CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No.266/2010

Coram:

- 1. Shri S.Jayaraman, Member
- 2. Shri V.S.Verma, Member
- 3. Shri M.Deena Dayalan, Member

DATE OF HEARING: 23.12.2010 DATE OF ORDER: 11.2.2011

In the matter of

Approval of transmission tariff for combined assets for (a) 80 MVAR bus reactor along with Nellor 400 kV bay extension; (b) 315 MVA ICT with Cuddapah 400 kV bay extension; (c) 315 MVA ICT with Gooty Extension and IInd 3X167 MVA auto transformer at Kolar and switching arrangement for reactor at Somanahalli; (d) 315 MVA ICT with Gazuwaka sub-station bay extension; (e) 315 MVA ICT with Munirabad sub-station bay extension; and (f) 315 MVA ICT with Khammam sub-station bay extension under System Strengthening Scheme V 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 M.M. Mondal, PGCIL
- 2. Shri Rakesh Prasad, PGCIL
- 3. Shri Rajiv Gupta, PGCIL

<u>ORDER</u>

The petition has been filed for approval of combined assets for (a) 80 MVAR bus reactor along with Nellor 400 kV bay extension (Asset-I); (b) 315 MVA ICT with Cuddapah 400 kV bay extension (Asset-II); (c) 315 MVA ICT with Gooty extension and IInd 3X167 MVA auto transformer at Kolar and switching arrangement for reactor at Somanahalli (Asset-III); (d) 315 MVA ICT with Gazuwaka sub-station bay extension (Asset-IV); (e) 315 MVA ICT with Munirabad sub-station bay extension (Asset-V); and (f) 315 MVA ICT with Khammam sub-station bay extension (Asset-VI) (hereinafter collectively referred to as "the transmission assets") under System Strengthening Scheme-V(hereinafter referred to as "the transmission scheme") in Southern 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 additional capital expenditure on account of undischarged liabilities during 2009-10. The petitioner has made the following additional prayers:-

(a) To Allow the additional capital expenditure incurred/ to be incurred on account of undischarged liabilities after the cut off date under Regulation 9 (2) (v) of the 2009 regulations or alternatively, invoke the provision of Regulation 44 of the 2009 regulations so that additional capital expenditure incurred on account of undischarged liabilities after



the cut off date is considered for the fixation of tariff for the period 2009-14;

- (b) To allow grossing up of base rate of return with the applicable tax 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;
- (c) In case of the assets being combined to calculate the transmission charges, allow to recover full depreciation (90% of the gross block) of the asset during its useful life (25 years for sub-station and 35 years for transmission lines) reckoning from its actual date of the commercial operation and also permit to treat the recovery in accordance with para 1.4 of the petition;
- (d) To approve reimbursement of petition filing fee and publication of notices in the newspaper as per the 2009 regulations;
- (e) Allow to bill and 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 investment approval for the transmission scheme was accorded by Board of Directors of the petitioner company vide memorandum dated 13.7.2004 at an estimated cost of ₹9212 lakh, which includes IDC of ₹482 lakh. Subsequently, revised cost estimate for the transmission scheme was

approved by Board of Directors vide memorandum dated 21.10.2008 at an estimated cost of ₹ 13180 lakh which included IDC of ₹268 lakh. The notional date of commercial operation of the transmission scheme has been taken as 1.2.2008.

- 3. The annual transmission charges up to 31.3.2009 were decided by the Commission in its order dated 16.3.2009 in Petition No. 125/2008 and same were revised vide order dated 18.3.2010 in Petition No. 331/200, after accounting for the additional capital expenditure up to 31.3.2009.
- 4. The petitioner has claimed the transmission charges in respect of the transmission assets as under:

(₹ in lakh) 2013-14 2009-10 2010-11 2011-12 2012-13 673.37 673.37 673.37 Depreciation 665.60 673.37 554.42 732.44 491.74 Interest on Loan 679.61 617.13 Return on Equity 660.79 668.50 668.50 668.50 668.50 Interest on Working Capital 85.98 82.23 83.70 84.78 87.33 O & M Expenses 831.00 878.56 928.76 981.88 786.00 Total 2927.06 2936.18 2922.34 2911.03 2902.82

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 2013-14 117.90 124.65 139.31 147.28 Maintenance Spares 131.78 69.25 73.21 77.40 81.82 O & M expenses 65.50 Receivables 487.84 489.36 487.06 485.17 483.80 671.24 683.26 692.05 701.88 712.90 Total Rate of Interest 12.25% 12.25% 12.25% 12.25% 12.25% 84.78 Interest 82.23 83.70 85.98 87.33

6. Reply to the petition has been filed by Tamil Nadu Electricity Board (TNEB). The objections of TNEB have been dealt with in relevant paras of this order. 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. The petitioner has claimed the capital expenditure of ₹12454.18 lakh, which was admitted vide order dated 18.3.2010 in Petition No. 331/2009. The petitioner has claimed projected additional capital expenditure incurred during the period 2009-10.

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 assets is given hereunder:

	Years	Nature and details of expenditure	Amount (₹ in lakh)
Asset-II	2009-10	Sub-station- Retention, PV and	44.00
		Taxes and duties payments	
Asset-III	2009-10	Sub-station- Retention, PV and	191.23
		Taxes and duties payments	
Asset-IV	2009-10	Sub-station- Retention, PV and	20.55
		Taxes and duties payments	
Asset-V	2009-10	Sub-station- Retention, PV and	28.30
		Taxes and duties payments	
Asset-VI	2009-10	Sub-station- Retention, PV and	10.05
		Taxes and duties payments	
		Total	294.13

11. TNEB in its reply has submitted that the claim for additional capital expenditure on account of undischarged liabilities should be dealt strictly in accordance with the 2009 regulations. In response, the petitioner has submitted that Hon'ble Commission may invoke the provisions of Regulation 44 of the 2009 regulation to allow the additional capital expenditure on account of undischarged liabilities.

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- 12. It is noted that the additional capital expenditure for the year 2009-10 includes ₹17.84 lakh corresponding to the payment of initial spares. During the hearing on 23.12.2010, the petitioner was directed to clarify whether initial spares were supplied within or after the cut-off date. The petitioner vide its affidavit dated 11.1.2010 has submitted that under the transmission scheme, the following spares were delivered after the cut-off date i.e 31.3.2009 and rest of spares for the scheme were supplied within cut-off date:
 - (i) "Part of LS" of Bushing CTs = ₹17.80 lakh
 - (ii) Complete set of valves in Kolar = ₹ 0.09 lakh
 Total = ₹ 17.89 lakh
- 13. The petitioner has further submitted that LOAs for spare, received after the cut-off date under the scheme were placed on 17.3.2005. The explanation given by the petitioner is found to be justified. Therefore, we allow the expenditure on spare of ₹17.89 lakh for the purpose of tariff.
- 14. The petitioner has submitted that the assets covered under the petition were declared under Commercial operation during 2004-09 wherein the admitted capital expenditure after the cut-off date because of deferred liabilities was allowed as per clause 53(2) of the 2004 regulations. Due to contractual exigencies and other reasons beyond the control of the petitioner, it had to make provisions for release of balance / retention payment beyond 2008-09. Since Regulation 9 (2) of 2009 Regulations does not provide for such undischarged liabilities as part of additional capitalization after the cut off date, the Commission may consider to invoke Regulation 44 of the 2009

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Regulations for relaxation of Regulation 9 (2) of 2009 Regulations so that the additional capitalization incurred/to be incurred on account of undischarged liabilities after the cut-off date is allowed and considered for tariff fixation during 2009-14.

15. We have considered the submission made by the petitioner and the respondents. In accordance with our decision in order dated 8.2.2011 in Petition No. 176/2010, the additional capital expenditure of ₹ 294.13 lakh incurred/projected to be incurred during 2009-10 after the cut-off date on account of balance and retention payments, taxes and duties payments have been allowed to be capitalized in this order.

TOTAL CAPITAL COST

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

	(र in iakn)
Admitted capital	Projected additional capital Total capital cost as
cost as on the	expenditure proposed to be on 1.4.2014
31.3.2009	incurred during 2009-10
12454.18	294.13 12748.31

DEBT- EQUITY RATIO

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

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

(# in Inlah)

18. The petitioner has claimed tariff based on debt-equity ratio of 70:30. The petitioner has further claimed the amount of projected additional capital expenditure in the debt-equity ratio of 70:30 for the year 2009-10, same has been considered for the calculation of tariff. For the purpose of tariff, equity considered for the transmission assets is as under:

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Equity as on	Notional equity	Average	Notional	Average	Equity as
1.4.2009	due to projected		Equity for the	equity for	on
	additional capital	2009-10	period 2010-	2013-14	31.3.2014
	expenditure for		14		
	the period 2009-				
	10				
3735.88	88.24	3780.00	0.00	3824.12	3824.12

RETURN ON EQUITY

- 19. 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%."

- 20. TENB has submitted that the petitioner has prayed to invoke 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.
- 21. 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 holidays of between the generating company/transmission licensee and the beneficiaries/long-term transmission customers on year to year basis. The process of amendment to the 2009 regulations is under way and will address the grievance of the petitioner with regard to the MAT rate. Accordingly, the return on equity has been computed as per the existing provision of Regulation 15 (3) of 2009 regulation as under:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Equity as on 1.4.2009	3735.88	3824.12	3824.12	3824.12	3824.12
Addition due to Additional Capitalisation	88.24	0.00	0.00	0.00	0.00
Closing Equity	3824.12	3824.12	3824.12	3824.12	3824.12
Average Equity	3780.00	3824.12	3824.12	3824.12	3824.12
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)	660.78	668.50	668.50	668.50	668.50

INTEREST ON LOAN

- 22. Regulation 16 of the 2009 regulations provides as under:
 - "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. TENB in 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 this regard, it is clarified that since the 2009 regulations do not allow for the floating rate of interest, the rate of interest as on 1.4.2009 have been considered for the purpose of the tariff.
- 24. The interest on loan has been worked out as detailed below:
 - (i) The gross amount of loan, repayment of instalments and rate of interest and weighted average rate of interest on actual average loan have been considered as per the petition;
 - (ii) The repayment for the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that period;

- (iii) Moratorium period availed by the transmission licensee, the repayment of the loan have been e considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed;
- (iv) Weighted average rate of interest on actual loan has been worked out and applied on the average loan during the year to arrive at the interest on loan; and
- (v) The interest on loan has been calculated on the basis of rate prevailing as on 1.4.2009. Any change in rate of interest subsequent to 1.4.2009 will be considered at the time of truing up.
- 25. Based on the above, the year-wise details of interest worked out are given hereunder:

(₹ in lakh)

Details of loan	As on 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	8718.29	8718.29	8924.18	8924.18	8924.18	8924.18
Cumulative repayment up to previous year		619.87	1285.47	1958.84	2632.20	3305.57
Net Loan-Opening		8098.42	7638.71	6965.35	6291.98	5618.61
Addition due to additional capitalisation		205.89	0.00	0.00	0.00	0.00
Repayment during the year		665.60	673.37	673.37	673.37	673.37
Net loan-closing		7638.71	6965.35	6291.98	5618.61	4945.24
Average Loan		7868.57	7302.03	6628.66	5955.29	5281.93
Weighted Average rate of interest on loan		9.3085%	9.3072%	9.3100%	9.3098%	9.3100%
Interest	·	732.44	679.61	617.13	554.43	491.74

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:
 - "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.

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

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

- (5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2009 from the gross depreciable value of the assets.
- (6) Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis."
- 28. The transmission assets were declared under commercial operation w.e.f. 1.9.2005 and accordingly will complete 12 years beyond 2013-14 and thus, depreciation has been calculated annually based on Straight Line



Method and at rates specified in *Appendix-III* of the 2009 regulations. Accordingly, depreciation works out is as under:

(₹ in lakh)

Details of loan		2009-10	2010-11	2011-12	2012-13	2013-14
Gross block as on 31.3.2009	12454.18	12454.18	12748.31	12748.31	12748.31	12748.31
Addition during 2009-14		294.13	0.00	0.00	0.00	0.00
due to projected						
Additional Capitalisation						
Average Gross Block		12748.31	12748.31	12748.31	12748.31	12748.31
Gross block as on 31.3.2009		12601.24	12748.31	12748.31	12748.31	12748.31
Rate of depreciation		5.2820%	5.2820%	5.2820%	5.2820%	5.2820%
Depreciable Value	90%	11341.12	11473.48	11473.48	11473.48	11473.48
Remaining depreciable		10721.25	10188.01	9514.64	8841.27	8167.90
Value						
Depreciation		665.60	673.37	673.37	673.37	673.37

OPERATION & MAINTENANCE EXPENSES

29. In accordance with clause (g) of Regulation 19 the 2009 regulations, the following norms for 400 kV and 220 kV bays have been specified for O & M expenses:

			Year		
	2009-10	2010-11	2011-12	2012-13	2013-14
O & M expenses for 400 kV bay (₹ in lakh per bay)	52.40	55.40	58.57	61.92	65.46
O & M expenses for 220 kV bay (₹ in lakh per bay)	36.68	37.78	41.00	43.34	45.82

30. 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
O & M expenses for 400 kV bays (8 bays)	419.20	443.20	468.56	495.36	523.68
O & M expenses for 400 kV bays (10	366.80	387.80	410.00	433.40	458.20
bays)					
Total	786.00	831.00	878.56	928.76	981.88

31. The petitioner has submitted that O & M expenditure for 2009-14 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%.

32. TNEB has submitted that O & M expenses for the period 2009-14 have been specified on normative basis and the 2009 regulations do not provide for revisiting the normative O & M expenses. In response, the petitioner has submitted that per ckt. km. and per bay O & M rates considered are based on the 2009 regulations. The petitioner has submitted that the wage revision for the executive levels has already been done, however, for the non-executive levels, the wage revision shall be done shortly and it will approach the Commission for additional manpower cost on account of wage revision during the period 2009-14. 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

- 33. The components of the working capital and the interest thereon are discussed hereunder:
 - (i) Receivables: As per Regulation 18(1)(c)(i) of the 2009 regulations, receivables will be equivalent to two months of annual transmission charges. 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 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 specified in Regulation 19. The value of maintenance spares has been accordingly 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 O&M expenses of the respective year which has been considered for computing 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.

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

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	117.90	124.65	131.78	139.31	147.28
O & M expenses	65.50	69.25	73.21	77.40	81.82
Receivables	487.84	489.36	487.05	485.17	483.80
Total	671.24	683.26	692.05	701.88	712.91
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	82.23	83.70	84.78	85.98	87.33

TRANSMISSION CHARGES

35. 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	665.60	673.37	673.37	673.37	673.37
Interest on Loan	732.44	679.61	617.13	554.43	491.74
Return on Equity	660.78	668.50	668.50	668.50	668.50
Interest on Working Capital	82.23	83.70	84.78	85.98	87.33
O & M Expenses	786.00	831.00	878.56	928.76	981.88
	2927.06	2936.17	2922.33	2911.03	2902.82

Application fee and the publication expenses

36. The petitioner has sought approval for the reimbursement of fee paid by it for filing the petition for determination of transmission tariff. Regulation 42 of the 209 regulations provides as under:

"The application filing fee and the expenses incurred on publication of notices in the application for approval of tariff, may in the discretion of the Commission, be allowed to be recovered by the generating company or the transmission licensee, as the case may be, directly from the beneficiaries or the transmission customers, as the case may be."

37. TNEB has submitted that the claim of filing fee should be dealt as per the decision taken by Commission vide order dated 11.9.2008 in Petition No. 129/2005 (Suo motu). It is clarified that the said decision was applicable to the tariff period 2004-09. However, Regulation 42 of the 2009 regulation provides for reimbursement of filing fees and expenses on publication of notices may be allowed in the direction of the Commission. 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 beneficiaries on pro rata basis.

Service Tax

39. The prayer of the petitioner for reimbursement of service tax if it is revised in future has been opposed by TENB. We have already decided in our order dated 23.9.2010 in Petition No. 62/2009 that the petitioner is exempted from service tax as per the extent policy of the Government of India. As regards the reimbursement of service tax is imposed on the petitioner in future, the prayer is premature at this stage and if any application is made by the petitioner, the same will be dealt in accordance with law.

Licence fee

40. TNEB has requested to negate the claim for reimbursement of license fee as the 2009 regulations does not make any provisions for reimbursement of licence fee. In this regard, It is clarified that the matter is under

consideration of the Commission and any decision on the issue as and when taken will be applicable to this petition.

- 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. 266/2010.

Sd/- Sd/- Sd/
(M.Deena Dayalan) (V.S.Verma) (S.Jayaraman)

Member Member Member

Annexure

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

	Details of Loan	2009-10	2010-11	2011-12	2012-13	(₹ in lakh) 2013-14
	Bond XXI	2009-10	2010-11	2011-12	2012-13	2013-14
1	Gross loan opening	212.00	212.00	212.00	212.00	212.00
	Cumulative Repayment up to the date of	0.00	0.00	17.67	35.33	53.00
	commercial operation/previous year	0.00	0.00	17.07	33.33	33.00
	Net Loan-Opening	212.00	212.00	194.33	176.67	159.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	17.67	17.67	17.67	17.67
	Net Loan-Closing	212.00	194.33	176.67	159.00	141.33
	Average Loan	212.00	203.17	185.50	167.83	150.17
	Rate of Interest	8.73%	8.73%	8.73%	8.73%	8.73%
	Interest	18.51	17.74	16.19	14.65	13.11
	Rep Schedule	12	Annual inst	talments fro	om 11-10-2	010
2	Bond XXII					
	Gross loan opening	496.00	496.00	496.00	496.00	496.00
	Cumulative Repayment up to the date of	0.00	0.00	41.33	82.67	124.00
	commercial operation /previous year					
	Net Loan-Opening	496.00	496.00	454.67	413.33	372.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	41.33	41.33	41.33	41.33
	Net Loan-Closing	496.00	454.67	413.33	372.00	330.67
	Average Loan	496.00	475.33	434.00	392.67	351.33
	Rate of Interest	8.68%	8.68%	8.68%	8.68%	8.68%
	Interest	43.05	41.26	37.67	34.08	30.50
	Rep Schedule	12	Annual ins	stalments fr	om 7-12-20	010
3	Bond XXIV					
	Gross loan opening	470.00	470.00	470.00	470.00	470.00
	Cumulative Repayment up to the date of	0.00	0.00	39.17	78.33	117.50
	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
	I Avorago Loan					
	Average Loan	470.00	450.42	411.25	372.08	332.92
	Rate of Interest	9.95%	9.95%	9.95%	9.95%	332.92 9.95%
	Rate of Interest Interest	9.95% 46.77	9.95% 44.82	9.95% 40.92	9.95% 37.02	332.92 9.95% 33.13
	Rate of Interest Interest Rep Schedule	9.95% 46.77	9.95%	9.95% 40.92	9.95% 37.02	332.92 9.95% 33.13
4	Rate of Interest Interest Rep Schedule Bond XXV	9.95% 46.77	9.95% 44.82 Annual Ins	9.95% 40.92 stalments fi	9.95% 37.02 com 26.3.20	332.92 9.95% 33.13
4	Rate of Interest Interest Rep Schedule Bond XXV Gross Ioan opening	9.95% 46.77	9.95% 44.82	9.95% 40.92	9.95% 37.02	332.92 9.95% 33.13
4	Rate of Interest Interest Rep Schedule Bond XXV Gross loan opening Cumulative Repayment up to the date of	9.95% 46.77	9.95% 44.82 Annual Ins	9.95% 40.92 stalments fi	9.95% 37.02 com 26.3.20	332.92 9.95% 33.13 011 733.00
4	Rate of Interest Interest Rep Schedule Bond XXV Gross loan opening Cumulative Repayment up to the date of commercial operation /previous year	9.95% 46.77 12 733.00 0.00	9.95% 44.82 Annual Ins 733.00 0.00	9.95% 40.92 stalments fr 733.00 0.00	9.95% 37.02 com 26.3.20 733.00 61.08	332.92 9.95% 33.13 011 733.00 122.17
4	Rate of Interest Interest Rep Schedule Bond XXV Gross loan opening Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening	9.95% 46.77 12 733.00 0.00	9.95% 44.82 Annual Ins 733.00 0.00 733.00	9.95% 40.92 stalments fi 733.00 0.00 733.00	9.95% 37.02 com 26.3.20 733.00 61.08	332.92 9.95% 33.13 011 733.00 122.17 610.83
4	Rate of Interest Interest Rep Schedule Bond XXV Gross Ioan opening Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year	733.00 0.00	9.95% 44.82 Annual Ins 733.00 0.00 733.00 0.00	9.95% 40.92 stalments fi 733.00 0.00 733.00 0.00	9.95% 37.02 com 26.3.20 733.00 61.08 671.92 0.00	332.92 9.95% 33.13 011 733.00 122.17 610.83 0.00
4	Rate of Interest Interest Rep Schedule Bond XXV Gross Ioan opening Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year	733.00 0.00 733.00 0.00	9.95% 44.82 Annual Ins 733.00 0.00 733.00 0.00 0.00	9.95% 40.92 stalments fi 733.00 0.00 733.00 0.00 61.08	9.95% 37.02 com 26.3.20 733.00 61.08 671.92 0.00 61.08	332.92 9.95% 33.13 011 733.00 122.17 610.83 0.00 61.08
4	Rate of Interest Interest Rep Schedule Bond XXV Gross loan opening Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing	733.00 0.00 733.00 0.00 733.00 0.00 733.00	9.95% 44.82 Annual Ins 733.00 0.00 733.00 0.00 0.00 733.00	9.95% 40.92 stalments fi 733.00 0.00 733.00 0.00 61.08 671.92	9.95% 37.02 com 26.3.20 733.00 61.08 671.92 0.00 61.08 610.83	332.92 9.95% 33.13 011 733.00 122.17 610.83 0.00 61.08 549.75
4	Rate of Interest Interest Rep Schedule Bond XXV Gross loan opening Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan	733.00 733.00 0.00 733.00 0.00 0.00 733.00 733.00 733.00	733.00 733.00 733.00 0.00 733.00 0.00 733.00 733.00 733.00	9.95% 40.92 stalments fi 733.00 0.00 733.00 0.00 61.08 671.92 702.46	9.95% 37.02 com 26.3.20 733.00 61.08 671.92 0.00 61.08 610.83 641.38	332.92 9.95% 33.13 011 733.00 122.17 610.83 0.00 61.08 549.75 580.29
4	Rate of Interest Interest Rep Schedule Bond XXV Gross Ioan opening Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest	733.00 0.00 733.00 0.00 733.00 0.00 733.00 733.00 10.10%	9.95% 44.82 Annual Ins 733.00 0.00 733.00 0.00 733.00 733.00 10.10%	9.95% 40.92 stalments fi 733.00 0.00 733.00 0.00 61.08 671.92 702.46 10.10%	9.95% 37.02 733.00 61.08 671.92 0.00 61.08 610.83 641.38 10.10%	332.92 9.95% 33.13 733.00 122.17 610.83 0.00 61.08 549.75 580.29 10.10%
4	Rate of Interest Interest Rep Schedule Bond XXV Gross Ioan opening Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest	733.00 0.00 733.00 0.00 733.00 0.00 733.00 733.00 733.00 74.03	9.95% 44.82 Annual Ins 733.00 0.00 733.00 0.00 733.00 733.00 10.10% 74.03	9.95% 40.92 stalments fi 733.00 0.00 733.00 0.00 61.08 671.92 702.46 10.10% 70.95	9.95% 37.02 com 26.3.20 733.00 61.08 671.92 0.00 61.08 610.83 641.38 10.10% 64.78	332.92 9.95% 33.13 733.00 122.17 610.83 0.00 61.08 549.75 580.29 10.10% 58.61
	Rate of Interest Interest Rep Schedule Bond XXV Gross loan opening Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Rep Schedule	733.00 0.00 733.00 0.00 733.00 0.00 733.00 733.00 733.00 74.03	9.95% 44.82 Annual Ins 733.00 0.00 733.00 0.00 733.00 733.00 10.10%	9.95% 40.92 stalments fi 733.00 0.00 733.00 0.00 61.08 671.92 702.46 10.10% 70.95	9.95% 37.02 com 26.3.20 733.00 61.08 671.92 0.00 61.08 610.83 641.38 10.10% 64.78	332.92 9.95% 33.13 733.00 122.17 610.83 0.00 61.08 549.75 580.29 10.10% 58.61
5	Rate of Interest Interest Rep Schedule Bond XXV Gross Ioan opening Cumulative Repayment up to the date of commercial operation /previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest	733.00 0.00 733.00 0.00 733.00 0.00 733.00 733.00 733.00 74.03	9.95% 44.82 Annual Ins 733.00 0.00 733.00 0.00 733.00 733.00 10.10% 74.03	9.95% 40.92 stalments fi 733.00 0.00 733.00 0.00 61.08 671.92 702.46 10.10% 70.95	9.95% 37.02 com 26.3.20 733.00 61.08 671.92 0.00 61.08 610.83 641.38 10.10% 64.78	332.92 9.95% 33.13 733.00 122.17 610.83 0.00 61.08 549.75 580.29 10.10% 58.61

		1					
	Cumulative Repayment up to the date of	0.00	0.00	91.67	183.33	275.00	
	commercial operation /previous year						
	Net Loan-Opening	1100.00	1100.00	1008.33	916.67	825.00	
	Additions during the year	0.00	0.00	0.00	0.00	0.00	
	Repayment during the year	0.00	91.67	91.67	91.67	91.67	
	Net Loan-Closing	1100.00	1008.33	916.67	825.00	733.33	
	Average Loan	1100.00	1054.17	962.50	870.83	779.17	
	Rate of Interest	8.93%	8.93%	8.93%	8.93%	8.93%	
	Interest	98.23	94.14	85.95	77.77	69.58	
	Rep Schedule	12 Annual instalments from 07.09.2010					
6	Bond XXVIII						
	Gross loan opening	672.00	672.00	672.00	672.00	672.00	
	Cumulative Repayment up to the date of	0.00	0.00	0.00	0.00	56.00	
	commercial operation /previous year						
	Net Loan-Opening	672.00	672.00	672.00	672.00	616.00	
	Additions during the year	0.00	0.00	0.00	0.00	0.00	
	Repayment during the year	0.00	0.00	0.00	56.00	56.00	
	Net Loan-Closing	672.00	672.00	672.00	616.00	560.00	
	Average Loan	672.00	672.00	672.00	644.00	588.00	
	Rate of Interest	9.33%	9.33%	9.33%	9.33%	9.33%	
	Interest	62.70	62.70	62.70	60.09	54.86	
	Rep Schedule	12	Annual ins	talments fro	om 15.12.20	012	
	Bond XXVII (ADDCAP FOR 2007-08 DRAWL ON						
7	31.03.2008)						
	Gross loan opening	143.00	143.00	143.00	143.00	143.00	
	Cumulative Repayment up to the date of	0.00	0.00	0.00	11.92	23.83	
	commercial operation /previous year	0.00	0.00	0.00		20.00	
	Net Loan-Opening	143.00	143.00	143.00	131.08	119.17	
	Additions during the year	0.00	0.00	0.00	0.00	0.00	
	Repayment during the year	0.00	0.00	11.92	11.92	11.92	
	Net Loan-Closing	143.00	143.00	131.08	119.17	107.25	
	Average Loan	143.00	143.00	137.04	125.13	113.21	
	Rate of Interest	9.47%	9.47%	9.47%	9.47%	9.47%	
	Interest	13.54	13.54	12.98	11.85	10.72	
	Rep Schedule		12 Annual instalments from 31.3.2012				
8	Bond XXVI / ICICI	12 / Williadi installiforits from 51.3.2012					
-	Gross loan opening	4134.00	4134.00	4134.00	4134.00	4134.00	
	Cumulative Repayment up to the date of	0.00	0.00	0.00	344.50	689.00	
	commercial operation /previous year	0.00	0.00	5.00	544.50	307.00	
	Net Loan-Opening	4134.00	4134.00	4134.00	3789.50	3445.00	
	Additions during the year	0.00	0.00	0.00	0.00	0.00	
	Repayment during the year	0.00	0.00	344.50	344.50	344.50	
	Net Loan-Closing	4134.00	4134.00	3789.50	3445.00	3100.50	
	Average Loan	4134.00	4134.00	3961.75	3617.25	3272.75	
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%	
	Interest	384.46	384.46	368.44	336.40	304.37	
	Rep Schedule		2 Annual in				
-	Bond XXX (Add Cap for 2009-10 Drawl on	1.	_ / \	stan Helita I		16	
9	31.3.2010						
<u> </u>	Gross loan opening	0.00	41.00	41.00	41.00	41.00	
	Cumulative Repayment up to the date of	0.00	0.00	0.00	0.00	0.00	
	commercial operation /previous year						
	Net Loan-Opening	0.00	41.00	41.00	41.00	41.00	
	Additions during the year	41.00	0.00	0.00	0.00	0.00	
1	Repayment during the year	0.00	0.00	0.00	0.00	3.42	



	Net Loan-Closing	41.00	41.00	41.00	41.00	37.58	
	Average Loan	20.50	41.00	41.00	41.00	39.29	
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%	
	Interest	1.80	3.61	3.61	3.61	3.46	
	Rep Schedule	12 Annual instalments from 29.09.2013					
1 0	Bond XXXI (Add Cap for 2009-10 Drwal on 31.03.2010						
	Gross loan opening	0.00	113.00	113.00	113.00	113.00	
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00	0.00	0.00	0.00	
	Net Loan-Opening	0.00	113.00	113.00	113.00	113.00	
	Additions during the year	113.00	0.00	0.00	0.00	0.00	
	Repayment during the year	0.00	0.00	0.00	0.00	9.42	
	Net Loan-Closing	113.00	113.00	113.00	113.00	103.58	
	Average Loan	56.50	113.00	113.00	113.00	108.29	
	Rate of Interest	8.90%	8.90%	8.90%	8.90%	8.90%	
	Interest	5.03	10.06	10.06	10.06	9.64	
	Rep Schedule	12 Annual instalments from 25.02.2014					
	Total Loan						
	Gross loan opening	7960.00	8114.00	8114.00	8114.00	8114.00	
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00	189.83	797.17	1460.50	
	Net Loan-Opening	7960.00	8114.00	7924.17	7316.83	6653.50	
	Additions during the year	154.00	0.00	0.00	0.00	0.00	
	Repayment during the year	0.00	189.83	607.33	663.33	676.17	
	Net Loan-Closing	8114.00	7924.17	7316.83	6653.50	5977.33	
	Average Loan	8037.00	8019.08	7620.50	6985.17	6315.42	
	Weighted Average Rate of Interest	9.3085%	9.3072%	9.3100%	9.3098%	9.3100%	
	Interest	748.12	746.35	709.47	650.31	587.96	