

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 4/2010

Coram:

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

DATE OF HEARING: 22.4.2010

DATE OF ORDER 2.6.2010

In the matter of

Revision of transmission tariff due to additional capital expenditure incurred during 2008-09 for (i) 400 kV Balia-Lucknow Ckt I & II, 400 kV Balia-Mau Ckt-I, 400 kV D/C Patna-Balia transmission line including associated bays at Patna and Balia. (ii) 400 kV Balia-Mau Ckt-II, 40% FSC at Lucknow as 400 kV D/C Lucknow-Balia transmission line, (iii) 80 MVAR Bus Reactor of Biharshariff sub-station, (iv) 400 kV Lucknow-Bareilly Ckt-I & II along with associated bays, (v) 400 kV D/C Biharshariff-Balia transmission line Ckt-I with associated bays, and (vi) 400 kV D/C Biharshariff-Balia transmission line Ckt-II with associated bays under Kahalgaoon Stage-II Phase-I Transmission system in Northern Region.

And in the matter of

Power Grid Corporation of India Limited, Gurgaon

..Petitioner

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited, Jaipur
2. Ajmer Vidyut Vitaran Nigam Ltd., Jaipur
3. Jaipur Vidyut Vitaran Nigam Ltd, Jaipur
4. Jodhpur Vidyut Vitaran Nigam Ltd, Jaipur
5. Himachal Pradesh State Electricity Board, Shimla
6. Punjab State Electricity Board, Patiala
7. Haryana Power Purchase Centre, Panchkula
8. Power Development Department, Govt. of J&K, Jammu
9. Uttar Pradesh Power Corporation Ltd, Lucknow
10. Delhi Transco Ltd, New Delhi
11. BSES Yamuna Power Limited, New Delhi
12. BSES Rajdhani Power Ltd., New Delhi
13. North Delhi Power Ltd., New Delhi
14. Chief Engineer, Chandigarh Administration, Chandigarh
15. Uttaranchal Power Corporation Ltd, Dehradun
16. North Central Railway, Allahabad
17. New Delhi Municipal Corporation, New Delhi

.....Respondents

The following were present:

1. Shri U.K.Tyagi, PGCIL

2. Shri Rakesh Prasad, PGCIL
3. Shri M.M.Mondal, PGCIL
4. Shri Rajiv Gupta, PGCIL

ORDER

This petition has been filed for revision of transmission tariff due to additional capital expenditure incurred in respect of transmission assets given in the table below, together with their dates of commercial operation under Kahalgaon Stage-II, Phase-I Transmission system (the transmission system) in Northern 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 Balia-Lucknow Ckt-I & II, 400 kV Balia-Mau Ckt-I, 400 kV D/C Patna-Balia transmission line including associated bays at Patna & Balia (Asset-I)	1.5.2007
2.	400 kV Balia-Mau Ckt-II, 40% FSC at Lucknow on 400 kV D/C Lucknow-Balia transmission line (Asset-II)	1.6.2007
3.	80 MVAR Bus reactor of Biharshariff sub-station (Asset-III)	1.7.2007
4.	400 kV Lucknow-Bareilly Ckt-I & II along with associated bays (Asset-IV)	1.8.2007
5.	400 kV D/C Biharshariff-Balia transmission Line Ckt.I with associated bays (Asset-V)	1.9.2007
6.	400 kV D/C Biharshariff-Balia transmission Line Ckt.II with associated bays (Asset-VI)	1.11.2007

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 lakh, which included IDC of Rs. 8618 lakh. Subsequently, approval for the revised cost estimate was accorded by the Board of Directors of the petitioner company

under its letter dated 26.12.2008 at an estimated cost of Rs. 275223 lakh, which included IDC of Rs. 109.47 lakh.

4. The transmission charges for the transmission elements were approved by the Commission vide its order dated 13.5.2009 in Petition No. 6/2009. The summary of the revised transmission charges approved by the said order dated 13.5.2009 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	1752.54	1969.35	137.36	178.82	21.13	28.44	488.07	748.92	519.84	898.65	136.21	331.63
Interest on Loan	4011.05	4353.43	244.22	304.21	34.79	44.77	1080.75	1703.09	1209.33	2046.28	311.07	738.81
Return on Equity	2769.56	3105.29	167.52	218.00	24.48	32.96	763.86	1168.77	837.32	1446.29	213.39	519.01
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	275.53	308.67	19.37	24.56	3.14	4.25	76.26	118.60	80.51	139.49	21.67	52.62
O & M Expenses	560.21	636.46	107.37	134.03	23.72	32.90	171.22	267.53	72.87	130.12	52.05	130.12
Total	9368.90	10373.20	675.84	859.61	107.27	143.32	2580.17	4006.91	2719.88	4660.83	734.39	1772.18

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 13.5.2009)	Additional Capital Expenditure during 2008-09	Capital cost as on 1.4.2009
Asset-I	73933.01	1448.59	75381.60
Asset-II	5190.52	79.19	5269.71
Asset-III	789.94	63.00	852.94
Asset-IV	27825.94	984.03	28809.97
Asset-V	34432.30	1291.19	35723.49
Asset-VI	12359.29	138.19	12497.48

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	1989.72	179.97	29.57	762.97	915.71	333.86
Interest on Loan	4408.28	307.39	46.99	1741.28	2092.73	743.96
Return on Equity	3135.71	219.66	34.28	1189.43	1473.40	521.91
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	310.87	24.68	4.35	120.11	141.37	52.83

O & M Expenses	636.46	134.03	32.90	267.53	130.12	130.12
Total	10481.04	865.73	148.09	4081.32	4753.33	1782.68

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	737.82	46.01	8.10	278.01	351.01	123.33
O & M expenses	53.04	11.17	2.74	22.29	10.84	10.84
Receivables	1746.84	144.29	24.68	680.22	792.22	297.11
Total	2537.70	201.47	35.52	980.52	1154.07	431.28
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	310.87	24.68	4.35	120.11	141.37	52.83

8. UPPCL in its reply has raised the following issues:

(a) The total apportioned approved cost (RCE) is Rs. 166191.56 lakh. As against this, expenditure up to 31.3.2009 is Rs. 158535.19 lakh. There is difference in costs to the tune of Rs. 7656.37 lakh which requires to be explained by the petitioner against each asset;

(b) The petitioner has not furnished the asset-wise reasons for difference between revised cost estimate and actual expenditure up to 31.3.2009;

(c) The petitioner has not submitted auditor's report required as per the Companies Act, 1956; and

(d) The petitioner has not submitted the categorization and consolidation and details of balance and retention payments.

9. The petitioner in its rejoinder dated 21.4.2010 has submitted that The total apportioned approved cost (revised cost estimate) of the transmission assets is

Rs. 166191.56 lakh, expenditure up to 31.3.2009 is Rs. 158353.19 lakh as against total estimated completion cost of all the six assets amounting to Rs. 161807.07 lakh which includes the balance estimated expenditure after 1.4.2009. Thus the difference between total estimated completion cost of Rs. 161806.07 lakh and apportioned approved cost of Rs. 166191.56 lakh has resulted in net reduction of Rs. 4385.49 lakh. The difference in approved cost and estimated completion cost is due to estimation of various components such as PV, quantity variation, etc. during the project life cycle for the purpose of revised cost estimate. In regard to para 8 (b) above, the petitioner has submitted that the details of capital cost have been submitted in auditor`s certificates as per the 2004 regulations and the details of corporate and Northern Region accounts for the year 2008-09 and auditors report already have been furnished in Petition No. 43/2010. In regard to para 8 (c), the petitioner has submitted that the details of balance and retention payments have been furnished as per the 2004 regulations in Form 9 of the respective assets covered in the petition. In respect of para 8 (d), the petitioner has submitted that the additional capitalization claimed during the year has been incurred progressively during the year and it would not be possible to indicate date of incurring additional capital expenditure. As per the prevailing practice, the average of additional capital expenditure incurred during the year is being considered for calculation of tariff during that year. We are of view that the petitioner has met the objections raised by UPPCL and accordingly, we proceed to determine the revised annual transmission charges after accounting for the additional capital expenditure.

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	Free hold land, Transmission line, Building, sub-station and PL CC = Rs. 1448.59 lakh	Balance payment and taxes and duties and crop compensation	2008-09	Free hold land, Transmission line, Building, sub-station and PL CC= Rs. 79.19 lakh	Compensation , Rehabilitation an and social development and balance payment and taxes and duties and crop/tree compensation	2008-09	sub-station = Rs. 63.00 lakh	Balance payment
Total	Rs. 1448.59 lakh			Rs. 79.19 lakh			Rs. 63.00 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	Transmission line, Building and sub-station = Rs. 984.03 lakh	Balance payment and price variation and taxes and duties	2008-09	Free hold land, Transmission line, Building, sub-station and PL CC = Rs. 1291.19 lakh	Balance payment	2008-09	Free hold land, Transmission line, Building, sub-station and PL CC = Rs. 1291.19 lakh	Balance payment
Total	Rs. 984.03 lakh			Rs. 1291.19 lakh			Rs. 138.19 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 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	
1	Asset-I	69935.38	3997.63	1448.59	75381.60	382.10	Final transmission tariff up to the date of commercial operation and add cap up to 31.3.2008 allowed vide petition No. 6/2009
2	Asset-II	4382.25	808.27	79.19	5269.71	177.40	
3	Asset-III	774.94	15.00	63.00	852.94	12.00	
4	Asset-IV	26732.20	1093.74	984.03	28809.97	89.88	
5	Asset-V	33914.20	518.10	1291.19	35723.49	79.45	
6	Asset-VI	12032.05	327.24	138.19	12497.48	17.13	

14. Total actual expenditure incurred by the petitioner for the transmission assets up to 31.3.2009 is Rs. 158535.19 lakh and cost of spares included therein is Rs. 757.96 lakh. The total cost with out initial spares is Rs. 157777.23 lakh and cost of spares included therein is Rs. 757.96, which is within the ceiling of 1.5% up to the cut of date of 31.3.21009 as per the 2004 regulations.

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 13.5.2009)	Additional Capital Expenditure during 2008-09	Capital cost as on 1.4.2009
Asset-I	73933.01	1448.59	75381.60
Asset-II	5190.52	79.19	5269.71
Asset-III	789.94	63.00	852.94
Asset-IV	27825.94	984.03	28809.97
Asset-V	34432.30	1291.19	35723.49
Asset-VI	12359.29	138.19	12497.48

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:

(Rs. in lakh)

	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	22180.67	434.58	22615.25	22397.96
Asset-II	1557.16	23.76	1580.91	1569.03
Asset-III	235.44	18.90	254.34	244.89
Asset-IV	8348.32	295.21	8643.53	8495.93
Asset-V	10330.63	387.36	10717.99	10524.31
Asset-VI	3707.22	41.46	3748.68	3727.95

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	3135.71
Asset-II	219.66
Asset-III	34.28
Asset-IV	1189.43
Asset-V	1473.40
Asset-VI	521.91

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 per the procedure 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 the transmission assets w.e.f. 29.9.2008. 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, interest on loan has been worked out as under:

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	51752.34	3633.36	554.50	19477.62	24101.67	8652.07
Cumulative Repayment up to Previous Year/date of commercial operation	1752.54	137.36	21.13	488.07	519.84	136.21
Net Loan-Opening	49999.80	3496.01	533.37	18989.55	23581.83	8515.86
Addition due to Additional Capitalisation	1014.01	55.43	44.10	688.82	903.83	96.73
Repayment during the year	1989.72	179.97	29.57	762.97	915.71	333.86
Net Loan-Closing	49024.09	3371.47	547.90	18915.40	23569.95	8278.73
Average Loan	49511.94	3433.74	540.64	18952.47	23575.89	8397.29
Weighted Average Rate of Interest on Loan	8.90%	8.95%	8.69%	9.19%	8.88%	8.86%
Interest	4408.28	307.39	46.99	1741.28	2092.73	743.96

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 appended to this order.

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 under:

(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	73933.01	5190.52	789.94	27825.94	34432.30	12359.29
Additional Capitalisation during 2008-09	1448.59	79.19	63.00	984.03	1291.19	138.19
Gross Block at the end of the year	75381.60	5269.71	852.94	28809.97	35723.49	12497.48
Rate of Depreciation	2.6651%	3.4409%	3.6000%	2.6943%	2.6105%	2.6863%
Depreciable Value	66618.36	4629.73	739.30	25486.16	31492.73	11108.17
Balance Useful life of the asset	-	-	-	-	-	-
Remaining Depreciable Value	64865.82	4492.37	718.17	24998.09	30972.89	10971.96
Depreciation	1989.72	179.97	29.57	762.97	915.71	333.86

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 been considered as nil.

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 13.5.2009 in Petition No. 6/2009 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 13.5.2009 in Petition No. 6/2009 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.

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	737.82	46.01	8.10	278.01	351.01	123.33
O & M expenses	53.04	11.17	2.74	22.29	10.84	10.84
Receivables	1746.84	144.29	24.68	680.22	792.22	297.11
Total	2,537.70	201.47	35.52	980.53	1,154.08	431.29
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	310.87	24.68	4.35	120.11	141.37	52.83

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	1989.72	179.97	29.57	762.97	915.71	333.86
Interest on Loan	4408.28	307.39	46.99	1741.28	2092.73	743.96
Return on Equity	3135.71	219.66	34.28	1189.43	1473.40	521.91
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	310.87	24.68	4.35	120.11	141.37	52.83
O & M Expenses	636.46	134.03	32.90	267.53	130.12	130.12
Total	10481.04	865.73	148.10	4081.32	4753.34	1782.69

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. 4/2010.

Sd/-
(M.DEENA DAYALAN)
MEMBER

sd/-
(V.S.VERMA)
MEMBER

sd/-
(S.JAYARAMAN)
MEMBER

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	8500.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	8500.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	8500.00
	Average Loan	8500.00
	Rate of Interest	8.15%
	Interest	692.75
	Repayment Schedule	12 Annual instalments from 9.3.2010
2	Bond-XX	
	Gross Loan opening	24981.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	24981.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	24981.00
	Average Loan	24981.00
	Rate of Interest	8.93%
	Interest	2230.80
	Repayment Schedule	12 Annual instalments from 7-9-2010
3	Bond-XXI	
	Gross Loan opening	5151.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	5151.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	5151.00
	Average Loan	5151.00
	Rate of Interest	8.73%
	Interest	449.68
	Repayment Schedule	12 Annual instalments from 11-10-2010

4	Bond-XXII	
	Gross Loan opening	5639.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	5639.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	5639.00
	Average Loan	5639.00
	Rate of Interest	8.68%
	Interest	489.47
	Repayment Schedule	12 Annual instalments from 7-12-2010
5	Bond-XXV	
	Gross Loan opening	791.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	791.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	791.00
	Average Loan	791.00
	Rate of Interest	10.10%
	Interest	79.89
	Repayment Schedule	12 Annual instalments from 12-6-2011
6	Bond- XXIV	
	Gross Loan opening	3591.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	3591.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	3591.00
	Average Loan	3591.00
	Rate of Interest	9.95%
	Interest	357.30
	Repayment Schedule	12 Annual instalments from 26-3-2011
7	Bond- XXVI From 07-03-2008 (Replacement of 8.00% ICICI loan: 20-08-2007 to 06-03-2008)	
	Gross Loan opening	301.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	301.00
	Additions during the year	0.00

	Repayment during the year	0.00
	Net Loan-Closing	301.00
	Average Loan	301.00
	Rate of Interest	9.30%
	Interest	27.99
	Repayment Schedule	12 Annual instalments from 7-3-2012
8	Bond- XXVI (For ACE 2007-08)	
	Gross Loan opening	305.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	305.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	305.00
	Average Loan	305.00
	Rate of Interest	9.30%
	Interest	28.37
	Repayment Schedule	12 Annual instalments from 7-3-2012
9	Bond- XXVII (For ACE 2007-08)	
	Gross Loan opening	3203.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	3203.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	3203.00
	Average Loan	3203.00
	Rate of Interest	9.47%
	Interest	303.32
	Repayment Schedule	12 Annual instalments from 31-3-2012
10	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	1295.59
	Repayment during the year	0.00
	Net Loan-Closing	1295.59
	Average Loan	647.80
	Rate of Interest	10.66%
	Interest	69.03
	Repayment Schedule	12 Annual instalments from 15.12.2012
	Total Loan	

	Gross Loan opening	52462.00
	Cumulative Repayment up to the date of commercial operation	0.00
	Net Loan-Opening	52462.00
	Additions during the year	1295.59
	Repayment during the year	0.00
	Net Loan-Closing	53757.59
	Average Loan	53109.80
	Rate of Interest	8.90%
	Interest	4728.61

Asset-II

(Rs. in lakh)

	Details of Loan	2008-09
1	Bond-XX	
	Gross Loan opening	3067.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	3067.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	3067.00
	Average Loan	3067.00
	Rate of Interest	8.93%
	Interest	273.88
	Repayment Schedule	12 Annual instalments from 7-9-2010
2	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	79.19
	Repayment during the year	0.00
	Net Loan-Closing	79.19
	Average Loan	39.60
	Rate of Interest	10.66%
	Interest	4.22
	Repayment Schedule	12 Annual instalments from 15.12.2012
	Total Loan	
	Gross Loan opening	3067.00
	Cumulative Repayment up to the date of commercial operation	0.00
	Net Loan-Opening	3067.00
	Additions during the year	79.19
	Repayment during the year	0.00
	Net Loan-Closing	3146.19
	Average Loan	3106.60
	Rate of Interest	8.95%
	Interest	278.10

Asset-III

(Rs. in lakh)

	Details of Loan	2008-09
1	Bond-XVIII	
	Gross Loan opening	230.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	230.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	230.00
	Average Loan	230.00
	Rate of Interest	8.15%
	Interest	18.75
	Repayment Schedule	12 Annual instalments from 9.3.2010
2	Bond-XX	
	Gross Loan opening	314.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	314.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	314.00
	Average Loan	314.00
	Rate of Interest	8.93%
	Interest	28.04
	Repayment Schedule	12 Annual instalments from 7-9-2010
3	Bond- XXVII (For ACE 2007-08)	
	Gross Loan opening	15.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	15.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	15.00
	Average Loan	15.00
	Rate of Interest	9.47%
	Interest	1.42
	Repayment Schedule	12 Annual instalments from 31-3-2012
4	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	39.00
	Repayment during the year	0.00
	Net Loan-Closing	39.00
	Average Loan	19.50
	Rate of Interest	10.66%
	Interest	2.08
	Repayment Schedule	12 Annual instalments from 15.12.2012
	Total Loan	
	Gross Loan opening	559.00
	Cumulative Repayment up to the date of commercial operation	0.00
	Net Loan-Opening	559.00
	Additions during the year	39.00
	Repayment during the year	0.00
	Net Loan-Closing	598.00
	Average Loan	578.50
	Rate of Interest	8.69%
	Interest	50.28

Asset-IV

	Details of Loan	2008-09
1	Bond-XX	
	Gross Loan opening	7637.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	7637.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	7637.00
	Average Loan	7637.00
	Rate of Interest	8.93%
	Interest	681.98
	Repayment Schedule	12 Annual instalments from 7-9-2010
2	Bridge loan from ICICI 20.08.2007 to 6.3.2008 @ 8% Replaced by Bond- XXVI @ 9.3% from 7.3.2008	
	Gross Loan opening	11075.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	11075.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	11075.00
	Average Loan	11075.00
	Rate of Interest	9.30%
	Interest	1029.98
	Repayment Schedule	12 Annual instalments from 31-3-2012
3	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	984.03
	Repayment during the year	0.00
	Net Loan-Closing	984.03
	Average Loan	492.02
	Rate of Interest	10.66%
	Interest	52.43
	Repayment Schedule	12 Annual instalments from 15.12.2012
	Total Loan	
	Gross Loan opening	18712.00
	Cumulative Repayment up to the date of commercial operation	0.00
	Net Loan-Opening	18712.00
	Additions during the year	984.03

Repayment during the year	0.00
Net Loan-Closing	19696.03
Average Loan	19204.02
Rate of Interest	9.19%
Interest	1764.39

Asset-V

(Rs. in lakh)

	Details of Loan	2008-09
1	Bond-XVIII	
	Gross Loan opening	8739.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	8739.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	8739.00
	Average Loan	8739.00
	Rate of Interest	8.15%
	Interest	712.23
	Repayment Schedule	12 Annual instalments from 9.3.2010
2	Bond-XX	
	Gross Loan opening	7606.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	7606.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	7606.00
	Average Loan	7606.00
	Rate of Interest	8.93%
	Interest	679.22
	Repayment Schedule	12 Annual instalments from 7-9-2010
3	Bond-XXII	
	Gross Loan opening	1397.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	1397.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1397.00
	Average Loan	1397.00
	Rate of Interest	8.68%
	Interest	121.26
	Repayment Schedule	12 Annual instalments from 7.12.2010
4	Bond-XXIV	
	Gross Loan opening	4317.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	4317.00

	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	4317.00
	Average Loan	4317.00
	Rate of Interest	9.95%
	Interest	429.54
	Repayment Schedule	12 Annual instalments from 26.3.2011
5	Bridge loan from ICICI 01.09.2007 to 06.03.2008 @ 8% Replaced by Bond- XXVI @ 9.3% from 7.3.2008	
	Gross Loan opening	1680.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	1680.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1680.00
	Average Loan	1680.00
	Rate of Interest	9.30%
	Interest	156.24
	Repayment Schedule	12 Annual instalments from 7.3.2012
6	Bond-XXVII (ACE FOR 2007-08)	
	Gross Loan opening	232.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	232.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	232.00
	Average Loan	232.00
	Rate of Interest	9.47%
	Interest	21.97
	Repayment Schedule	12 Annual instalments from 31.3.2012
7	STBL FROM BOB 29.09.2008 TO 14.12.2008 @ 12.5% Replaced by BOND XXVIII @ 9.33% FROM 15.12.2008 (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	825.19
	Repayment during the year	0.00
	Net Loan-Closing	825.19
	Average Loan	412.60
	Rate of Interest	10.66%
	Interest	43.97
	Repayment Schedule	12 Annual instalments from 15.12.2012
	Total Loan	

Gross Loan opening	23971.00
Cumulative Repayment up to the date of commercial operation	0.00
Net Loan-Opening	23971.00
Additions during the year	825.19
Repayment during the year	0.00
Net Loan-Closing	24796.19
Average Loan	24383.60
Rate of Interest	8.88%
Interest	2164.42

Asset-VI

(Rs. in lakh)

	Details of Loan	2008-09
1	Bond-XVIII	
	Gross Loan opening	2917.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	2917.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	2917.00
	Average Loan	2917.00
	Rate of Interest	8.15%
	Interest	237.74
	Repayment Schedule	12 Annual instalments from 9.3.2010
2	Bond-XX	
	Gross Loan opening	3284.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	3284.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	3284.00
	Average Loan	3284.00
	Rate of Interest	8.93%
	Interest	293.26
	Repayment Schedule	12 Annual instalments from 7-9-2010
3	Bond-XXII	
	Gross Loan opening	466.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	466.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	466.00
	Average Loan	466.00
	Rate of Interest	8.68%
	Interest	40.45
	Repayment Schedule	12 Annual instalments from 7-12-2010
4	Bond- XXIV	
	Gross Loan opening	1441.00

	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	1441.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	1441.00
	Average Loan	1441.00
	Rate of Interest	9.95%
	Interest	143.38
	Repayment Schedule	12 Annual instalments from 26-3-2011
5	Bridge Loan from ICICI 01.11.2007 to 06.03.2008 @8% Replaced by Bond XXVI @ 9.3% From 0703.2008	
	Gross Loan opening	175.00
	Cumulative Repayment up to the date of commercial operation/previous year	0.00
	Net Loan-Opening	175.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	175.00
	Average Loan	175.00
	Rate of Interest	9.30%
	Interest	16.28
	Repayment Schedule	12 Annual instalments from 7-3-2012
6	Bond- XXVII drawn on 31-3-08 & also for ACE during 2007-08	
	Gross Loan opening	285.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00
	Net Loan-Opening	285.00
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	285.00
	Average Loan	285.00
	Rate of Interest	9.47%
	Interest	26.99
	Repayment Schedule	12 Annual instalments from 31-3-2012
7	STBL FROM BOB 29.09.2008 TO 14.12.2008 @ 12.5% Replaced by BOND XXVIII @ 9.33% FROM 15.12.2008 (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	110.19
	Repayment during the year	0.00
	Net Loan-Closing	110.19
	Average Loan	55.10
	Rate of Interest	10.66%
	Interest	5.87

Repayment Schedule	12 Annual instalments from 15.12.2012
Total Loan	
Gross Loan opening	8568.00
Cumulative Repayment up to the date of commercial operation	0.00
Net Loan-Opening	8568.00
Additions during the year	110.19
Repayment during the year	0.00
Net Loan-Closing	8678.19
Average Loan	8623.10
Rate of Interest	8.86%
Interest	763.96