- (a) To invoke the provision of Regulation 44 of the 2009 regulations for relaxation of regulation 9 (2) of the 2009 regulations so that the additional capital expenditure incurred/to be incurred on account of undischarged liabilities after the cut off date shall be allowed and considered f or fixation of tariff for 2009-14 period accordingly;
- (b) To invoke the provision of Regulation 44 of the 2009 regulations for relaxation of regulations 15 (3) of the 2009 regulations so that grossing up the base rate shall be considering the revised rate of MAT as per the Finance Act, 2009 for the year 2009-10 and as per the Finance Act, 2010 for the year 2010-11 and subsequent years and allow consequential impact on tariff for 2009-14 period accordingly;
- (c) To approve reimbursement of petition filing fee and publication of notices in the newspaper as per the 2009 regulations;
- (d) Allow to recover the service tax on transmission charges separately from the respondents, if the petitioner is subjected to such service tax; and

(e) Allow reimbursement of licence fee separately from the respondents.

2. The investment approval for the transmission line was accorded by Board of Directors of the petitioner company vide Memorandum dated 19.2.2004 at an estimated cost of ₹16402.00 lakh, which included IDC of ₹878.00 lakh. The transmission line was to be completed by February 2007.

Subsequently, approval for the revised cost estimate was accorded by Board of Directors of the petitioner company vide letter dated 10.7.2007 for an estimated cost of ₹21253.00 lakh, which included IDC of ₹1447.00 lakh. The transmission line was declared under commercial operation 1.1.2007.

3. The annual transmission charges for the period from 1.1.2007 to 31.3.2009 were decided by the Commission in its order dated 9.4.2009 in Petition No. 127/2008. Subsequently, the revised annual transmission charges were revised by the Commission vide its order dated 8.4.2010 in Petition No. 307/2009 based on admitted capital cost of ₹18621.19 lakh.

4. The details of admitted capital cost and capital expenditure etc. of the transmission line are as under:

			(₹ in lakh)
Admitted capital cost as on	Capital expenditure	Capital	Total
1.4.2009 as per order dated	during 2009-10	expenditure	
8.4.2010	_	during 2010-11	
18621.19	62.43	42.43	18726.05

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

				( <b>₹</b> ir	ı lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	985.78	988.55	989.67	989.67	989.67
Interest on Loan	923.64	851.90	776.60	699.53	622.36
Return on Equity	978.19	980.94	982.05	982.05	982.05
Interest on Working Capital	70.60	69.81	68.92	67.98	67.08
O & M Expenses	208.26	220.04	232.74	246.08	260.10
Total	3166.47	3111.24	3049.98	2985.31	2921.26

6. 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	31.24	33.01	34.91	36.91	39.02
O & M expenses	17.36	18.34	19.40	20.51	21.68
Receivables	527.75	518.54	508.33	497.55	486.88
Total	576.34	569.88	562.64	554.97	547.57
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	70.60	69.81	68.92	67.98	67.08

7. Reply to the petition has been filed by Madhya Pradesh Power Trading Company Ltd. (MPPTCL). 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.

## CAPITAL COST

8. As per clause (2) of Regulation 7 of the 2009 regulations, the project cost admitted by the Commission for determination of tariff prior to 1.4.2009 shall form the basis for determination of tariff.

9. The petitioner has claimed the tariff after accounting for additional capital expenditure as under:

		(	(₹ in lakh)
Admitted capital cost as on	Capital expenditure	Capital	Total
1.4.2009 as per order dated	during 2009-10	expenditure	
8.4.2010	-	during 2010-11	
18621.19	62.43	42.43	18726.05

## ADDITIONAL CAPITAL EXPEDNTURE FOR THE YEAR 2009-10 AND 2010-11

10. Regulation 9 of the 2009 regulations provides as under:

- (1) The capital expenditure incurred or projected to be incurred, on the following counts with in 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 regulating 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 the tariff.

- (2) The capital expenditure incurred on the following counts after the cut-offdate, 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) \*\*\*\*\*
  - (iv) \*\*\*\*\*
  - (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 the transmission system.
- 11. The details submitted by the petitioner in support of its claim for

Projected additional capital expenditure for the transmission line is given hereunder:

Years	Nature and details of expenditure	Amount (₹ in lakh)
2009-10	Transmission line-Balance and	62.43
	retention payments	
2010-11	Transmission line-Balance and	42.43
	retention payments	
Total		104.86

12. MPPTCL in its reply has requested not to allow the amount claimed towards additional capital expenditure, which is not in accordance with the 2009 regulations. In regard to capital cost, MPPTCL has submitted that justification given in Form 9 of the petition indicates that the payment is still with the petitioner and has not been discharged. Therefore, additional

capital expenditure of ₹ 62.43 lakh and ₹ 42.43 lakh incurred during 2009-10 and 2010-11, respectively be not allowed. The petitioner has submitted that asset covered in this petition was declared under commercial operation during 2004-09, wherein additional capital expenditure after cut off dates on account of deferred liabilities was allowed as per Regulation 53 (2) of the under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004. Due to contractual exigencies and other reasons beyond the control of it and it has to make provisions for release of balance/retention payment beyond 2008-09. However, as per Regulation 9 (2) of the 2009 regulations does not provide for such undischarged liabilities as part of additional capitalization after cut off date. The petitioner has further submitted that the additional capital expenditure incurred/projected to be incurred during the years 2009-10 and 2010-11 is on account of balance and retention payments and is within the original scope of work and which is necessary for successful and efficient operation of the transmission system.

13. In view of the petitioner contention, the additional capital expenditure claimed is within the original scope of work and is found to be in order as it was against committed liability. Accordingly, capitalization of the additional expenditure claimed by the petitioner has been allowed as per regulation 9 (1) and (2) of the 2009 regulations.

#### TOTAL CAPITAL COST

14. Based on the above, gross block as given below has been considered for the purpose of tariff for the transmission asset, after allowing additional capital expenditure on works as claimed by the petitioner:

			(₹ in lakh)
Admitted capital cost	Capital expenditure during	Capital	Total
as on 1.4.2009 as per	2009-10	expenditure	
order dated 8.4.2010		during 2010-11	
18621.19	Transmission line-Balance	Transmission line-	18726.05
	and retention payments =	Balance and	
	62.43	retention	
		payments =42.43	

## **DEBT- EQUITY RATIO**

15. 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 Commission for determination of tariff for the period ending 31.3.2009 shall be considered."

16. In regard to rate of equity, MPPTCL has submitted that equity be calculated on the amount of ₹18621.19 lakh indicated in Form 5 of the petition. The petitioner has claimed tariff based on debt-equity ratio of 70:30 as considered by the Commission in its order dated 8.4.2010 ibid. The petitioner has further claimed the amount of additional capital expenditure in the debt-equity ratio of 70:30 for the year 2009-10 and 2010-11. For the purpose of tariff, equity considered for the transmission asset is as under:

(₹ in lakh) Equity for the Average Equity as Notional equity Average Notional equity Average on due to equity for due equity period 2011equity for to 1.4.2009 additional 2009-10 additional for 2010-2011-14 14 capital capital 11 expenditure for expenditure for the period the period 2009-10 2010-11 5586.36 18.73 5595.72 12.73 5611.45 5617.82 5617.82

#### **RETURN ON EQUITY**

17. 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.

#### Illustration.-

(i) In case of the generating company or the transmission licensee paying Minimum Alternate Tax (MAT) @ 11.33% including surcharge and cess:

Rate of return on equity = 15.50/ (1-0.1133) = 17.481%

(ii) In case of generating company or the transmission licensee paying normal corporate tax @ 33.99% including surcharge and cess:

Rate of return on equity = 15.50/ (1-0.3399) = 23.481%."

18. Equity has been considered as on 1.4.2009 as given in the table in para

16 above. However, the tariff for period 2009-14 has been allowed on average

equity. The petitioner has computed return on equity on pre-tax basis on

11.33% MAT in accordance with tax rate applicable for the year 2008-09.

19. In regard to MAT, the Commission vide its order dated 3.8.2010 in Petition

No. 17/2010 has already taken a decision to amend the 2009 regulations. The

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 settlement of liability direct tax 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."

20. In view of our above order the prayer of the petitioner will be taken

care of after amendment of the regulations.

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

				(₹i	n lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Return on equity	978.19	980.94	982.05	982.05	982.05

## **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. MPPTCL has submitted that the petitioner has replaced bridge

loan taken from ICICI with Bond XXVI. The former loan was @ 8% and the

later one is 9.3%. In such cases there will be no saving in the interest rate,

which is not accordance with Regulations 16 (7) of the 2009 regulations.

MPPTCL has requested to direct the petitioner to calculate the interest rate

@ 8% only, otherwise the respondent will suffer from loss. In regard to interest on loan, the MPPTCL has submitted that calculation of interest on loan after considering additional capital expenditure during the year 2009-10 and 2010-11 is not agreeable by it because loan component of additional capital expenditure belongs to un-discharged liability for prior to 2009 period.

- 24. The interest on loan has been worked out as detailed below:
  - (i) Gross amount of the 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;
  - (ii) The repayment for the period 2009-14 shall be deemed to be equal to the depreciation allowed for that period;
  - (iii) Weighted average rate of interest on actual loan worked out as per (i) above is applied on the average loan during the year to arrive at the interest on loan.

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

					(₹ in lał	(n)
Details of loan	Up to 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	13034.83	13034.83	13078.53	13108.23	13108.23	13108.23
Cumulative Repayment up to Previous Year		892.60	1878.38	2866.93	3856.59	4846.26
Net Loan-Opening		12142.23	11200.15	10241.31	9251.64	8261.97
Addition due to Additional Capitalisation		43.70	29.70	0.00	0.00	0.00
Repayment during the year		985.78	988.55	989.67	989.67	989.67
Net Loan-Closing		11200.15	10241.31	9251.64	8261.97	7272.30
Average Loan		11671.19	10720.73	9746.47	8756.80	7767.14
Weighted Average Rate of Interest on Loan		7.9138%	7.9463%	7.9680%	7.9884%	8.0127%
Interest		923.64	851.90	776.60	699.53	622.36

(Finlokh)

26. The detailed calculations in support of the weighted revised average rate of

interest are contained in **Annexure** attached.

## **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.

xxxx xxxx

(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. MPPTCL has submitted that the petitioner should have calculated

depreciation after considering the capital cost of ₹18621.19 already approved

by the Commission. The deprecation has been worked out on the admitted

capital expenditure of ₹18621.19 lakh as on 31.3.2009. Cumulative

depreciation amounting to ₹892.60 lakh up to 31.3.2009 has been taken as per order dated 8.4.2010 in Petition No. 307/2009.

29. The transmission asset was declared under commercial on 1.6.2007 and accordingly, asset will complete 12 years beyond 2013-14. Therefore, depreciation for the period 2009-14 has been calculated annually based on Straight Line Method and rate specified in Appendix-III of the 2009 regulations Accordingly, for the periods 1.4.2009 to 31.3.2010, 1.4.2010 to 31.3.2011 and 1.4.2011 to 31.32014 the depreciation works out to ₹ 985.78 lakh, Rs. 988.55 lakh and Rs. 989.67 lakh, respectively by applying rate of depreciation of 5.2850% as shown below:

						(₹in lak	h)
Details of Depreciation		Up to 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Gross block as per order dated 8.4.2010		18621.19	18621.19	18683.62	18726.05	18726.05	18726.05
Addition during 2009-14 due to projected Additional Capitalisation			62.43	42.43	0.00	0.00	0.00
Gross block as on 31.3.2009			18683.62	18726.05	18726.05	18726.05	18726.05
Average gross block			18652.41	18704.84	18726.05	18726.05	18726.05
Rate of Depreciation			5.2850%	5.2850%	5.2850%	5.2850%	5.2850%
Depreciable Value	90%		16787.16	16834.35	16853.45	16853.45	16853.45
Remaining Depreciable Value			15894.56	14955.97	13986.52	12996.85	12007.18
Depreciation			985.78	988.55	989.67	989.67	989.67

30. The MPPTCL has also raised issues of the service tax, reimbursement of expenditure towards publishing notices, petition filing fee and licence fee, which is already covered in O & M expenses. The issues raised by the MPPTCL have been dealt with in the relevant paras of this order.

## **OPERATION & MAINTENANCE EXPENSES**

31. In accordance with clause (g) of Regulation 19 the 2009 regulations, the following norms for 400 kV S/C, Twin conductor, transmission line, 400 kV and

220 kV bays are prescribed for O & M expenses:

	Year					
	2009-10	2010-11	2011-12	2012-13	2013-14	
400 kV S/C transmission line (Twin conductor) (₹ in lakh /km)	0.358	0.378	0.400	0.423	0.447	
400 k V bays (₹ in lakh per bay)	52.40	55.40	58.57	61.92	65.46	

32. The petitioner has claimed O & M expenses for 288.994 Ckt.km. and 2 bays, which has been allowed. Accordingly, the petitioner's entitlement to O & M expenses has been worked out as given hereunder:

(₹ in lakh)

	Year				
	2009-10	2010-11	2011-12	2012-13	2013-14
400 kV S/C, single conductor,	103.46	109.24	115.60	122.24	129.18
transmission line (288.994 km)					
O&M expenses 400 kV bays for 2	104.80	110.80	117.14	123.84	130.92
bays					
Total	208.26	220.04	232.74	246.08	260.10

33. The petitioner has submitted that O & M expenditure for the year 2009-14 had been arrived at on the basis of normalized actual O & M expenses during the year 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking has also been considered while calculating the O & M charges for the tariff period 2009-14. 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 then 50%. The petitioner has further submitted that period 2009-14, the cost associated with license fees had not been captured and the licence fee be allowed to be recovered separately from the respondents. The petitioner has not made any claim towards wage hike and licence fee in the present petition, these issues shall be considered after making the application by the petitioner in this regard.

#### **INTEREST ON WORKING CAPITAL**

34. 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 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.

#### (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 works out to ₹ 102.14 lakh as on 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 1 month of O&M expenses 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.

35. The necessary computations in support of interest on working capital are appended hereinbelow:

				( <b>₹</b> in	lakh)
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	31.24	33.01	34.91	36.91	39.02
O & M expenses	17.36	18.34	19.40	20.51	21.68
Receivables	527.74	518.54	508.33	497.55	486.88
Total	576.34	569.88	562.64	554.97	547.57
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	70.60	69.81	68.92	67.98	67.08

## **TRANSMISSION CHARGES**

36. The transmission charges being allowed for the transmission asset are summarised below:

				(₹ in lakh)		
	2009-10	2010-11	2011-12	2012-13	2013-14	
Depreciation	985.78	988.55	989.67	989.67	989.67	
Interest on Loan	923.64	851.90	776.60	699.53	622.36	
Return on Equity	978.19	980.94	982.05	982.05	982.05	
Interest on Working Capital	70.60	69.81	68.92	67.98	67.08	
O & M Expenses	208.26	220.04	232.74	246.08	260.10	
Total	3166.47	3111.24	3049.98	2985.31	2921.26	

## Application fee and the publication expenses

37. 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.

38. Accordingly, expenses incurred by the petitioner on application filing fees and publication of notices in connection with the present petition shall be directly recovered from the beneficiary on pro rata basis.

## Service Tax

39. Presently, service tax on transmission service has been exempted by Government of India vide its notification No. 20/2010 dated 27.2.2010 read with notification No. 45/2010 dated 20.7.2010. Therefore, prayer made by the petitioner for recovery of service tax on transmission charges from the beneficiaries has become infractuous.

40. In addition to the transmission charges, the petitioner shall be entitled to other charges like income-tax, surcharge and other cess and taxes in accordance with the 2009 regulations.

41. 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.

42. This order disposes of Petition No.167/2010.

sd/-(M.DEENA DAYALAN) MEMBER sd/-(V.S.VERMA) MEMBER sd/-(Dr. PRAMOD DEO) CHAIRERSON

## CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

						(₹ in lakh)
	Details of Loan	2009-10	2010-11	2011-12	2012-13	2013-14
1	BOND XVII					
	Gross loan opening	9416.00	9416.00	9416.00	9416.00	9416.00
	Cumulative Repayment up to the	0.00	941.60	1883.20	2824.80	3766.40
	date of commercial					
	operation/previous year					
	Net Loan-Opening	9416.00	8474.40	7532.80	6591.20	5649.60
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	941.60	941.60	941.60	941.60	941.60
	Net Loan-Closing	8474.40	7532.80	6591.20	5649.60	4708.00
	Average Loan	8945.20	8003.60	7062.00	6120.40	5178.80
	Rate of Interest	7.39%	7.39%	7.39%	7.39%	7.39%
	Interest	661.05	591.47	521.88	452.30	382.71
	Rep Schedule		10 Annual I	nstalments fro	m 22.9.2009	
2	BOND XX					
	Gross loan opening	2000.00	2000.00	2000.00	2000.00	2000.00
	Cumulative Repayment up to the	0.00	0.00	166.67	333.34	500.01
	date of commercial operation					
	/previous year					
	Net Loan-Opening	2000.00	2000.00	1833.33	1666.66	1499.99
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	166.67	166.67	166.67	166.67
	Net Loan-Closing	2000.00	1833.33	1666.66	1499.99	1333.32
	Average Loan	2000.00	1916.67	1750.00	1583.33	1416.66
	Rate of Interest	8.93%	8.93%	8.93%	8.93%	8.93%
	Interest	178.60	171.16	156.27	141.39	126.51
	Rep Schedule		12 Annual	Instalments fro	om 7.9.2010	
3	BOND XXII					
	Gross loan opening	100.00	100.00	100.00	100.00	100.00
	Cumulative Repayment up to the	0.00	0.00	8.33	16.66	24.99
	date of commercial operation					
	/previous year					
	Net Loan-Opening	100.00	100.00	91.67	83.34	75.01
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	8.33	8.33	8.33	8.33
	Net Loan-Closing	100.00	91.67	83.34	75.01	66.68
	Average Loan	100.00	95.84	87.51	79.18	70.85
	Rate of Interest	8.68%	8.68%	8.68%	8.68%	8.68%
	Interest	8.68	8.32	7.60	6.87	6.15
	RepSchedule			nstalments fro		
4	BOND XXIII					
-	Gross loan opening	700.00	700.00	700.00	700.00	700.00
	Cumulative Repayment up to the	0.00	0.00	58.33	116.67	175.00
	date of commercial operation	0.00	0.00	00.00	110.07	170.00
	/previous year					
	Net Loan-Opening	700.00	700.00	641.67	583.33	525.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	58.33	58.33	58.33	58.33
	Net Loan-Closing	700.00	641.67	583.33	525.00	466.67
	Average Loan	700.00	670.83	612.50	554.17	495.83
	Rate of Interest	9.25%	9.25%	9.25%	9.25%	9.25%
	Interest	64.75	62.05	56.66	51.26	45.86

1	Rep Schedule	12 Annual Instalments from 9.2.2011					
5	BOND XXV (ADDCAP FOR 2007-08)						
	Gross loan opening	67.00	67.00	67.00	67.00	67.00	
	Cumulative Repayment up to the	0.00	0.00	0.00	5.58	11.16	
	date of commercial operation						
	/previous year						
	Net Loan-Opening	67.00	67.00	67.00	61.42	55.84	
	Additions during the year	0.00	0.00	0.00	0.00	0.00	
	Repayment during the year	0.00	0.00	5.58	5.58	5.58	
	Net Loan-Closing	67.00	67.00	61.42	55.84	50.26	
	Average Loan	67.00	67.00	64.21	58.63	53.05	
	Rate of Interest	10.10%	10.10%	10.10%	10.10%	10.10%	
	Interest	6.77	6.77	6.49	5.92	5.36	
	Rep Schedule	0.77		stalments from		0.00	
	Bond- XXVI w.e.f 7.3.2008 in						
	replacement of 8.00% bridge loan						
	from ICICI bank w.e.f 20.8.2007						
6							
	Gross loan opening	720.00	720.00	720.00	720.00	720.00	
	Cumulative Repayment up to the	0.00	0.00	0.00	60.00	120.00	
	date of commercial operation						
	/previous year						
	Net Loan-Opening	720.00	720.00	720.00	660.00	600.00	
	Additions during the year	0.00	0.00	0.00	0.00	0.00	
	Repayment during the year	0.00	0.00	60.00	60.00	60.00	
	Net Loan-Closing	720.00	720.00	660.00	600.00	540.00	
	Average Loan	720.00	720.00	690.00	630.00	570.00	
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%	
	Interest	66.96	66.96	64.17	58.59	53.01	
	Rep Schedule	12 Annual Instalments from 7.3.2012					
	BOND XXIX (ADDCAP FOR 2008-09						
7	Drawl on 12.03.09)						
	Gross loan opening	140.00	140.00	140.00	140.00	140.00	
	Cumulative Repayment up to the	0.00	0.00	0.00	0.00	11.67	
	date of commercial operation						
	/previous year						
	Net Loan-Opening	140.00	140.00	140.00	140.00	128.33	
	Additions during the year	0.00	0.00	0.00	0.00	0.00	
	Repayment during the year	0.00	0.00	0.00	11.67	11.67	
	Net Loan-Closing	140.00	140.00	140.00	128.33	116.66	
	Average Loan	140.00	140.00	140.00	134.17	122.50	
	Rate of Interest	9.20%	9.20%	9.20%	9.20%	9.20%	
	Interest	12.88	12.88	12.88	12.34	11.27	
	Rep Schedule		12 Annual in	stallment fror	n 12.3.2013		
	BOND XXVIII (ADDCAP FOR 2008-09						
8	Drawl on 15.12.2008)						
	Gross loan opening	210.00	210.00	210.00	210.00	210.00	
	Cumulative Repayment up to the	0.00	0.00	0.00	0.00	17.50	
	date of commercial operation						
	/previous year						
	Net Loan-Opening	210.00	210.00	210.00	210.00	192.50	
	Additions during the year	0.00	0.00	0.00	0.00	0.00	
	Repayment during the year	0.00	0.00	0.00	17.50	17.50	
	Net Loan-Closing	210.00	210.00	210.00	192.50	175.00	
	Average Loan	210.00	210.00	210.00	201.25	183.75	
	Rate of Interest	9.33%	9.33%	9.33%	9.33%	9.33%	
						17.14	
	Interest	19.59	19.59	19.59	18.78		

1	Rep Schedule	12 Annual installment from 15.12.2012				
	BOND XXX (ADDCAP FOR 2009-10					
9	Drawl on 29-09.2009)					
	Gross loan opening	0.00	43.70	43.70	43.70	43.70
	Cumulative Repayment up to the	0.00	0.00	0.00	0.00	0.00
	date of commercial operation					
	/previous year					
	Net Loan-Opening	0.00	43.70	43.70	43.70	43.70
	Additions during the year	43.70	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	3.64
	Net Loan-Closing	43.70	43.70	43.70	43.70	40.06
	Average Loan	21.85	43.70	43.70	43.70	41.88
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	1.92	3.85	3.85	3.85	3.69
	Rep Schedule					
	Total Loan					
	Gross loan opening	13353.00	13396.70	13396.70	13396.70	13396.70
	Cumulative Repayment up to the	0.00	941.60	2116.53	3357.05	4626.73
	date of commercial operation					
	/previous year					
	Net Loan-Opening	13353.00	12455.10	11280.17	10039.65	8769.97
	Additions during the year	43.70	0.00	0.00	0.00	0.00
	Repayment during the year	941.60	1174.93	1240.51	1269.68	1273.32
	Net Loan-Closing	12455.10	11280.17	10039.65	8769.97	7496.65
	Average Loan	12904.05	11867.63	10659.91	9404.81	8133.31
	Rate of Interest	7.9138%	7.9463%	7.9680%	7.9884%	8.0127%
	Interest	1021.20	943.04	849.38	751.30	651.70