CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No.211/2010

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

Date of Hearing: 9.11.2010 Date of Order: 31.3.2011

In the matter of

Approval for transmission tariff for combined assets of 400 kV D/C Kaiga-Narendra Transmission line, 400/200 kV sub-station at Narendra with one 315 MVA ICT and 2nd 315 MVA ICT at Narendra sub-station under Kaiga-Narendra Transmission system in Southern 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

Vs

- 1 Kerala State Electricity Board, Thiruvanathapuram
- 2 Tamil Nadu Electricity Board, Chennai
- 3 Electricity Department, Govt. of Pondicherry, Pondicherry
- 4 Electricity Department, Government of Goa, Panaji
- 5 Transmission Corporation of Andhra Pradesh Ltd., Hyderabad
- 6 Northern Power Distribution Company of Andhra Pradesh Limited, Warangal
- 7 Eastern Power Distribution Company of Andhra Pradesh Limited, Vishakhapatnam
- 8 Southern Power Distribution Company of Andhra Pradesh Limited, Tirupati
- 9 Central Power Distribution Company of Andhra Pradesh Limited, Hyderabad
- 10 Karnataka Power Transmission Corporation Limited, Bangalore
- 11 Bangalore Electricity Supply Company Ltd., Bangalore
- 12 Gulbarga Electricity Supply Company Ltd. Gulburga
- 13 Hubli Electricity Supply Company Ltd., Hubli
- 14 MESCOM Corporate office, Mangalore
- 15 Chamundeswari Electricity Supply Corporation Ltd., Mysore.

.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

<u>ORDER</u>

The petition has been filed seeking approval of tariff for combined element of (i) 400 kV D/C Kaiga-Narendra Transmission line, 400/200 kV substation at Narendra with one 315 MVA ICT (Asset-I); and (ii) 2nd 315 MVA ICT at Narendra sub-station (Asset-II) under Kaiga-Narendra Transmission system (herein after referred to as "the transmission system") in Southern Region for the period from 1.4.2009 to 31.3.2014, in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 regulations") after accounting for additional capital expenditure incurred/projected to be incurred during 2009-10 and 2010-11. The petitioner has made the following additional prayers:-

- (a) In case of assets being combined to calculate the transmission charges, allow to recover full depreciation (90% of the gross block) of the assets during its useful life (25 years for sub-station and 35 years of transmission line) reckoning from its actual date of commercial operation and to permit to treat the recovery of depreciation after achieving the useful life by an asset in accordance with para 10.4 of the petition;
- (b) To invoke the provisions of Regulation 44 of the 2009 regulations for relaxation of regulations 15 (3) of the 2009 regulations so that

grossing up the base rate of ROE may be allowed 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 bill and adjust impact on interest on loan due to floating rate of interest applicable during 2009-14;
- (e) Allow to recover the service tax on transmission charges separately from the respondents, if the petitioner is subjected to such service tax; and
- (f) Allow reimbursement of licence fee separately from the respondents.
- 2. The administrative approval and expenditure sanction for the transmission assets was accorded by the Board of Directors of the petitioner company vide Memorandum dated 27.2.2003 at an estimated cost of Rs 6051 lakh, which included IDC of Rs. 487 lakh. Subsequently, revised cost estimate was approved by Board of Directors of the petitioner company vide Memorandum dated 26.2.2008 at an estimated cost of Rs 6231 lakh, including IDC of `223 lakh. The notional date of the commercial operation of all the assets of the transmission system has been taken as 1.9.2006.

- 3. The annual transmission charges as on 31.3.2009 were determined by the Commission by order dated 29.8.2008 in Petition No. 123/2007 for Asset-I and by order dated 24.5.2010 in Petition No. 5/2010 for Assets II and III based on admitted capital cost of `15039.15 lakh, ` 5463.49 lakh and ` 722.67 lakh respectively.
- 4. The petitioner has claimed the transmission charges as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	1078.13	1078.30	1078.47	1078.47	1078.47
Interest on Loan	897.43	810.15	722.45	634.36	546.97
Return on Equity	1107.45	1107.62	1107.79	1107.79	1107.79
Interest on Working Capital	92.80	92.62	92.53	92.51	92.62
O & M Expenses	570.54	603.22	637.75	674.18	712.70
Total	3746.35	3691.91	3638.99	3587.31	3538.55

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	85.58	90.48	95.66	101.13	106.90
O & M expenses	47.55	50.27	53.15	56.18	59.39
Receivables	624.39	615.32	606.50	597.89	589.76
Total	757.52	756.07	755.31	755.20	756.05
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	92.80	92.62	92.53	92.51	92.62

6. Reply to the petition has been filed by Tamil Nadu Electricity Board (TNEB). 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

- 7. As per the last proviso to clause (2) of Regulation 7 of the 2009 regulations, in case of the existing projects, 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.
- 8. As per the order dated 29.8.2008 in Petition No. 123/2007 and order dated 24.5.2010 in Petition No. 5/2010, the admitted capital expenditure of the transmission system in `21225.31 lakh which has been considered as the opening capital cost as on 1.4.2009 for the purpose of tariff determination during 2009-14.

ADDITIONAL CAPITAL EXPEDNTURE

- 9. 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-off-date, 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."
- 10. The details submitted by the petitioner in support of its claim for Projected additional capital expenditure for the transmission line is given hereunder:

Name of Asset	Years	Nature	Amount (`in lakh)	Remarks
Kaiga-Narendra	2010-11	Transmission line	6.4	Towards court
Transmission line				cases line in the
				line.

- 11. TNEB in its reply has submitted that the petitioner has claimed `6.4 lakh as proposed additional capital expenditure for the year 2010-11 on account of expected payment towards court cases on account of crop compensation in 400 kV Kaiga-Narendra Transmission line. The admissibility of the claim should be dealt with as per the Regulations. The petitioner in its rejoinder has submitted that proposed additional capital expenditure should be dealt with in accordance with Regulation 9(2) (i) of 2009 regulations.
- 12. The petitioner has submitted that various court cases regarding enhancement of crop compensation and land cost are pending in various District Courts. The amount works out to ₹ 2 crore approximately, out of which

only `6.4 lakh pertaining to crop compensation as per the extant policy and guidelines, has been considered as the proposed additional capital expenditure during 2010-11 for computation of tariff. The petitioner has submitted that actual expenditure can only be ascertained after the decision of the court in these matters and, therefore, no tariff has been claimed in the present petition for that remaining amount. The petitioner has submitted that PGCIL shall approach the Commission after payment/incurring the expenditure and consequential tariff revision during the period 2009-14.

13. Regulations 9(2)(i) of 2009 regulations provides that capital expenditure towards the liabilities to meet the award of arbitration or for compliance of the order or decree of the court incurred after the cut off date shall be admitted subject to prudence check. Regulation 9(2)(i) do not allow capitalisation of expenditure on projection basis. In the light of the decision in a order dated 8.2.2011 in Petition No. 176/2010, we allow capitalisation of ₹ 6.4 lakh by relaxing the provisions of Regulation 9(2)(i) of 2009 regulations.

CAPITAL COST

14. Based on the above, gross block as given below has been considered for the purpose of tariff for the transmission asset, as under

(₹ in lakh)

Admitted capital cost as on	Projected additional capital	Total
1.4.2009	expenditure during 2009-14	
21225.31	6.4	21231.71

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. The petitioner has claimed tariff based on debt-equity ratio of 70.15:29.85 as admitted on 31.3.2009 vide order dated 29.8.2008 and 24.5.2010 in Petition No. 123/2007 and 5/2010, respectively. The petitioner has further claimed the amount of additional capital expenditure in the debt-equity ratio of 70:30 for the year 2010-11. The details of debt-equity ratio claimed by the petitioner are as under:

Asset I	Admitted as on 31.03.2009					
	Amount (₹ Lakh)	%				
Debt	10556.47	70.19%				
Equity	4482.68	29.81%				
Total	15039.15	100.00%				
Asset II	Admitted as on 31	.03.2009				
	Amount (₹ Lakh)	%				
Debt	3827.14	70.05%				
Equity	1636.35	29.95%				
Total	5463.49	100.00%				
Asset III	Admitted as on 31	.03.2009				
	Amount (₹ Lakh)	%				
Debt	506.51	70.09%				
Equity	216.16	29.91%				
Total	722.67	100.00%				
Combined	Admitted as on 31	.03.2009				
	Amount (Rs. Lakh)	%				
Debt	14890.12	70.15%				
Equity	6335.19	29.85%				
Total	21225.31	100.00%				

Accordingly, D-E ratio of 70.15:29.85 as above has been considered for tariff calculations. Additional capitalisatio has been apportioned as per the debt-equity ratio of 70:30.

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. TNEB has submitted that the petitioner has prayed for innovation of the provisions of Regulation 44 of the 2009 regulations to allow the revised MAT rate as per the applicable Finance Act. Since the Commission has already taken a decision to amend the Tariff Regulations in this regard, the amended provisions should apply.
- 19. 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 regulation is under way and will address the grievance of the petitioner with regard to the MAT rate. Accordingly, the return on equity has been computed as per the existing provisions of Regulation 15(3) of 2009 regulations as under:

(`in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Equity as on 1.4.2009	6335.19	6335.19	6337.11	6337.11	6337.11
Addition due to additional	0.00	1.92	0.00	0.00	0.00
capitalisation					
Closing Equity	6335.19	6337.11	6337.11	6337.11	6337.11
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax note for the year 2008-09 (MAT)	11.30%	11.30%	11.30%	11.30%	11.30%
Rate of Return on Equity (pre-tax)	17.48%	17.48%	17.48%	17.48%	17.48%
Return on Equity	1107.45	1107.62	1107.79	1107.79	1107.79

INTEREST ON LOAN

- 20. 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."

- 21. TNEB it its reply has submitted that there is no provision for calculation of the interest on loan on the basis of the rate prevailing as on 1.4.2009 and change in rate of interest, if any, due to floating rate of interest to be claimed/adjusted over the tariff period directly from the beneficiaries. In its rejoinder, the petitioner has submitted that the Commission had allowed direct settlement with the beneficiaries any change in the rate of interest on account of floating rate of interest during the tariff period 2004-09. As any change in the rate of interest may increase or decrease during the tariff period 2009-14, it would be fair to allow annual adjustment of differences in interest rates as was the practice during 2004-09. Since the 2009 regulations do not allow for the floating rate of interest, the rate of interest as on 1.4.2009 has been considered for the purpose of tariff.
- 22. The interest on loan has been worked out as detailed below:
 - (i) 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 orders dated 29.8.2008 and 24.5.2010 in Petition No. 123/2007 and 5/2010, respectively for working out weighted average rate of interest;
 - (ii) Tariff has been worked out considering normative loan and normative repayments. Depreciation allowed has been taken as normative repayment for the period 2009-14;

- (iii) Loans with floating interest rates, rates of interest as on 1.4.2009 have been considered for the purpose of tariff;
- (iv) Weighted average rate of interest on actual loan has been worked out as per (i) above and applied on the average loan during the year to arrive at the interest on loan.
- 23. Based on the above, the year-wise details of interest worked out are given hereunder:

(₹ in lakh)

Details of loan	Up to 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	14890.12	14890.12	14890.12	14894.60	14894.60	14894.60
Cumulative Repayment up		2992.06	4070.19	5148.49	6226.96	7305.42
to Previous Year						
Net Loan-Opening		11898.06	10819.93	9746.11	8667.64	7589.18
Addition due to Additional		0.00	4.48	0.00	0.00	0.00
Capitalisation						
Repayment during the year		1078.13	1078.30	1078.47	1078.47	1078.47
Net Loan-Closing		10819.93	9746.11	8667.64	7589.18	6510.71
Average Loan		11358.99	10283.02	9206.88	8128.41	7049.94
Weighted Average Rate of		7.9006%	7.8786%	7.8469%	7.8042%	7.7586%
Interest on Loan						
Interest		897.43	810.15	722.45	634.36	546.97

24. The detailed calculations in support of the weighted revised average rate of interest are contained in **Annexure** attached.

DEPRECIATION

- 25. 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."
- 26. The depreciation has been worked out on the admitted capital expenditure of ₹21225.31 lakh as on 31.3.2009, as under:

(₹in lakh)

Details of Depreciation		Up to 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Gross block as per last		21225.31	21225.31	21225.31	21231.71	21231.71	21231.71
order							
Addition during 2009-14 due			0.00	6.40	0.00	0.00	0.00
to projected Additional							
Capitalisation							
Gross block as on 31.3.2009			21225.31	21231.71	21231.71	21231.71	21231.71
Average Gross Block			21225.31	21228.51	21231.71	21231.71	21231.71
Rate of Depreciation			5.0795%	5.0795%	5.0795%	5.0795%	5.0795%
Depreciable Value	90%		18609.93	18612.81	18615.69	18615.69	18615.69
Remaining Depreciable			16044.11	14968.86	13893.44	12814.97	11736.51
Value							
Depreciation			1078.13	1078.30	1078.47	1078.47	1078.47

OPERATION & MAINTENANCE EXPENSES

27. In accordance with clause (g) of Regulation 19 the 2009 regulations, the following norms for 400 kV D/C, Twin Conductor transmission line 400 kV and 220 kV bays have been specified for O & M expenses:

	Year					
	2009-10	2010-11	2011-12	2012-13	2013-14	
400 kV D/C, Twin Conductor	0.627	0.663	0.701	0.741	0.783	
transmission line (₹ in lakh/km)						
400 kV bay (₹ in lakh /bay)	52.40	55.40	58.57	61.92	65.46	
220 kV bays (₹ in lakh/bay)	36.68	38.78	41.00	43.34	45.82	

28. The petitioner has claimed O & M expenses for 107.662 ckt.km and 8 bays. 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 D/C, Twin Conductor	67.50	71.38	75.47	79.78	84.30	
transmission line (107.662 ckt km)						
O&M expenses for 400 kV (4 bays)	209.60	221.60	234.28	247.68	261.84	
O&M expenses for 220 kV (6 bays)	293.44	310.24	328.00	346.72	366.56	
Total	570.54	603.22	637.75	674.18	712.70	

29. The petitioner has submitted that O & M expenditure for 1009-14 tariff block had been arrived on the basis of normalized actual O & M expenses of the petitioner 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 was also considered while calculating the O & M charges for 2009-14 periods. The petitioner has submitted that it would approach the Commission for suitable revision in the norms of O & M expenses in case the impact of wage hike w.e.f. 1.1.2007 is more than 50%.

30. TNEB has submitted that the O&M expenses for the period 2009-14 have been specified on normative basis and the regulations do not provide for revisiting the normative O&M expenses. In response, the petitioner in its rejoinder has submitted that the wage revision for the executive level has been done but for the non-executive level, it is to be completed shortly. The petitioner has reiterated that it would approach the Commission separately for additional manpower cost on account of wage revision. With reference to the submission of the petitioner, it is clarified that, if any, such application is made, it will be dealt with in accordance with law.

INTEREST ON WORKING CAPITAL

- 31. 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 ₹85.58 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 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.
- 32. The necessary computations in support of interest on working capital are appended herein below:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	85.58	90.48	95.67	101.13	106.91
O & M expenses	47.55	50.27	53.15	56.18	59.39
Receivables	624.39	615.23	606.50	597.88	589.76
Total	757.52	756.07	755.32	755.19	756.05
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	92.80	92.62	92.53	92.51	92.62

TRANSMISSION CHARGES

33. 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	1078.13	1078.30	1078.47	1078.47	1078.47
Interest on Loan	897.43	810.15	722.45	634.36	546.97
Return on Equity	1107.45	1107.62	1107.79	1107.79	1107.79
Interest on Working Capital	92.80	92.62	92.53	92.51	92.62
O & M Expenses	570.54	603.22	637.79	674.18	712.70
Total	3746.35	3691.91	3639.02	3587.31	3538.55

<u>APPLICATION FEE AND THE PUBLICATION EXPENSES</u>

34. The petitioner has sought approval for the reimbursement of fee paid by it for filing the petition. TNEB has submitted that the prayer for reimbursement of filing fee may be rejected in view of the decision of the Commission in order dated 11.9.2008 in Petition No. 129/2005. It is clarified that the said decision of 11.9.2008 was applicable to the tariff period 2004-09. However, Regulation 42 of 2009 regulations provides for reimbursement of fling fees and expenses on publication of notices at the discretion of the Commission. The Commission has taken a decision in this regard in petition No. 109/2009. 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.

35. 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 beneficiaries on pro rata basis.

SERVICE TAX

36. The prayer of the petitioner for reimbursement of service tax has

become infructuous as transmission service has been exempted from the

ambit of the service tax.

LICENCE FEE

37. As regards the reimbursement of licence fee, a view in the matter is yet

to taken by the Commission.

38. 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.

39. This order disposes of Petition No. 211/2010.

Sd/-

(M.Deena Dayalan) Member Sd

(S.Jayaraman) Member

Annexure

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

		1	T	T	1	(₹ in lakh)
	Details of Loan	2009-10	2010-11	2011-12	2012-13	2013-14
1	Bond-IX					
	Gross loan opening	431.00	431.00	431.00	431.00	431.00
	Cumulative Repayment up to the	258.60	301.70	344.80	387.90	431.00
	date of commercial operation					
	/previous year					
	Net Loan-Opening	172.40	129.30	86.20	43.10	0.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	43.10	43.10	43.10	43.10	0.00
	Net Loan-Closing	129.30	86.20	43.10	0.00	0.00
	Average Loan	150.85	107.75	64.65	21.55	0.00
	Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
	Interest	18.48	13.20	7.92	2.64	0.00
	Rep Schedule		10 Annual ir	nstalments from	m 22.08.2003	
2	Bond-X					
	Gross loan opening	1254.00	1254.00	1254.00	1254.00	1254.00
	Cumulative Repayment up to the	522.50	627.00	731.50	836.00	940.50
	date of commercial operation					
	previous year					
	Net Loan-Opening	731.50	627.00	522.50	418.00	313.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	104.50	104.50	104.50	104.50	104.50
	Net Loan-Closing	627.00	522.50	418.00	313.50	209.00
	Average Loan	679.25	574.75	470.25	365.75	261.25
	Rate of Interest	10.90%	10.90%	10.90%	10.90%	10.90%
	Interest	74.04	62.65	51.26	39.87	28.48
	Rep Schedule		12 Annual ir	nstalments from	m 21.06.2004	ı
3	Bond-XI Option-I					
	Gross loan opening	1012.00	1012.00	1012.00	1012.00	1012.00
	Cumulative Repayment up to the	337.32	421.65	505.99	590.32	674.65
	date of commercial operation					
	/previous year			==		
	Net Loan-Opening	674.68	590.35	506.01	421.68	337.35
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	84.33	84.33	84.33	84.33	84.33
	Net Loan-Closing	590.35	506.01	421.68	337.35	253.01
	Average Loan	632.51	548.18	463.85	379.51	295.18
	Rate of Interest	9.80%	9.80%	9.80%	9.80%	9.80%
	Interest	61.99	53.72	45.46	37.19	28.93
	Rep Schedule		m 07.12.2005			
4	Bond-XII					
	Gross loan opening	71.00	71.00	71.00	71.00	71.00
	Cumulative Repayment up to the	23.68	29.60	35.51	41.43	47.35
	date of commercial operation					
	/previous year				_	
	Net Loan-Opening	47.32	41.40	35.49	29.57	23.65
	Additions during the year	0.00	0.00	0.00	0.00	0.00

Т			F 00	F 00	5.00		
	Repayment during the year	5.92	5.92	5.92	5.92	5.92	
	Net Loan-Closing	41.40	35.49	29.57	23.65	17.74	
	Average Loan	44.36	38.45	32.53	26.61	20.70	
	Rate of Interest	9.70%	9.70%	9.70%	9.70%	9.70%	
	Interest	4.30	3.73	3.16	2.58	2.01	
	Rep Schedule		12 Annual in:	stalments fron	n 28.03.2006		
5	Bond-XIII Option-I						
	Gross loan opening	888.00	888.00	888.00	888.00	888.00	
	Cumulative Repayment up to DOCO/previous year	222.00	296.00	370.00	444.00	518.00	
	Net Loan-Opening	666.00	592.00	518.00	444.00	370.00	
	Additions during the year	0.00	0.00	0.00	0.00	0.00	
	Repayment during the year	74.00	74.00	74.00	74.00	74.00	
	Net Loan-Closing	592.00	518.00	444.00	370.00	296.00	
	Average Loan	629.00	555.00	481.00	407.00	333.00	
	Rate of Interest	8.63%	8.63%	8.63%	8.63%	8.63%	
	Interest	54.28	47.90	41.51	35.12	28.74	
	Rep Schedule		12 Annual in:	stalments fron	n 31.07.2006		
6	Bond-XV						
	Gross loan opening	3000.00	3000.00	3000.00	3000.00	3000.00	
	Cumulative Repayment up to the	500.00	750.00	1000.00	1250.00	1500.00	
	date of commercial operation						
	/previous year						
	Net Loan-Opening	2500.00	2250.00	2000.00	1750.00	1500.00	
	Additions during the year	0.00	0.00	0.00	0.00	0.00	
	Repayment during the year	250.00	250.00	250.00	250.00	250.00	
	Net Loan-Closing	2250.00	2000.00	1750.00	1500.00	1250.00	
	Average Loan	2375.00	2125.00	1875.00	1625.00	1375.00	
	Rate of Interest	6.68%	6.68%	6.68%	6.68%	6.68%	
	Interest	158.65	141.95	125.25	108.55	91.85	
	Rep Schedule	12 Annual instalments from 23-02-2008					
7	Bond-XVI						
	Gross loan opening	2365.00	2365.00	2365.00	2365.00	2365.00	
	Cumulative Repayment up to the	236.50	473.00	709.50	946.00	1182.50	
	date of commercial operation /previous year	230.30	473.00	707.50	740.00	1102.50	
	Net Loan-Opening	2128.50	1892.00	1655.50	1419.00	1182.50	
	Additions during the year	0.00	0.00	0.00	0.00	0.00	
	Repayment during the year	236.50	236.50	236.50	236.50	236.50	
	Net Loan-Closing	1892.00	1655.50	1419.00	1182.50	946.00	
	Average Loan	2010.25	1773.75	1537.25	1300.75	1064.25	
	Rate of Interest	7.10%	7.10%	7.10%	7.10%	7.10%	
	Interest	142.73	125.94	109.14	92.35	75.56	
	Rep Schedule	1 12.70	10 Annual instalments from 18-02-2009				
8	Bond- XVII						
J	Gross loan opening	3472.00	3472.00	3472.00	3472.00	3472.00	
	Cumulative Repayment upto	0.00	347.20	694.40	1041.60	1388.80	
		0.00	377.20	077.70	10-11.00	1300.00	
	, ,						
	DOCO/previous year	3472.00	3124.80	2777.60	2430.40	2083.20	
	, ,	3472.00 0.00	3124.80 0.00	2777.60	2430.40	2083.20	

	Net Loan-Closing	3124.80	2777.60	2430.40	2083.20	1736.00	
	Average Loan	3298.40	2951.20	2604.00	2256.80	1909.60	
	Rate of Interest	7.39%	7.39%	7.39%	7.39%	7.39%	
	Interest	243.75	218.09	192.44	166.78	141.12	
	Rep Schedule	243.73		stalments fror		141.12	
9	Bond- XVIII		1071111111111	stairrierits iroi	11 22.07.2007		
7	Gross loan opening	900.00	900.00	900.00	900.00	900.00	
	Cumulative Repayment up to up	0.00	75.00	150.00	225.00	300.00	
	to the date of commercial	0.00	75.00	130.00	223.00	300.00	
	operation /previous year						
	Net Loan-Opening	900.00	825.00	750.00	675.00	600.00	
	Additions during the year	0.00	0.00	0.00	0.00	0.00	
	Repayment during the year	75.00	75.00	75.00	75.00	75.00	
	Net Loan-Closing	825.00	750.00	675.00	600.00	525.00	
	Average Loan	862.50	787.50	712.50	637.50	562.50	
	Rate of Interest	8.15%	8.15%	8.15%	8.15%	8.15%	
	Interest	70.29	64.18	58.07	51.96	45.84	
	Rep Schedule	7 0.27		atalments fror		10101	
10	Bond- XIX (For ACE)						
	Gross loan opening	230.00	230.00	230.00	230.00	230.00	
	Cumulative Repayment up to the	0.00	0.00	19.17	38.33	57.50	
	date of commercial operation						
	/previous year						
	Net Loan-Opening	230.00	230.00	210.83	191.67	172.50	
	Additions during the year	0.00	0.00	0.00	0.00	0.00	
	Repayment during the year	0.00	19.17	19.17	19.17	19.17	
	Net Loan-Closing	230.00	210.83	191.67	172.50	153.33	
	Average Loan	230.00	220.42	201.25	182.08	162.92	
	Rate of Interest	9.25%	9.25%	9.25%	9.25%	9.25%	
	Interest	21.28	20.39	18.62	16.84	15.07	
	Rep Schedule		12 annual ina	atalments fror	m 24.07.2010		
11	Bond- XXII (For ACE)						
	Gross loan opening	470.00	470.00	470.00	470.00	470.00	
	Cumulative Repayment up to the	0.00	0.00	39.17	78.33	117.50	
	date of commercial operation						
	/previous year						
	Net Loan-Opening	470.00	470.00	430.83	391.67	352.50	
	Additions during the year	0.00	0.00	0.00	0.00	0.00	
	Repayment during the year	0.00	39.17	39.17	39.17	39.17	
	Net Loan-Closing	470.00	430.83	391.67	352.50	313.33	
	Average Loan	470.00	450.42	411.25	372.08	332.92	
	Rate of Interest	8.68%	8.68%	8.68%	8.68%	8.68%	
	Interest	40.80	39.10	35.70	32.30	28.90	
	Rep Schedule		12 Annual In	stalments fror	m 07.12.2010		
12	PNB-II						
	Gross loan opening	559.00	559.00	559.00	559.00	559.00	
	Cumulative Repayment up to the	232.92	279.50	326.08	372.67	419.25	
	date of commercial operation						
	/previous year	001.00	070 - 1	000.05	401.00	400 ==	
	Net Loan-Opening	326.08	279.50	232.92	186.33	139.75	
	Additions during the year	0.00	0.00	0.00	0.00	0.00	
	Repayment during the year	46.58	46.58	46.58	46.58	46.58	

	Net Loan-Closing	279.50	232.92	186.33	139.75	93.17	
	Average Loan	302.79	256.21	209.63	163.04	116.46	
	Rate of Interest	9.35%	9.35%	9.35%	9.35%	9.35%	
	Interest	28.31	23.96	19.60	15.24	10.89	
	Rep Schedule	12 Annual Instalments from 08.03.2005					
13	OBC						
	Gross loan opening	466.00	466.00	466.00	466.00	466.00	
	Cumulative Repayment up to the	194.17	233.00	271.83	310.67	349.50	
	date of commercial operation						
	/previous year						
	Net Loan-Opening	271.83	233.00	194.17	155.33	116.50	
	Additions during the year	0.00	0.00	0.00	0.00	0.00	
	Repayment during the year	38.83	38.83	38.83	38.83	38.83	
	Net Loan-Closing	233.00	194.17	155.33	116.50	77.67	
	Average Loan	252.42	213.58	174.75	135.92	97.08	
	Rate of Interest	9.60%	9.60%	9.60%	9.60%	9.60%	
	Interest	24.23	20.50	16.78	13.05	9.32	
	Rep Schedule	12 Annual Instalments from 22.03.2005					
	Total Loan						
	Gross loan opening	15118.00	15118.00	15118.00	15118.00	15118.00	
	Cumulative Repayment up to the	2527.68	3833.65	5197.95	6562.25	7926.55	
	date of commercial operation						
	/previous year						
	Net Loan-Opening	12590.32	11284.35	9920.05	8555.75	7191.45	
	Additions during the year	0.00	0.00	0.00	0.00	0.00	
	Repayment during the year	1305.97	1364.30	1364.30	1364.30	1321.20	
	Net Loan-Closing	11284.35	9920.05	8555.75	7191.45	5870.25	
	Average Loan	11937.33	10602.20	9237.90	7873.60	6530.85	
	Weighted Average Rate of Interest	7.9006%	7.8786%	7.8469%	7.8042%	7.7586%	
	Interest	943.13	835.30	724.89	614.47	506.70	