

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 331/2009

Coram:

- 1. Dr. Pramod Deo, Chairperson**
- 2. Shri S.Jayaraman, Member**
- 3. Shri V.S.Verma, Member**

DATE OF HEARING: 16.2.2010

DATE OF ORDER 18.3.2010

In the matter of

Revision of transmission tariff due to additional capital expenditure incurred during 2008-09 for (a) 80 MVAR Reactor along with Nellore 400 kV bay extension work; (b) 315 MVA ICT along with Cuddapah 400 kV bay extension work; (c) 315 MVA ICT along with Gooty sub-station bay extension work and 11nd 3x167 MVA Auto transformer at Kolar and switching arrangement for reactor at Somanhalli; (d) 315 MVA ICT along with Guzuwaka sub-station bay extension work; (e) 315 MVA ICT at Munirabad sub-station bay extension work; and (f) 315 MVA ICT along with Khammam sub-station bay extension work under the system strengthening Scheme-V in Southern Region Grid.

And in the matter of

Power Grid Corporation of India Limited, Gurgaon **..Petitioner**
Vs

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

The following were present:

1. Shri U.K.Tyagi, PGCIL
2. Shri Rakesh Prasad, PGCIL
3. Shri M.M.Mondal, PGCIL
4. Shri S.K.Niranjan, PGCIL

ORDER

This petition has been filed for revision of transmission tariff due to additional capital expenditure incurred in respect of transmission elements given in the table below, together with their dates of commercial operation under the system strengthening Scheme-V (the transmission scheme) in Southern Region Grid for the period from 1.4.2008 to 31.3.2009, based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 (hereinafter referred to as "the 2004 regulations):

S.No.	Name of Asset	Date of the commercial operation
1.	80 MVAR Reactor along with Nellore 400 kV bay extension work (Asset-I)	1.7.2007
2.	315 MVA ICT along with Cuddapah 400 kV bay extension work (Asset-II)	1.8.2007
3.	315 MVA ICT along with Gooty sub-station bay extension work and 11nd 3 x167 MVA Auto transformer at Kolar and switching arrangement for reactor at Somanhalli (Asset-III)	1.9.2007
4.	315 MVA ICT along with Guzuwaka sub-station bay extension work (Asset-IV)	1.10.2007
5.	315 MVA ICT along with Munirabad sub-station bay extension work (Asset-V)	1.11.2007
6.	315 MVA ICT along with Khammam sub-station bay extension (Asset-VI)	1.2.2008

2. The petitioner has also prayed for reimbursement of the petition filing fee, licence fee and other expenditure in connection with the filing of the petition

3. 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 Rs. 9212 lakh, which includes IDC of Rs. 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 Rs. 13180 lakh which included an IDC of Rs. 268 lakh.

4. The transmission charges for the transmission elements were approved by the Commission vide its order dated 16.3.2009 in Petition No. 125/2008. The summary of the revised transmission charges approved by the said order dated 16.3.2009 is extracted hereunder:

(Rs. in lakh)

	Asset-I		Asset-II		Asset-III		Asset-IV		Asset-V		Asset-VI	
	2007-08	2008-09	2007-08	2008-09	2007-08	2008-09	2007-08	2008-09	2007-08	2008-09	2007-08	2008-09
Depreciation	25.18	34.63	32.72	51.50	84.34	146.48	22.97	49.63	26.35	65.38	7.55	45.30
Interest on Loan	43.88	57.66	59.36	89.51	138.72	249.79	37.01	84.84	42.15	112.48	12.58	79.04
Return on Equity	29.38	40.41	38.17	60.08	98.00	170.21	26.78	57.86	30.74	76.27	8.81	52.85
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	3.64	4.97	5.11	7.93	13.61	24.12	3.53	7.58	4.60	11.59	1.19	7.34
O & M Expenses	23.72	32.90	42.17	65.80	129.16	230.30	31.63	65.80	52.72	131.60	10.54	65.80
Total	125.80	170.57	177.54	274.83	463.83	820.89	121.92	265.71	156.55	397.32	40.68	250.33

5. The relevant details of the capital expenditure on the transmission assets claimed by the petitioner are as under:

(Rs. in lakh)

	Capital cost as on 1.4.2008 (As per order dated 16.3.2009)	Additional Capital Expenditure during 2008-09	Capital cost as on 1.4.2009
Asset-I	962.02	150.78	1112.80
Asset-II	1430.60	216.64	1647.24
Asset-III	4052.13	539.20	4591.65
Asset-IV	1378.72	217.73	1596.45
Asset-V	1816.05	264.32	2080.37
Asset-VI	1258.29	171.70	1429.99

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

(Rs.in lakh)

	Asset- I	Asset-II	Asset- III	Asset-IV	Asset-V	Asset- VI
	2008-09	2008-09	2008-09	2008-09	2008-09	2008-09
Depreciation	37.35	55.40	156.18	53.55	70.14	48.39
Interest on Loan	63.34	96.52	270.33	91.71	120.85	84.48
Return on Equity	43.57	64.64	181.53	62.43	81.82	56.45
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	5.22	8.26	24.98	7.90	11.98	7.59
O & M Expenses	32.90	65.80	230.30	65.80	131.60	65.80
Total	182.38	290.62	863.32	281.39	416.39	262.71

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

(Rs. in lakh)

	Asset- I	Asset-II	Asset- III	Asset-IV	Asset-V	Asset- VI
	2008-09	2008-09	2008-09	2008-09	2008-09	2008-09
Maintenance Spares	9.44	13.48	40.85	12.09	17.39	12.71
O & M expenses	2.74	5.48	19.19	5.48	10.97	5.48
Receivables	30.40	48.44	143.89	46.90	69.40	43.79
Total	42.58	67.40	203.93	64.47	97.76	61.98
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	5.22	8.26	24.98	7.90	11.98	7.59

8. The reply to the petition has been filed by Tamil Nadu Electricity Board (TNEB). TNEB in its reply has prayed as under:

- (i) Restrict spares up to 1.5% of original project cost in accordance with Regulations 52;
- (ii) Order revision of tariff by considering judgment that would be passed in Appeal No. 143/2009;
- (iii) Negate revision of O & M expenses by considering the impact of wage revision effective from 1.1.2007 along with D.A.;

(iv) Negate the filing fee in line with the decision taken in order dated 11.9.2009 in Petition No. 129/2005; and

(v) Direct the petitioner to claim imposition or charges specifically ordered to be reimbursed by CERC from the beneficiaries.

9. In respect of issue raised at (ii) above, it is clarified that it is premature to discuss the applicability or otherwise of the judgment in the Appeal which is presently pending before the Appellate Tribunal for Electricity. A view in this regard will be taken on the terms of the judgment. As regards other four issues, the same are discussed later in this order under the relevant heads.

CAPITAL COST

10. The details submitted by the petitioner in support of its claim for additional capital expenditure are given hereunder:

Asset-I			Asset-II			Asset-III		
Year	Amount (Rs. in lakh)	Nature and details of expenditure	Year	Amount (Rs. in lakh)	Nature and details of expenditure	Year	Amount (Rs. in lakh)	Nature and details of expenditure
2008-09	sub-station = Rs. 150.78 lakh	Final and retention payments	2008-09	Sub-station= Rs. 216.64 lakh	Final and retention payments	2008-09	sub-station = Rs. 539.20 lakh	Final and retention payments
Total	Rs. 150.78 lakh			Rs. 216.64 lakh			Rs. 539.20 lakh	

Asset-IV			Asset-V			Asset-VI		
Year	Amount (Rs. in lakh)	Nature and details of expenditure	Year	Amount (Rs. in lakh)	Nature and details of expenditure	Year	Amount (Rs. in lakh)	Nature and details of expenditure
2008-09	sub-station = Rs. 217.73 lakh	Final and retention payments	2008-09	Sub-station= Rs. 264.32 lakh	Final and retention payments	2008-09	Sub-station = Rs. 171.70 lakh	Final and retention payments
Total	Rs. 217.73 lakh			Rs. 264.32 lakh			Rs. 171.70 lakh	

11. The additional capital expenditure claimed is within the original scope of work and mainly on account of final and retention payments. The additional

expenditure sought to be capitalised is allowed under Regulations 53 of the 2004 regulations.

Initial spares

12. Clause (1) of the Regulation 52 of the 2004 regulations *inter alia* provides that,-

“(1) Subject to prudence check by the Commission, the actual expenditure incurred on completion of the project shall form the basis for determination of final tariff. The final tariff shall be determined based on the admitted capital expenditure actually incurred up to the date of commercial operation of the transmission system and shall include capitalized initial spares subject to a ceiling norm as 1.5% of original project cost”.

13. The details of actual expenditure incurred and spares included therein by the petitioner as per original scope of project up to 31.3.2009 are as under:-

	Particulars	capital expenditure (Rs in lakh)				Initial Spares included therein	Remarks
		Up to the date of commercial operation	From the date of commercial operation to 31-3-2008	From 1-4-2008 to 31-3-2009	Total		
1	Asset-I	903.16	58.86	150.78	1112.80	13.21	Included in the current Petition
2	Asset-II	1296.02	134.58	216.64	1647.24	23.50	
3	Asset-III	3947.23	105.22	539.20	4591.65	116.95	
4	Asset-IV	1173.76	204.96	217.73	1596.45	1.74	
5	Asset-V	1696.70	119.35	264.32	2080.37	19.60	
6	Asset-VI	1258.29	0.00	171.70	1429.99	16.13	
	TOTAL	10275.16	622.97	1560.37	12458.50	191.13	

14. Total actual expenditure incurred by the petitioner for the transmission assets up to 31.3.2009 is Rs. 12458.50 lakh and cost of spares included therein is Rs. 191.13 lakh. The total cost with out initial spares is Rs. 12267.37 lakh and cost of spares included therein is Rs. 191.13 lakh. Cut of date of the above transmission assets is 31.3.2009 and value of initial spares included in the capital cost has been

reviewed as on the cut of the date. The allowable spares in the capital cost is [capital cost without initial spares *1.5/98.5] i.e. 12267.37 X 1.5/98.5= 186.81 lakh]. In case of Asset-III, the value of capital spares has been exceeded, hence excess spares of Rs. 4.32 lakh claimed by the petitioner has been restricted from sub-station for Asset-III from the date of commercial operation of the above assets and the tariff for 2007-08 and 2008-09 has been revised accordingly.

TOTAL CAPITAL COST

15. Based on the above, capital cost for the purpose of tariff in respect of each of the transmission assets as on 31.3.2009 works out as under:

	Capital cost as on 1.4.2008 (As per order dated 16.3.2009)	Additional Capital Expenditure during 2008-09	Capital cost as on 1.4.2009
Asset-I	962.02	150.78	1112.80
Asset-II	1430.60	216.64	1647.24
Asset-III	4048.13	539.20	4587.33
Asset-IV	1378.72	217.73	1596.45
Asset-V	1816.05	264.32	2080.37
Asset-VI	1258.29	171.70	1429.99

(Rs. in lakh)

DEBT- EQUITY RATIO

16. The petitioner has considered the amount of additional capital expenditure in the debt-equity ratio of 70:30. This has been found to be in order. Accordingly, for the purpose of tariff, equity considered for the transmission assets is as under:

	Equity as on 1.4.2008	Notional additional equity during 2008-09	Total equity considered as on 31.3.2009	Average equity for 2008-09
Asset-I	288.60	45.23	333.84	311.22
Asset-II	429.18	64.99	494.17	461.68
Asset-III	1214.44	161.76	1376.20	1295.32
Asset-IV	413.25	65.32	478.57	445.91
Asset-V	544.82	79.30	624.11	584.46
Asset-VI	377.49	51.51	429.00	403.24

(Rs. in lakh)

RETURN ON EQUITY

17. As per clause (iii) of Regulation 56 of the 2004 regulations, return on equity shall be computed on the equity base determined in accordance with regulation 54 @ 14% per annum. Equity invested in foreign currency is to be allowed a return in the same currency and the payment on this account is made in Indian Rupees based on the exchange rate prevailing on the due date of billing.

18. Equity as given in the table under para 16 above has been considered. However, tariff for the 2008-09 has been allowed on average equity. Accordingly, return on equity allowed for the year 2008-09 is given as under:

(Rs. in lakh)

Name of the asset	
	2008-09
Asset-I	43.57
Asset-II	64.63
Asset-III	181.34
Asset-IV	62.43
Asset-V	81.82
Asset-VI	56.45

INTEREST ON LOAN

19. Clause (i) of regulation 56 of the 2004 regulations *inter alia* provides that,-

“(a) Interest on loan capital shall be computed loan wise on the loans arrived at in the manner indicated in regulation 54.

(b) The loan outstanding as on 1.4.2004 shall be worked out as the gross loan in accordance with Regulation 54 minus cumulative repayment as admitted by the Commission or any other authority having power to do so, up to 31.3.2004. The repayment for the period 2004-09 shall be worked out on a normative basis.

(c) The transmission licensee shall make every effort to re-finance the loan as long as it results in net benefit to the beneficiaries. The costs associated with such re-financing shall be borne by the beneficiaries.

(d) The changes to the loan terms and conditions shall be reflected from the date of such re-financing and benefit passed on to the beneficiaries.

(e) In case of dispute, any of the parties may approach the Commission with proper application. However, the beneficiaries shall not withhold any payment ordered by the Commission to the transmission licensee during pendency of any dispute relating to re-financing of loan;

(f) In case any moratorium period is availed of by the transmission licensee, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly.

(g) The transmission licensee shall not make any profit on account of re-financing of loan and interest on loan;

(h) The transmission licensee may, at its discretion, swap loans having floating rate of interest with loans having fixed rate of interest, or vice versa, at its own cost and gains or losses as a result of such swapping shall accrue to the transmission licensee:

Provided that the beneficiaries shall be liable to pay interest for the loans initially contracted, whether on floating or fixed rate of interest."

20. In our calculation, the interest on loan has been worked out as detailed below:

(i) Gross amount of loan, repayment of instalments and rate of interest and weighted average rate of interest on actual loan have been considered as per the petition.

(ii) Notional loan arising out of additional capital expenditure for the years 2008-09 has been added to the loan amount as on the date of the commercial operation to arrive at total notional loans. This adjusted Gross loan has been considered as normative loans for tariff calculations.

- (iii) Tariff has been worked out considering normative loan and normative repayments. Once the normative loan has been arrived at, it has been considered for all purposes in the tariff. Normative repayment has been worked out by the following formula:

$$\frac{\text{Actual repayment of actual loan during the year}}{\text{Opening balance of actual loan during the year}} \times \text{Opening balance of normative loan during the year}$$

- (iv) Moratorium in repayment of loan has been considered with reference to normative loan and if the normative repayment of loan during the year is less than the depreciation during the year, it is considered as moratorium and depreciation during the year is deemed as normative repayment of loan during the year.
- (v) Weighted average rate of interest on actual loan worked out as per (i) above has been applied on the notional average loan during the year to arrive at the interest on loan.
- (vi) Short term loan from Bank of Baroda was replaced by Bond XXVIII for Asset-I and Asset-III w.e.f. 15.12.2008. Therefore, for the year 2008-09, weighted average rate of interest based on number of days for these loans has been considered while working out the weighted average rate of interest on actual loans.

21. Based on the above, the details of interest worked out are given hereunder:

Details	(Rs. in lakh)					
	Asset- I 2008-09	Asset-II 2008-09	Asset- III 2008-09	Asset-IV 2008-09	Asset-V 2008-09	Asset- VI 2008-09
Gross Normative Loan	673.41	1001.42	2833.69	965.47	1271.24	880.80
Cumulative Repayment up to	25.18	32.72	84.25	22.97	26.35	7.55

Previous Year/date of commercial operation						
Net Loan-Opening	648.23	968.70	2749.44	942.50	1244.89	873.25
Addition due to Additional Capitalisation	105.55	151.65	377.44	152.41	185.02	120.19
Repayment during the year	37.35	55.40	156.03	53.55	70.14	48.39
Net Loan-Closing	716.43	1064.95	2970.86	1041.36	1359.78	945.05
Average Loan	682.33	1016.82	2860.15	991.93	1302.33	909.15
Weighted Average Rate of Interest on Loan	9.28%	9.49%	9.44%	9.25%	9.28%	9.29%
Interest	63.34	96.52	270.07	91.71	120.85	84.48

22. The detailed calculations in support of the weighted average rate of interest for Asset-I, Asset-II, Asset-III, Asset-IV, Asset-V and Asset-VI are contained in Annexure-I, Annexure-II, Annexure-III, Annexure-IV Annexure-V and Annexure-VI, respectively attached.

DEPRECIATION

23. Sub-clause (a) of clause (ii) of Regulation 56 of the 2004 regulations provides for computation of depreciation in the following manner, namely:

- "(i) The value base for the purpose of depreciation shall be the historical cost of the asset.
- (ii) Depreciation shall be calculated annually based on straight line method over the useful life of the asset and at the rates prescribed in Appendix II to these regulations. The residual value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the historical capital cost of the asset. Land is not a depreciable asset and its cost shall be excluded from the capital cost while computing 90% of the historical cost of the asset. The historical capital cost of the asset shall include additional capitalisation on account of Foreign Exchange Rate Variation up to 31.3.2004 already allowed by the Central Government/Commission.
- (iii) On repayment of entire loan, the remaining depreciable value shall be spread over the balance useful life of the asset.
- (iv) Depreciation shall be chargeable from the first year of operation. In case of operation of the asset for part of the year, depreciation shall be charged on pro rata basis."

24. Depreciation allowed has been worked out as below:

(Rs. in lakh)

Details	Asset- I	Asset-II	Asset- III	Asset-IV	Asset-V	Asset- VI
	2008-09	2008-09	2008-09	2008-09	2008-09	2008-09
Gross block as on the date of commercial operation	962.02	1430.60	4048.13	1378.72	1816.05	1258.29
Additional Capitalisation during 2008-09	150.78	216.64	539.20	217.73	264.32	171.70
Gross Block at the end of the year	1112.80	1647.24	4587.33	1596.45	2080.37	1429.99
Rate of Depreciation	3.6000%	3.6000%	3.6136%	3.6000%	3.6000%	3.6000%
Depreciable Value	933.67	1385.03	3885.96	1338.83	1753.39	1209.73
Balance Useful life of the asset	-	-	-	-	-	-
Remaining Depreciable Value	908.49	1352.31	3801.71	1315.85	1727.04	1202.18
Depreciation	37.35	55.40	156.03	53.55	70.14	48.39

ADVANCE AGAINST DEPRECIATION

25. As per sub-clause (b) of clause (ii) of Regulation 56 of the 2004 regulations, in addition to allowable depreciation, the transmission licensee is entitled to Advance Against Depreciation, computed in the manner given hereunder:

AAD = Loan repayment amount as per regulation 56 (i) subject to a ceiling of 1/10th of loan amount as per regulation 54 minus depreciation as per schedule

26. It is provided that Advance Against Depreciation shall be permitted only if the cumulative repayment up to a particular year exceeds the cumulative depreciation up to that year. It is further provided that Advance Against Depreciation in a year shall be restricted to the extent of difference between cumulative repayment and cumulative depreciation up to that year.

27. Petitioner has not claimed Advance Against Depreciation and accordingly, Advance Against Depreciation has not been considered.

OPERATION & MAINTENANCE EXPENSES

28. In accordance with clause (iv) of Regulation 56 the 2004 regulations, the following norms are prescribed for O & M expenses:

	Year				
	2004-05	2005-06	2006-07	2007-08	2008-09
O&M expenses (Rs in lakh per ckt-km)	0.227	0.236	0.246	0.255	0.266
O&M expenses (Rs in lakh per bay)	28.12	29.25	30.42	31.63	32.90

29. O&M expenses as taken for the tariff calculations as per order dated 16.3.2009 in Petition No. 125/2008 have been considered, since line length and number of bays remain unchanged.

INTEREST ON WORKING CAPITAL

30. The components of the working capital and the interest thereon are discussed hereunder:

(i) Maintenance spares

Regulation 56(v) (1) (b) of the 2004 regulations provides for maintenance spares @ 1% of the historical cost escalated @ 6% per annum from the date of commercial operation. The petitioner has claimed maintenance spares after accounting for additional capital expenditure.

For the purpose of computation of maintenance spares, the historical cost is being taken as the cost on the date of commercial operation. Maintenance spares on additional capital expenditure are not being considered for this purpose. Accordingly, maintenance spares have been

worked out on the historical cost and by providing escalation from the date of commercial operation.

(ii) O & M expenses

Regulation 56(v)(1)(a) of the 2004 regulations provides for operation and maintenance expenses for one month as a component of working capital. O&M expenses as considered in the order dated 16.3.2009 in Petition No. 125/2008 have been considered.

(iii) Receivables

As per Regulation 56(v)(1)(c) of the 2004 regulations, receivables will be equivalent to two months` average billing calculated on target availability level. Accordingly, in the tariff being allowed, receivables have been worked out on the basis of 2 months' transmission charges.

(iv) Rate of interest on working capital

As per Regulation 56(v) (2) of the 2004 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 1.4.2004 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 1.4.2007, which is in accordance with the 2004 regulations and has been allowed.

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

(Rs. in lakh)

	Asset- I	Asset-II	Asset- III	Asset-IV	Asset-V	Asset- VI
	2008-09	2008-09	2008-09	2008-09	2008-09	2008-09
Maintenance Spares	9.44	13.48	40.81	12.09	17.39	12.71
O & M expenses	2.74	5.48	19.19	5.48	10.97	5.48
Receivables	30.40	48.44	143.78	46.90	69.40	43.79
Total	42.58	67.40	203.79	64.47	97.76	61.98
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	5.22	8.26	24.96	7.90	11.98	7.59

TRANSMISSION CHARGES

32. The transmission charges being allowed for the six transmission assets are summarised below:

(Rs.in lakh)

	Asset- I	Asset-II	Asset- III	Asset-IV	Asset-V	Asset- VI
	2008-09	2008-09	2008-09	2008-09	2008-09	2008-09
Depreciation	37.35	55.40	156.03	53.55	70.14	48.39
Interest on Loan	63.34	96.52	270.07	91.71	120.85	84.48
Return on Equity	43.57	64.63	181.34	62.43	81.82	56.45
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	5.22	8.26	24.96	7.90	11.98	7.59
O & M Expenses	32.90	65.80	230.30	65.80	131.60	65.80
Total	182.37	290.61	862.71	281.38	416.38	262.72

33. The petitioner shall recover from the beneficiaries the additional transmission charges in one installment and these charges shall be shared in accordance with the 2004 regulations.

34. The petitioner has also sought reimbursement of filing fee paid. The Commission by its separate general order dated 11.9.2008 in Petition No. 129/2005 (suo-motu) has decided that reimbursement of the petition filing fee shall not be allowed during the tariff period 2004-09 as the same has been factored in the

O&M norms. The decision on reimbursement of the licence fee shall be communicated separately.

35. In addition to the transmission charges, the petitioner shall be entitled to other charges like income-tax, incentive, surcharge and other cess and taxes in accordance with the 2004 regulations.

36. This order disposes of Petition No. 331/2009.

Sd/-
(V.S.VERMA)
MEMBER

sd/-
(S.JAYARAMAN)
MEMBER

sd/-
(DR.PRAMOD DEO)
CHAIRPERSON

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

Asset-I

		(Rs. in lakh)	
	Details of Loan	2007-08	2008-09
1	Bond XXI		
	Gross Loan opening	42.00	42.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	42.00	42.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	42.00	42.00
	Average Loan	42.00	42.00
	Rate of Interest	8.73%	8.73%
	Interest	3.67	3.67
	Repayment Schedule	12 Annual instalments from 11-10-2010	
2	Bond XXII		
	Gross Loan opening	99.00	99.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	99.00	99.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	99.00	99.00
	Average Loan	99.00	99.00
	Rate of Interest	8.68%	8.68%
	Interest	8.59	8.59
	Repayment Schedule	12 Annual instalments from 7-12-2010	
3	Bond XXIV		
	Gross Loan opening	94.00	94.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	94.00	94.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	94.00	94.00
	Average Loan	94.00	94.00
	Rate of Interest	9.95%	9.95%
	Interest	9.35	9.35
	Repayment Schedule	12 Annual instalments from 26-3-2011	
4	Bond XXV		
	Gross Loan opening	59.00	59.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00

	Net Loan-Opening	59.00	59.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	59.00	59.00
	Average Loan	59.00	59.00
	Rate of Interest	10.10%	10.10%
	Interest	5.96	5.96
	Repayment Schedule	12 Annual instalments from 12.6.2011	
5	Bond XX		
	Gross Loan opening	338.00	338.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	338.00	338.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	338.00	338.00
	Average Loan	338.00	338.00
	Rate of Interest	8.93%	8.93%
	Interest	30.18	30.18
	Repayment Schedule	12 Annual instalments from 7.9.2010	
6	STBL BOB 29.09.2008 TO 14.12.2008 @12.5% Replaced by Bond XXVIII @ 9.33% from 15.12.2008 (ADDCAP FOR 2008-09 DRAWL ON 15.12.2008)		
	Gross Loan opening	0.00	0.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	0.00	0.00
	Additions during the year	0.00	132.80
	Repayment during the year	0.00	0.00
	Net Loan-Closing	0.00	132.80
	Average Loan	0.00	66.40
	Rate of Interest	0.00%	10.66%
	Interest	0.00	7.08
	Repayment Schedule	12 Annual instalments from 15.12.2012	
	Gross Loan opening	632.00	632.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	632.00	632.00
	Additions during the year	0.00	132.80
	Repayment during the year	0.00	0.00
	Net Loan-Closing	632.00	764.80
	Average Loan	632.00	698.40
	Rate of Interest	9.14%	9.28%
	Interest	57.76	64.83

Asset-II

		(Rs. in lakh)	
	Details of Loan	2007-08	2008-09
1	Bond XXI		
	Gross Loan opening	84.00	84.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	84.00	84.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	84.00	84.00
	Average Loan	84.00	84.00
	Rate of Interest	8.73%	8.73%
	Interest	7.33	7.33
	Repayment Schedule	12 Annual instalments from 11-10-2010	
2	Bond XXII		
	Gross Loan opening	196.00	196.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	196.00	196.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	196.00	196.00
	Average Loan	196.00	196.00
	Rate of Interest	8.68%	8.68%
	Interest	17.01	17.01
	Repayment Schedule	12 Annual instalments from 7-12-2010	
3	Bond XXIV		
	Gross Loan opening	195.00	195.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	195.00	195.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	195.00	195.00
	Average Loan	195.00	195.00
	Rate of Interest	9.95%	9.95%
	Interest	19.40	19.40
	Repayment Schedule	12 Annual instalments from 26-3-2011	
4	Bond XXV		
	Gross Loan opening	324.00	324.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00

	Net Loan-Opening	324.00	324.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	324.00	324.00
	Average Loan	324.00	324.00
	Rate of Interest	10.10%	10.10%
	Interest	32.72	32.72
	Repayment Schedule	12 Annual instalments from 12.6.2011	
5	Bond XX		
	Gross Loan opening	108.00	108.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	108.00	108.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	108.00	108.00
	Average Loan	108.00	108.00
	Rate of Interest	8.93%	8.93%
	Interest	9.64	9.64
	Repayment Schedule	12 Annual instalments from 7.9.2010	
6	Bond XXVII (ADDCAP FOR 2007-08 DRAWN ON 31.3.2008)		
	Gross Loan opening	0.00	97.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	0.00	97.00
	Additions during the year	97.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	97.00	97.00
	Average Loan	48.50	97.00
	Rate of Interest	9.47%	9.47%
	Interest	4.59	9.19
	Repayment Schedule	12 Annual instalments from 31.3.2012	
	Gross Loan opening	907.00	1004.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	907.00	1004.00
	Additions during the year	97.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	1004.00	1004.00
	Average Loan	955.50	1004.00
	Rate of Interest	9.49%	9.49%
	Interest	90.71	95.30

Asset-III

		(Rs. in lakh)	
	Details of Loan	2007-08	2008-09
1	Bond XXI		
	Gross Loan opening	86.00	86.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	86.00	86.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	86.00	86.00
	Average Loan	86.00	86.00
	Rate of Interest	8.73%	8.73%
	Interest	7.51	7.51
	Repayment Schedule	12 Annual instalments from 11-10-2010	
2	Bond XXII		
	Gross Loan opening	40.00	40.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	40.00	40.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	40.00	40.00
	Average Loan	40.00	40.00
	Rate of Interest	8.68%	8.68%
	Interest	3.47	3.47
	Repayment Schedule	12 Annual instalments from 7-12-2010	
3	Bond XXIV		
	Gross Loan opening	80.00	80.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	80.00	80.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	80.00	80.00
	Average Loan	80.00	80.00
	Rate of Interest	9.95%	9.95%
	Interest	7.96	7.96
	Repayment Schedule	12 Annual instalments from 26-3-2011	
4	Bond XXV		
	Gross Loan opening	350.00	350.00

	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	350.00	350.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	350.00	350.00
	Average Loan	350.00	350.00
	Rate of Interest	10.10%	10.10%
	Interest	35.35	35.35
	Repayment Schedule	12 Annual instalments from 12.6.2011	
5	Bond XX		
	Gross Loan opening	520.00	520.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	520.00	520.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	520.00	520.00
	Average Loan	520.00	520.00
	Rate of Interest	8.93%	8.93%
	Interest	46.44	46.44
	Repayment Schedule	12 Annual instalments from 7.9.2010	
6	Bond XXVI / ICICI		
	Gross Loan opening	1687.00	1687.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	1687.00	1687.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	1687.00	1687.00
	Average Loan	1687.00	1687.00
	Rate of Interest	8.15%	9.30%
	Interest	137.53	156.89
	Repayment Schedule	12 Annual instalments from 7.3.2012	
7	STBL FROM BOB 29.09.2008 TO 14.12.2008 @ 12.5% Replaced by BOND XXVIII @ 9.33% from 15.12.2008 (ADDCAP FOR 2008-09 DRAWL ON 15.12.2008)		
	Gross Loan opening	0.00	0.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	0.00	0.00
	Additions during the year	0.00	539.20
	Repayment during the year	0.00	0.00
	Net Loan-Closing	0.00	539.20
	Average Loan	0.00	269.60
	Rate of Interest	0.00%	10.66%

	Interest	0.00	28.74
	Repayment Schedule	12 Annual instalments from 15.12.2012	
	Gross Loan opening	2763.00	2763.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	2763.00	2763.00
	Additions during the year	0.00	539.20
	Repayment during the year	0.00	0.00
	Net Loan-Closing	2763.00	3302.20
	Average Loan	2763.00	3032.60
	Rate of Interest	8.62%	9.44%
	Interest	238.26	286.36

Asset-IV

		(Rs. in lakh)	
	Details of Loan	2007-08	2008-09
1	Bond XXII		
	Gross Loan opening	75.00	75.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	75.00	75.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	75.00	75.00
	Average Loan	75.00	75.00
	Rate of Interest	8.68%	8.68%
	Interest	6.51	6.51
	Repayment Schedule	12 Annual instalments from 7-12-2010	
2	Bond XXIV		
	Gross Loan opening	45.00	45.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	45.00	45.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	45.00	45.00
	Average Loan	45.00	45.00
	Rate of Interest	9.95%	9.95%
	Interest	4.48	4.48
	Repayment Schedule	12 Annual instalments from 26-3-2011	
3	Bond XXVI / ICICI		
	Gross Loan opening	627.00	627.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	627.00	627.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	627.00	627.00
	Average Loan	627.00	627.00
	Rate of Interest	8.18%	9.30%
	Interest	51.27	58.31
	Repayment Schedule	12 Annual instalments from 7.3.2012	
4	Bond XX		
	Gross Loan opening	75.00	75.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00
	Net Loan-Opening	75.00	75.00
	Additions during the year	0.00	0.00

Repayment during the year	0.00	0.00
Net Loan-Closing	75.00	75.00
Average Loan	75.00	75.00
Rate of Interest	8.93%	8.93%
Interest	6.70	6.70
Repayment Schedule	12 Annual instalments from 7.9.2010	
Gross Loan opening	822.00	822.00
Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
Net Loan-Opening	822.00	822.00
Additions during the year	0.00	0.00
Repayment during the year	0.00	0.00
Net Loan-Closing	822.00	822.00
Average Loan	822.00	822.00
Rate of Interest	8.39%	9.25%
Interest	68.96	76.00

Asset-V

		(Rs. in Lacs)	
	Details of Loan	2007-08	2008-09
1	Bond XXII		
	Gross Loan opening	41.00	41.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	41.00	41.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	41.00	41.00
	Average Loan	41.00	41.00
	Rate of Interest	8.68%	8.68%
	Interest	3.56	3.56
	Repayment Schedule	12 Annual instalments from 7-12-2010	
2	Bond XXIV		
	Gross Loan opening	35.00	35.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	35.00	35.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	35.00	35.00
	Average Loan	35.00	35.00
	Rate of Interest	9.95%	9.95%
	Interest	3.48	3.48
	Repayment Schedule	12 Annual instalments from 26-3-2011	
3	Bond XXVI / ICICI		
	Gross Loan opening	1052.00	1052.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	1052.00	1052.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	1052.00	1052.00
	Average Loan	1052.00	1052.00
	Rate of Interest	8.21%	9.30%
	Interest	86.41	97.84
	Repayment Schedule	12 Annual instalments from 7.3.2012	
4	Bond XX		
	Gross Loan opening	59.00	59.00

	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	59.00	59.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	59.00	59.00
	Average Loan	59.00	59.00
	Rate of Interest	8.93%	8.93%
	Interest	5.27	5.27
	Repayment Schedule	12 Annual instalments from 7.9.2010	
	Gross Loan opening	1187.00	1187.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	1187.00	1187.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	1187.00	1187.00
	Average Loan	1187.00	1187.00
	Rate of Interest	8.32%	9.28%
	Interest	98.72	110.15

Asset-VI

		(Rs. in lakh)	
	Details of Loan	2007-08	2008-09
1	Bond XXII		
	Gross Loan opening	45.00	45.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	45.00	45.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	45.00	45.00
	Average Loan	45.00	45.00
	Rate of Interest	8.68%	8.68%
	Interest	3.91	3.91
	Repayment Schedule	12 Annual instalments from 7-12-2010	
2	Bond XXIV		
	Gross Loan opening	21.00	21.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	21.00	21.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	21.00	21.00
	Average Loan	21.00	21.00
	Rate of Interest	9.95%	9.95%
	Interest	2.09	2.09
	Repayment Schedule	12 Annual instalments from 26-3-2011	
3	Bond XXVI / ICICI		
	Gross Loan opening	768.00	768.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	768.00	768.00
	Additions during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	768.00	768.00
	Average Loan	768.00	768.00
	Rate of Interest	8.54%	9.30%
	Interest	65.60	71.42
	Repayment Schedule	12 Annual instalments from 7.3.2012	
4	Bond XXVII		
	Gross Loan opening	0.00	46.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00

	Net Loan-Opening	0.00	46.00
	Additions during the year	46.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	46.00	46.00
	Average Loan	23.00	46.00
	Rate of Interest	9.47%	9.47%
	Interest	2.18	4.36
	Repayment Schedule	12 Annual instalments from 31.3.2012	
	Gross Loan opening	834.00	880.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	834.00	880.00
	Additions during the year	46.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	880.00	880.00
	Average Loan	857.00	880.00
	Rate of Interest	8.61%	9.29%
	Interest	73.77	81.78