

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 50/2010

Coram:

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

DATE OF HEARING: 15.4.2010

DATE OF ORDER 18.5.2010

In the matter of

Revision of transmission tariff due to additional capital expenditure incurred during 2008-09 for (i) 400 kV D/C Kahalgaon-Patna line (including 1x50 MVAR line reactor), 1x80 MVAR Bus Reactor with associated bay at Patna sub-station, 2 nos. 220 kV line bays at Patna sub-station for BSEB sub-station and 400 and 220 kV bays for ICT-I at Patna sub-station, (ii) 400 kV D/C Maithon-Ranchi line along with associated bays, 400/220 kV, 315 MVA, ICT-II along with associated bays at Ranchi sub-station and 220 Patratu & Chandil bays at Ranchi sub-station, (iii) 80 MVAR Bus Ractor at Ranchi and 2 nos of 220 kV line bays at Ranchi DOCO 1.9.2007. (iv) ICT-I at Patna sub-station, (v) 400/220 kV ICT-I at Ranchi sub-station along with associated bays and 2 nos line bays at Patna sub-station, and (vi) ICT-II at Patna sub-station along with associated bays under Kahalgaon stage-II Phase-I (2x500 MW) Transmission system in Eastern Region .

And in the matter of

Power Grid Corporation of India Limited, Gurgaon
Vs

..Petitioner

1. Bihar State Electricity Board, Patna
2. West Bengal State Electricity Board, Kolkata
3. Grid Corporation of Orissa Ltd., Bhubaneswar
4. Damodar Valley Corporation , Kolkata
5. Power Department, Govt. of Sikkim, Gangtok
6. Jharkhand State Electricity Board, Ranchi

.... Respondents

The following were present:

1. Shri Rakesh Prasad, PGCIL
2. Shri M.M.Mondal, PGCIL
3. Shri Rajeev Gupta, PGCIL
4. Shri R.B.Sharma, Advocate, PGCIL

ORDER

This petition has been filed for revision of transmission tariff due to additional capital expenditure incurred during 2008-09, in respect of transmission assets given in the table below, together with their dates of commercial operation, under Kahalgaon Stage-II, Phase-I (2x500 MW) Transmission system (the transmission system) in Eastern Region 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 the assets	Date of commercial operation
1.	400 KV D/C Kahalgaon- Patna transmission line (including 1x 50 MVAR line Reactor), 1x 80 MVAR Bus Reactor with associated bays at Patna sub-station, 2 nos 220 kV line bays at Patna sub-station for BSEB sub-station and 400 & 220 kV bays for ICT-I at Patna sub-station (Asset-I)	1.5.2007
2.	400 kV D/C Maithon -Ranchi transmission line along with associated bays, 400/220 kV, 315 MVA, ICT-II along with associated bays at Ranchi sub-station and 220 kV Patratu & Chandil bays at Ranchi sub-station (Asset-II)	1.6.2007
3.	80 MVAR Bus Reactor at Ranchi and 2 nos. of 220 kV line bays at Ranchi (Asset-III)	1.9.2007
4.	ICT-I at Patna sub-station (Asset-IV)	1.11.2007
5.	400/220 kV ICT-I at Ranchi sub-station along with associated bays and 2 nos line bays at Patna sub-station (Asset-V)	1.12.2007
6.	ICT-II at Patna sub-station along with associated bays (Asset-VI)	1.1.2008

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 system was accorded by Ministry of Power vide its letter dated 12.10.2004 at an estimated cost of Rs.177193.00 lakh, which included Interest during Construction (IDC) of Rs. 8618.00 lakh. Subsequently, approval for the revised cost estimate was accorded by

Board of Directors of the petitioner company under its letter dated 26.12.2008 at an estimated cost of Rs. 275223 lakh, which includes IDC of Rs. 109.47lakh.

4. The transmission charges for the transmission assets were approved by the Commission vide its order dated 6.5.2009 in Petition No. 1/2009. The summary of the revised transmission charges approved by the said order dated 6.5.2009 is extracted hereunder:

(Rs. in lakh)

	Asset- I		Asset-II		Asset-III		Asset-IV		Asset-V		Asset-VI	
	2007-08 (Pro rata)	2008-09	2007-08 (Pro rata)	2008-09	2007-08 (Pro rata)	2008-09	2007-08 (Pro rata)	2008-09	2007-08 (Pro rata)	2008-09	2007-08 (Pro rata)	2008-09
Depreciation	1159.29	1286.13	603.98	735.34	30.45	55.19	14.83	35.59	25.23	79.39	14.39	58.86
Interest on Loan	2613.30	2792.90	1322.53	1553.69	50.78	95.04	25.09	57.99	42.34	138.07	23.71	100.75
Return on Equity	1842.20	2041.61	931.75	1133.26	36.01	65.57	17.30	41.52	29.97	94.46	16.85	69.27
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	181.11	201.17	96.19	117.36	5.18	9.37	1.71	4.08	4.20	13.21	2.13	8.81
O & M Expenses	323.19	367.12	295.79	369.50	55.35	98.70	0.00	0.00	42.17	131.60	15.82	65.80
Total	6119.09	6688.93	3250.24	3909.16	177.77	323.87	58.92	139.18	143.90	456.72	72.90	303.49

5. Through this petition, the petitioner has not claimed additional capital expenditure in respect of transmission asset-IV. 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 6.5.2009)	Additional Capital Expenditure during 2008-09	Capital cost as on 1.4.2009
Asset-I	48607.66	1944.00	50551.66
Asset-II	26982.47	1312.00	28294.47
Asset-III	1561.47	207.00	1768.47
Asset-IV	988.54	0.00	988.54
Asset-V	2249.01	450.00	2699.01
Asset-VI	1651.08	342.00	1993.08

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	1312.17	752.72	58.56	35.59	87.55	63.88
Interest on Loan	2855.55	1600.35	102.40	57.99	154.07	112.98
Return on Equity	2082.44	1160.82	69.92	41.52	103.91	76.45
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00	0.00

Interest on Working Capital	203.87	119.27	9.68	4.08	13.91	9.32
O & M Expenses	367.12	369.50	98.70	0.00	131.60	65.80
Total	1312.17	4002.66	339.26	139.18	491.04	328.43

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	496.76	275.73	14.27	10.13	20.73	15.86
O & M expenses	30.59	30.79	8.23	0.00	10.97	5.48
Receivables	1136.86	667.11	56.54	23.20	81.84	54.74
Total	1664.21	973.63	79.04	33.33	113.54	76.08
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	203.87	119.27	9.68	4.08	13.91	9.32

8. BSEB in its reply dated 7.4.2010 has submitted that the additional capital expenditure claimed in the petition are mainly on account of retention/final payments and a confirmation be taken from the petitioner that no part of the claim belongs to any other category not covered by Regulation 53 of the 2004 regulations. The petitioner in its rejoinder has confirmed that the expenditure shown in the petition for the year 2007-08 and 2008-09 has been claimed as per Regulation 53 (2) of the 2004 regulation on account of final/retention payments. In view of the clarification of the petitioner, this objection of BSEB no more survives. The concern expressed by BSEB regarding initial spares, wages revision and reimbursement of filing fee have been taken care of under relevant heads of this order.

CAPITAL COST

9. 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	Building, Transmission line, sub-station and PLCC = Rs. 1944.00 lakh	Retention and final payments	2008-09	Building, Transmission line, sub-station and PLCC = Rs. 1312.00 lakh	Retention and final payments	2008-09	Building and sub-station = Rs. 207.00 lakh	Retention and final payments
Total	Rs. 1944.00 lakh			Rs. 1312.00 lakh			Rs. 207.00 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	0.00	-	2008-09	Building, Sub-station and PLCC = Rs. 450.00 lakh	Retention and final payments	2008-09	Land, Building and Sub-station = Rs. 342.00 lakh	Retention and final payments
Total	0.00	-		Rs. 450.00 lakh			Rs. 342.00 lakh	

10. 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

11. 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".

12. 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 Expenditures (Rs in lakh)					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	Initial Spares included therein	
Asset-I	47086.66	1521.00	1944.00	50551.66	365.55	Final transmission tariff up to the date of commercial operation and additional capital expenditure up to 31.3.2008 allowed vide petition No. 1/2009
Asset-II	26260.47	722.00	1312.00	28294.47	439.67	
Asset-III	1378.47	183.00	207.00	1768.47	64.81	
Asset-IV	988.54	0.00	0.00	988.54	6.59	
Asset-V	2032.01	217.00	450.00	2699.01	60.32	
Asset-VI	1562.08	89.00	342.00	1993.08	33.64	

13. Total actual expenditure incurred by the petitioner for the transmission assets up to 31.3.2009 is Rs. 86295.23 lakh and cost of spares included therein is Rs. 970.58 lakh. The total cost without initial spares is Rs. 85324.65 lakh and cost of spares included therein is Rs. 970.58 lakh, which is within the ceiling of 1.5% actual expenditure up to 31.3.2009 as per the 2004 regulations. The cut off date of the transmission assets is 31.3.2010

TOTAL CAPITAL COST

14. 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 6.5.2009)	Additional Capital Expenditure during 2008-09	Capital cost as on 1.4.2009
Asset-I	48607.66	1944.00	50551.66
Asset-II	26982.47	1312.00	28294.47

(Rs. in lakh)

Asset-III	1561.47	207.00	1768.47
Asset-IV	988.54	0.00	988.54
Asset-V	2249.01	450.00	2699.01
Asset-VI	1651.08	342.00	1993.08

DEBT- EQUITY RATIO

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

(Rs. in lakh)				
	Equity as on 1.4.2008	Notional equity due to additional capital expenditure during 2008-09	Total equity considered as on 31.3.2009	Average equity for 2008-09
Asset-I	14582.96	583.20	15166.16	14874.56
Asset-II	8094.74	393.60	8488.34	8291.54
Asset-III	468.37	62.10	530.47	499.42
Asset-IV	296.54	0.00	296.54	296.54
Asset-V	674.70	135.00	809.70	742.20
Asset-VI	494.78	102.60	597.38	546.08

RETURN ON EQUITY

16. 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.

17. Equity as given in the table under para 15 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	2082.44

Asset-II	1160.82
Asset-III	69.92
Asset-IV	41.52
Asset-V	103.91
Asset-VI	76.45

INTEREST ON LOAN

18. 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.”

19. 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 loan. 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, Asset-II, Asset-III, Asset-V and Asset-VI 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.

20. 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	34024.70	18887.73	1093.10	692.00	1574.31	1156.30
Cumulative Repayment up to Previous Year/date of commercial operation	1159.29	603.98	30.45	14.83	25.23	14.39
Net Loan-Opening	32865.41	18283.75	1062.65	677.17	1549.08	1141.91
Addition due to Additional Capitalisation	1360.80	918.40	144.90	0.00	315.00	239.40
Repayment during the year	1312.17	752.72	58.56	35.59	87.55	63.88
Net Loan-Closing	32914.04	18449.43	1148.99	641.58	1776.53	1317.44
Average Loan	32889.72	18366.59	1105.82	659.38	1662.81	1229.67
Weighted Average Rate of Interest on Loan	8.68%	8.71%	9.26%	8.79%	9.27%	9.19%
Interest	2855.54	1600.35	102.40	57.99	154.07	112.98

21. 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

22. 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."

23. 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	48607.66	26982.47	1561.47	988.54	2249.01	1651.08
Additional Capitalisation during 2008-09	1944.00	1312.00	207.00	0.00	450.00	342.00
Gross Block at the end of the year	50551.66	28294.47	1768.47	988.54	2699.01	1993.08
Rate of Depreciation	2.6466%	2.7235%	3.5169%	3.6000%	3.5389%	3.5057%
Depreciable Value	44240.09	24553.78	1498.47	889.69	2219.41	1611.97
Balance Useful life of the asset	-	-	-	-	-	-
Remaining Depreciable Value	43080.80	23949.80	1468.02	874.86	2194.18	1597.58
Depreciation	1312.17	752.72	58.56	35.59	87.55	63.88

ADVANCE AGAINST DEPRECIATION

24. 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

25. 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.

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

OPERATION & MAINTENANCE EXPENSES

27. 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

28. O&M expenses as taken for the tariff calculations in the order dated 6.5.2009 in Petition No. 1/2009 have been considered, since line length and number of bays remain unchanged.

INTEREST ON WORKING CAPITAL

29. 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 6.5.2009 in Petition No. 1/2009 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.

30. 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	496.76	275.73	14.27	10.13	20.73	15.86
O & M expenses	30.59	30.79	8.23	0.00	10.97	5.48
Receivables	1136.86	667.11	56.54	23.20	81.84	54.74
Total	1,664.21	973.64	79.03	33.33	113.53	76.08
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	203.87	119.27	9.68	4.08	13.91	9.32

TRANSMISSION CHARGES

31. 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	1312.17	752.72	58.56	35.59	87.55	63.88
Interest on Loan	2855.54	1600.35	102.40	57.99	154.07	112.98
Return on Equity	2082.44	1160.82	69.92	41.52	103.91	76.45
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	203.87	119.27	9.68	4.08	13.91	9.32
O & M Expenses	367.12	369.50	98.70	0.00	131.60	65.80
Total	6821.14	4002.66	339.25	139.18	491.04	328.43

32. 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.

33. 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.

34. 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.

35. This order disposes of Petition No. 50/2010.

Sd/-
(M.DEENA DAYALAN)
MEMBER

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	2008-09
1	Bond-XVIII	
	Gross Loan opening	11500.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	11500.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	11500.00
	Average Loan	11500.00
	Rate of Interest	8.15%
	Interest	937.25
	Repayment Schedule	12 Annual instalments from 9. 3.2010
2	Bond-XX	
	Gross Loan opening	14400.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	14400.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	14400.00
	Average Loan	14400.00
	Rate of Interest	8.93%
	Interest	1285.92
	Repayment Schedule	12 Annual instalments from 7-9-2010
3	Bond-XXI	
	Gross Loan opening	3350.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	3350.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	3350.00
	Average Loan	3350.00
	Rate of Interest	8.73%
	Interest	292.46
	Repayment Schedule	12 Annual instalments from 11-10-2010
4	Bond-XXII	
	Gross Loan opening	2500.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	2500.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	2500.00
	Average Loan	2500.00
	Rate of Interest	8.68%

	Interest	217.00
	Repayment Schedule	12 Annual instalments from 7-12-2010
5	Bond- XXIV	
	Gross Loan opening	1210.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	1210.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1210.00
	Average Loan	1210.00
	Rate of Interest	9.95%
	Interest	120.40
	Repayment Schedule	12 Annual instalments from 26.3.2011
6	Bond- XVIII (For ACE 2007-08)	
	Gross Loan opening	441.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	441.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	441.00
	Average Loan	441.00
	Rate of Interest	8.15%
	Interest	35.94
	Repayment Schedule	12 Annual instalments from 9-3-2010
7	Bond- XX(For ACE 2007-08)	
	Gross Loan opening	350.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	350.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	350.00
	Average Loan	350.00
	Rate of Interest	8.93%
	Interest	31.26
	Repayment Schedule	12 Annual instalments from 7-9-2010
8	Bond- XXII (For ACE 2007-08)	
	Gross Loan opening	92.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	92.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	92.00
	Average Loan	92.00
	Rate of Interest	8.68%

	Interest	7.99
	Repayment Schedule	12 Annual instalments from 7-12-2010
9	Bond- XXIV (For ACE 2007-08)	
	Gross Loan opening	10.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	10.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	10.00
	Average Loan	10.00
	Rate of Interest	9.95%
	Interest	1.00
	Repayment Schedule	12 Annual instalments from 26-3-2011
10	Bond- XXVII (For ACE 2007-08)	
	Gross Loan opening	628.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	628.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	628.00
	Average Loan	628.00
	Rate of Interest	9.47%
	Interest	59.47
	Repayment Schedule	12 Annual instalments from 31-03-2012
11	Bond- XXIX (For ACE 2008-09 Drawl on 12.03.2009)	
	Gross Loan opening	0.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	819.00
	Repayment during the year	0.00
	Net Loan-Closing	819.00
	Average Loan	409.50
	Rate of Interest	9.20%
	Interest	37.67
	Repayment Schedule	12 Annual instalments from 12-3-2013
12	STBL from BOB 29.09.2008 to 14.12.2008 @12.5% Replaced by BOND XXVIII @ 9.33% from 15.12.2008 (ACE for 2008-09 drawl on 15.12.2008)	
	Gross Loan opening	0.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	234.81
	Repayment during the year	0.00
	Net Loan-Closing	234.81
	Average Loan	117.41
	Rate of Interest	10.66%

	Interest	12.51
	Repayment Schedule	12 Annual instalments from 15.12.2012
13	Bond- XXVII (For ACE 2008-09 Drawl on 31.03.2009)	
	Gross Loan opening	0.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	150.88
	Repayment during the year	0.00
	Net Loan-Closing	150.88
	Average Loan	75.44
	Rate of Interest	9.47%
	Interest	7.14
	Repayment Schedule	12 Annual instalments from 31-3-2012
	Total Loan	
	Gross Loan opening	34481.00
	Cumulative Repayment up to the date of commercial operation	0.00
	Net Loan-Opening	34481.00
	Additions during the year	1204.69
	Repayment during the year	0.00
	Net Loan-Closing	35685.69
	Average Loan	35083.35
	Rate of Interest	8.68%
	Interest	3046.00

Asset-II

(Rs. in lakh)

	Details of Loan	2008-09
1	Bond-XVIII	
	Gross Loan opening	7100.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	7100.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	7100.00
	Average Loan	7100.00
	Rate of Interest	8.15%
	Interest	578.65
	Repayment Schedule	12 Annual instalments from 9.3.2010
2	Bond-XX	
	Gross Loan opening	8200.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	8200.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	8200.00
	Average Loan	8200.00
	Rate of Interest	8.93%
	Interest	732.26
	Repayment Schedule	12 Annual instalments from 7-9-2010
3	Bond-XXII	
	Gross Loan opening	2300.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	2300.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	2300.00
	Average Loan	2300.00
	Rate of Interest	8.68%
	Interest	199.64
	Repayment Schedule	12 Annual instalments from 7-12-2010
5	Bond- XXIV	
	Gross Loan opening	780.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	780.00
	Additions during the year	0.00
	Repayment during the year	0.00

	Net Loan-Closing	780.00
	Average Loan	780.00
	Rate of Interest	9.95%
	Interest	77.61
	Repayment Schedule	12 Annual instalments from 26-3-2011
6	Bond- XXVII (For ACE 2007-08)	
	Gross Loan opening	722.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	722.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	722.00
	Average Loan	722.00
	Rate of Interest	9.47%
	Interest	68.37
	Repayment Schedule	12 Annual instalments from 31.3.2012
7	STBL from BOB 29.09.2008 to 14.12.2008 @12.5% Repalced by BOND XXVIII @ 9.33% from 15.12.2008 (ACE for 2008-09 drawl on 15.12.2008)	
	Gross Loan opening	0.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	813.00
	Repayment during the year	0.00
	Net Loan-Closing	813.00
	Average Loan	406.50
	Rate of Interest	10.66%
	Interest	43.32
	Repayment Schedule	12 Annual instalments from 15.12.2012
	Total Loan	
	Gross Loan opening	19102.00
	Cumulative Repayment up to the date of commercial operation	0.00
	Net Loan-Opening	19102.00
	Additions during the year	813.00
	Repayment during the year	0.00
	Net Loan-Closing	19915.00
	Average Loan	19508.50
	Rate of Interest	8.71%
	Interest	1699.85

Asset-III

(Rs. in lakh)

Details of Loan		2008-09
1	Bond-XVIII	
	Gross Loan opening	158.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	158.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	158.00
	Average Loan	158.00
	Rate of Interest	8.15%
	Interest	12.88
	Repayment Schedule	12 Annual instalments from 9.3.2010
2	Bond-XX	
	Gross Loan opening	133.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	133.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	133.00
	Average Loan	133.00
	Rate of Interest	8.93%
	Interest	11.88
	Repayment Schedule	12 Annual instalments from 7-9-2010
3	Bond-XXII	
	Gross Loan opening	25.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	25.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	25.00
	Average Loan	25.00
	Rate of Interest	8.68%
	Interest	2.17
	Repayment Schedule	12 Annual instalments from 7-12-2010
5	Bond- XXIV	
	Gross Loan opening	123.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	123.00
	Additions during the year	0.00

	Repayment during the year	0.00
	Net Loan-Closing	123.00
	Average Loan	123.00
	Rate of Interest	9.95%
	Interest	12.24
	Repayment Schedule	12 Annual instalments from 26-3-2011
6	Bridge loan from ICICI 01.09.2007 to 06.03.2008 @ 8% Replaced by Bond XXVI @ 9.3% from 07.03.2008	
	Gross Loan opening	526.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	526.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	526.00
	Average Loan	526.00
	Rate of Interest	9.30%
	Interest	48.92
	Repayment Schedule	12 Annual instalments from 7.3.2012
7	Bond- XXVII (ADDCAP for 2007-08)	
	Gross Loan opening	183.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	183.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	183.00
	Average Loan	183.00
	Rate of Interest	9.47%
	Interest	17.33
	Repayment Schedule	12 Annual instalments from 31.3.2012
8	STBL from BOB 29.09.2008 to 14.12.2008 @12.5% Replaced by BOND XXVIII @ 9.33% from 15.12.2008 (ACE for 2008-09 drawl on 15.12.2008)	
	Gross Loan opening	0.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	128.00
	Repayment during the year	0.00
	Net Loan-Closing	128.00
	Average Loan	64.00
	Rate of Interest	10.66%
	Interest	6.82
	Repayment Schedule	12 Annual instalments from 15.12.2012
	Total Loan	
	Gross Loan opening	1148.00
	Cumulative Repayment up to the date of commercial	0.00

	operation	
	Net Loan-Opening	1148.00
	Additions during the year	128.00
	Repayment during the year	0.00
	Net Loan-Closing	1276.00
	Average Loan	1212.00
	Rate of Interest	9.26%
	Interest	112.23

Asset-IV

(Rs. in lakh)

	Details of Loan	2008-09
1	Bond-XVIII	
	Gross Loan opening	278.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	278.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	278.00
	Average Loan	278.00
	Rate of Interest	8.15%
	Interest	22.66
	Repayment Schedule	12 Annual instalments from 9.3.2010
2	Bond-XX	
	Gross Loan opening	237.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	237.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	237.00
	Average Loan	237.00
	Rate of Interest	8.93%
	Interest	21.16
	Repayment Schedule	12 Annual instalments from 7-9-2010
3	Bond-XXII	
	Gross Loan opening	45.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	45.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	45.00
	Average Loan	45.00
	Rate of Interest	8.68%
	Interest	3.91
	Repayment Schedule	12 Annual instalments from 7-12-2010
5	Bond- XXIV	
	Gross Loan opening	132.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	132.00
	Additions during the year	0.00

	Repayment during the year	0.00
	Net Loan-Closing	132.00
	Average Loan	132.00
	Rate of Interest	9.95%
	Interest	13.13
	Repayment Schedule	12 Annual instalments from 26-3-2011
	Total Loan	
	Gross Loan opening	692.00
	Cumulative Repayment up to the date of commercial operation	0.00
	Net Loan-Opening	692.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	692.00
	Average Loan	692.00
	Rate of Interest	8.79%
	Interest	60.86

Asset-V

(Rs. in lakh)

	Details of Loan	2008-09
1	Bond-XX	
	Gross Loan opening	195.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	195.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	195.00
	Average Loan	195.00
	Rate of Interest	8.93%
	Interest	17.41
	Repayment Schedule	12 Annual instalments from 7-9-2010
2	Bond-XXII	
	Gross Loan opening	37.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	37.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	37.00
	Average Loan	37.00
	Rate of Interest	8.68%
	Interest	3.21
	Repayment Schedule	12 Annual instalments from 07-12-2010
5	Bond- XXIV	
	Gross Loan opening	110.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	110.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	110.00
	Average Loan	110.00
	Rate of Interest	9.95%
	Interest	10.95
	Repayment Schedule	12 Annual instalments from 26-3-2011
6	Bridge loan from ICICI 01.12.2007 to 06.03.2008 @ 8% Replaced by Bond XXVI @ 9.3% from 07.03.2008	
	Gross Loan opening	851.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00

	Net Loan-Opening		851.00
	Additions during the year		0.00
	Repayment during the year		0.00
	Net Loan-Closing		851.00
	Average Loan		851.00
	Rate of Interest		9.30%
	Interest		79.14
	Repayment Schedule	12 instalments from 7.3.2012	Annual
7	Bond- XVIII		
	Gross Loan opening		229.00
	Cumulative Repayment up to the date of commercial operation /previous year		0.00
	Net Loan-Opening		229.00
	Additions during the year		0.00
	Repayment during the year		0.00
	Net Loan-Closing		229.00
	Average Loan		229.00
	Rate of Interest		8.15%
	Interest		18.66
	Repayment Schedule	12 instalments from 9.3.2010	Annual
8	Bond- XXVII (ACE for 2007-08)		
	Gross Loan opening		217.00
	Cumulative Repayment up to the date of commercial operation /previous year		0.00
	Net Loan-Opening		217.00
	Additions during the year		0.00
	Repayment during the year		0.00
	Net Loan-Closing		217.00
	Average Loan		217.00
	Rate of Interest		9.47%
	Interest		20.55
	Repayment Schedule	12 instalments from 31.3.2012	Annual
9	STBL from BOB 29.09.2008 to 14.12.2008 @12.5% Repalced by BOND XXVIII @ 9.33% from 15.12.2008 (ACE for 2008-09 drawl on 15.12.2008)		
	Gross Loan opening		0.00
	Cumulative Repayment up to the date of commercial operation /previous year		0.00
	Net Loan-Opening		0.00
	Additions during the year		279.00
	Repayment during the year		0.00
	Net Loan-Closing		279.00
	Average Loan		139.50
	Rate of Interest		10.66%
	Interest		14.87
	Repayment Schedule	12 instalments from 15.12.2012	Annual

	Total Loan	
	Gross Loan opening	1639.00
	Cumulative Repayment up to the date of commercial operation	0.00
	Net Loan-Opening	1639.00
	Additions during the year	279.00
	Repayment during the year	0.00
	Net Loan-Closing	1918.00
	Average Loan	1778.50
	Rate of Interest	9.27%
	Interest	164.79

Asset-VI

(Rs. in lakh)

	Details of Loan	2008-09
1	Bond-XVIII	
	Gross Loan opening	200.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	200.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	200.00
	Average Loan	200.00
	Rate of Interest	8.15%
	Interest	16.30
	Repayment Schedule	12 Annual instalments from 9.3.2010
2	Bond-XX	
	Gross Loan opening	200.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	200.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	200.00
	Average Loan	200.00
	Rate of Interest	8.93%
	Interest	17.86
	Repayment Schedule	12 Annual instalments from 7-9-2010
3	Bond-XXII	
	Gross Loan opening	12.00
	Cumulative up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	12.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	12.00
	Average Loan	12.00
	Rate of Interest	8.68%
	Interest	1.04
	Repayment Schedule	12 Annual instalments from 7-12-2010
5	Bond- XXIV	
	Gross Loan opening	12.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00

	Net Loan-Opening	12.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	12.00
	Average Loan	12.00
	Rate of Interest	9.95%
	Interest	1.19
	Repayment Schedule	12 Annual instalments from 26-3-2011
6	Bridge loan from ICICI 01.01.2008 to 06.03.2008 @ 8% Replaced by Bond XXVI @ 9.3% from 07.03.2008	
	Gross Loan opening	670.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	670.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	670.00
	Average Loan	670.00
	Rate of Interest	9.30%
	Interest	62.31
	Repayment Schedule	12 Annual instalments from 7.3.2012
7	Bond- XXVII (ACE for 2007-08)	
	Gross Loan opening	89.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	89.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	89.00
	Average Loan	89.00
	Rate of Interest	9.47%
	Interest	8.43
	Repayment Schedule	12 Annual instalments from 31.3.2012
8	STBL from BOB 29.09.2008 to 14.12.2008 @12.5% Repalced by BOND XXVIII @ 9.33% from 15.12.2008 (ACE for 2008-09 drawl on 15.12.2008)	
	Gross Loan opening	0.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	0.00
	Additions during the year	212.00
	Repayment during the year	0.00
	Net Loan-Closing	212.00
	Average Loan	106.00
	Rate of Interest	10.66%
	Interest	11.30
	Repayment Schedule	12 Annual instalments from 15.12.2012

	Total Loan	
	Gross Loan opening	1183.00
	Cumulative Repayment up to the date of commercial operation	0.00
	Net Loan-Opening	1183.00
	Additions during the year	212.00
	Repayment during the year	0.00
	Net Loan-Closing	1395.00
	Average Loan	1289.00
	Rate of Interest	9.19%
	Interest	118.43