

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 23/2010

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: 13.4.2010

DATE OF ORDER 17.6.2010

In the matter of

Revision of transmission tariff due to additional capital expenditure incurred during 2007-08 and 2008-09 for 500MW HVDC back to back station at Gazuwaka (Inter regional asset of Eastern Region and Southern Region) and 400 kV D/C Vijayawada–Gazuwaka transmission line along with bay extensions and equipments at Vijayawada–Gazuwaka (Southern Region) under augmentation of capacity of Gazuwaka HVDC back to back project (500 MW).

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.
15. Bihar State Electricity Board, Patna
16. West Bengal State Electricity Board, Kolkata

17. Grid Corporation of Orissa Ltd., Bhubaneswar
18. Damodar Valley Corporation, Kolkata
19. Power Department, Govt. of Sikkim, Gangtok
20. Jharkhand State Electricity Board, Ranchi

.Respondents

The following were present:

1. Shri U.K.Tyagi, PGCIL
2. Shri Rakesh Prasad, PGCIL
3. Shri M.M.Mondal, PGCIL
4. Shri R.B.Sharma, BSEB

ORDER

This petition has been filed for revision of transmission tariff due to additional capital expenditure incurred in respect of (a) 500MW HVDC back to back station at Gazuwaka (Inter regional asset of Eastern Region and Southern Region) (Asset-I); and (b) 400 kV D/C Vijayawada–Gazuwaka transmission line along with bay extensions and equipments at Vijayawada–Gazuwaka (Southern Region) (Asset-II) (collectively referred to as "the transmission assets") under augmentation of capacity of Gazuwaka HVDC back to back project (500 MW) (hereinafter referred to as "the project") during the period from 1.4.2007 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"). 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

2. Administrative approval and expenditure sanction for the project was accorded by the Ministry of Power vide letter dated 22.1.2002 at an estimated cost of Rs. 76925 lakh, including IDC of Rs. 9612 lakh, based on 4th

quarter 2002 price level. The transmission assets were declared under commercial operation on 1.3.2005.

3. The transmission charges for the assets were approved by the Commission vide its order dated 28.8.2008 in Petition No. 40/2008. The summary of the transmission charges approved by the said order dated 28.8.2008 is extracted hereunder:

(Rs. in lakh)

	Asset-I					Asset-II				
	2004-05	2005-06	2006-07	2007-08	2008-09	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	97.47	1255.79	1309.68	1312.26	1312.26	49.34	623.16	650.24	655.10	655.10
Interest on Loan	74.68	911.51	888.23	826.37	750.11	110.88	1364.81	1348.75	1265.20	1160.40
Return on Equity	105.00	1360.55	1423.42	1426.43	1426.43	69.03	877.55	919.79	926.61	926.61
Advance against Depreciation	0.00	492.48	609.49	782.13	895.06	0.00	0.00	315.70	545.42	697.18
Interest on Working Capital	8.57	115.53	121.68	126.33	129.76	6.44	79.68	87.76	92.24	94.91
O & M Expenses	37.49	468.00	486.72	506.08	526.40	21.28	265.58	276.55	287.06	299.06
Total	323.22	4603.87	4839.22	4979.81	5040.02	256.97	3210.78	3598.79	3771.63	3833.27

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

(Rs. in lakh)

	Capital cost as on 1.4.2007	Additional Capital Expenditure during 2007-08	Capital cost as on 1.4.2008	Additional Capital Expenditure during 2008-09	Capital cost as on 1.4.2009
Asset-I	36847.01	4.60	36851.61	0.00	36851.61
Asset-II	24570.52	28.04	24598.56	39.50	24638.06

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

(Rs. in lakh)

	Asset-I		Asset-II	
	2007-08	2008-09	2007-08	2008-09
Depreciation	1312.34	1312.43	655.46	656.33
Interest on Loan	826.56	750.49	1266.19	1163.79
Return on Equity	1426.53	1426.63	927.20	928.62
Advance against Depreciation	782.05	894.75	545.06	695.23
Interest on Working Capital	126.34	129.77	92.26	94.99
O & M Expenses	506.08	526.40	287.06	299.06
Total	4979.90	5040.47	3773.23	3838.02

6. 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	
	2007-08	2008-09	2007-08	2008-09
Maintenance Spares	360.43	382.05	247.34	262.18
O & M expenses	42.17	43.87	23.92	24.92
Receivables	829.98	840.08	628.87	639.67
Total	1232.58	1266.00	900.13	926.77
Rate of Interest	10.25%	10.25%	10.25%	10.25%
Interest	126.34	129.77	92.26	94.99

7. BSEB in its reply dated 7.4.2010 has prayed that the additional capital expenditure claimed in the petition be admitted strictly in accordance with Regulation 53 of the 2004 regulations. Shri R B. Sharma Advocate appearing on behalf of Bihar State Electricity Board pointed out that in the order dated 28.8.2008 in Petition No.40/2008 (Encl-1 to the present petition), it was held by the Commission that while seeking revision of tariff consequent to additional capital expenditure, the petitioner should furnish the details of the pending works relating to balance estimated expenditure as required by the last Proviso to regulation 53(1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2004. He further pointed out that the petitioner should have furnished the details of works to be undertaken under balance estimated expenditure of Rs. 548.38 lakh for HVDC back-to-back station at Gazuwaka mentioned in the present petition. The petitioner vide its affidavit dated 14.5.2010 has furnished the details of balance expenditure. Tamil Nadu Electricity Board (TNEB) in its reply has prayed to ascertain the cost over-run, if any, before finalizing the tariff. In this regard, it

is seen that the petitioner has claimed additional capital expenditure incurred during 2007-08 and 2008-09 as per Regulation 53 (1) (i) of the 2004 regulation on account of final/retention payments. BSEB and TNEB have also objected to considering wage revision under O & M expenses and reimbursement of the petition filing fee. The concern of BSEB and TNEB have been taken care of in the order.

CAPITAL COST

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

(Rs. in lakh)

Asset-I			Asset-II		
Year	Amount (Rs. in lakh)	Nature and details of expenditure	Year	Amount (Rs. in lakh)	Nature and details of expenditure
2007-08	Sub-station- Rs. 4.60 lakh	Retention and final payments	2008-08	0.00	
2008-09	Transmission line = Rs. 28.04 lakh	Retention and final payments	2008-09	Transmission line = Rs. 39.15 lakh	Retention and final payments

9. The petitioner has submitted audited capital cost up to 31.3.2009 duly certified by Chartered Accountant. The additional capital expenditure claimed is within the original scope of work and on account of retention/balance payments. The additional expenditure sought to be capitalised is allowed under Regulation 53 of the 2004 regulations.

TOTAL CAPITAL COST

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

(Rs. in lakh)

	Capital cost as on 1.4.2007	Additional Capital Expenditure during 2007-08	Capital cost as on 1.4.2008	Additional Capital Expenditure during 2008-09	Capital cost as on 1.4.2009
Asset-I	36847.01	4.60	36851.61	0.00	36851.61
Asset-II	24570.52	28.04	24598.56	39.50	24638.06

DEBT- EQUITY RATIO

11. 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 1.4.2007	Notional additional equity during 2007-08	Average equity for 2007-08	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	10188.81	1.38	10189.50	10190.19	0.00	10190.19	10190.19
Asset-II	6618.67	8.41	6622.88	6627.08	11.85	6638.93	6633.01

RETURN ON EQUITY

12. 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.

13. Equity as given in the table under para 11 above has been considered. However, tariff for 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	2007-08	2008-09
Asset-I	1426.53	1426.63
Asset-II	927.20	928.62

INTEREST ON LOAN

14. 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."

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

(a) 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.

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

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

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

(d) 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 including Advance

Against Depreciation during the year, it is considered as moratorium and depreciation including Advance Against Depreciation during the year is deemed as normative repayment of loan during the year.

(e) Weighted average rate of interest on actual loan worked out as per (a) above has been applied on the notional average loan during the year to arrive at the interest on loan.

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

(Rs. in lakh)

Details	Asset- I		Asset-II	
	2007-08	2008-09	2007-08	2008-09
Gross Normative Loan	26658.20	26661.42	17951.85	17971.48
Cumulative Repayment up to Previous Year/date of commercial operation	3764.91	5859.31	1638.44	2838.96
Net Loan-Opening	22893.29	20802.11	16313.41	15132.52
Addition due to Additional Capitalisation	3.22	0.00	19.63	27.65
Repayment during the year	2094.39	2207.18	1200.52	1351.56
Net Loan-Closing	20802.11	18594.94	15132.52	13808.61
Average Loan	21847.70	19698.53	15722.96	14470.56
Weighted Average Rate of Interest on Loan	3.7833%	3.8099%	8.0531%	8.0425%
Interest	826.56	750.49	1266.19	1163.79

17. The detailed calculations in support of the weighted average rate of interest for two assets are contained in Annexure-I and Annexure-II, respectively attached.

DEPRECIATION

18. 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."

19. Depreciation allowed has been worked out as below:

Details	(Rs. in lakh)			
	Asset- I		Asset- II	
	2007-08	2008-09	2007-08	2008-09
Gross block as on the date of commercial operation	36847.01	36851.61	24570.52	24598.56
Additional Capitalisation during 2008-09	4.60	0.00	28.04	39.50
Gross Block at the end of the year	36851.61	36851.61	24598.56	24638.06
Rate of Depreciation	3.56%	3.56%	2.67%	2.67%
Depreciable Value	33164.38	33166.45	22126.09	22156.48
Balance Useful life of the asset	-	-	-	-
Remaining Depreciable Value	29399.46	27307.14	20487.64	19317.52
Depreciation	1312.34	1312.43	655.46	656.33

ADVANCE AGAINST DEPRECIATION

20. 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

21. 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.

22. Accordingly, in our calculation the Advance Against Depreciation has been worked as detailed below:

(a) 1/10th of gross loan is worked out from the Gross Notional Loan as per para 16 above.

(b) Repayment of notional loan during the year is considered as per para 16 above.

(c) Depreciation is worked out as per para 19 above.

(d) In the calculation of Advance Against Depreciation, cumulative depreciation/Advance Against Depreciation up to the preceding year along with the depreciation of the current year have been considered for working out the Advance Against Depreciation

23. The Advance Against Depreciation has been worked as under:

(Rs. in lakh)

	Asset-I		Asset-II	
	2007-08	2008-09	2007-08	2008-09
Advance against Depreciation				
1/10th of Gross Loan(s)	2665.82	2666.14	1795.19	1797.15
Repayment of the Loan	2094.39	2207.18	1200.52	1351.56
Minimum of the above	2094.39	2207.18	1200.52	1351.56
Depreciation during the year	1312.34	1312.43	655.46	656.33
(A) Difference	782.05	894.75	545.06	695.23
Cumulative Repayment of the Loan	5859.31	8066.49	2838.96	4190.52
Cumulative Depreciation/Advance against Depreciation	5077.26	7171.73	2293.90	3495.29
(B) Difference	782.05	894.75	545.06	695.23
Advance against Depreciation Minimum of (A) and (B)	782.05	894.75	545.06	695.23

OPERATION & MAINTENANCE EXPENSES

24. 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

25. O&M expenses as taken for the tariff calculations as per order dated 28.8.2008 in Petition No. 40/2008 has been considered, since line length and number of bays remain unchanged.

INTEREST ON WORKING CAPITAL

26. 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. 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 the present. 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 28.8.2008 in Petition No. 40/2008 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 whether or not the transmission licensee has taken working capital loan from any outside agency. The petitioner has claimed interest on working capital @ 10.25% based on SBI PLR as on 1.4.2004, which is in accordance with the 2004 regulations and has been allowed.

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

(Rs. in lakh)

	Asset- I		Asset-II	
	2007-08	2008-09	2007-08	2008-09
Maintenance Spares	360.43	382.05	247.34	262.18
O & M expenses	42.17	43.87	23.92	24.92
Receivables	829.98	840.08	628.87	639.67
Total	1,232.58	1,265.99	900.13	926.77
Rate of Interest	10.25%	10.25%	10.25%	10.25%
Interest	126.34	129.76	92.26	94.99

TRANSMISSION CHARGES

28. The transmission charges being allowed for the three transmission assets are summarised below:

(Rs. in lakh)

	Asset-I		Asset-II	
	2007-08	2008-09	2007-08	2008-09
Depreciation	1312.34	1312.43	655.46	656.33
Interest on Loan	826.56	750.49	1266.19	1163.79
Return on Equity	1426.53	1426.63	927.20	928.62
Advance against Depreciation	782.05	894.75	545.06	695.23
Interest on Working Capital	126.34	129.76	92.26	94.99
O & M Expenses	506.08	526.40	287.06	299.06
Total	4979.91	5040.46	3773.24	3838.03

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

30. 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 the petitioner shall not be allowed reimbursement of the petition filing fee. The decision on reimbursement of the licence fee shall be communicated separately.

31. 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. The revised transmission charges for Asset-I will be borne by the beneficiaries of Southern Region with effect from 1.4.2008 and by the beneficiaries of Eastern Region and Southern Region in] 50:50 ratio for the period up to 31.3.2008. The revised transmission charges for Asset-II shall be borne only by the beneficiaries of Southern Region in accordance with vide order dated 28.3.2008 in Petition No. 85/2007.

32. This order disposes of Petition No. 23/2010.

Sd/-	sd/-	sd/-	sd/-
(M.DEENA DAYALAN)	(V.S.VERMA)	(S.JAYARAMAN)	(Dr. PRAMOD DEO)
MEMBER	MEMBER	MEMBER	CHAIRPERSON

Asset-I

	Details of Loan	2007-08	2008-09
1	Bond-XII		
	Gross Loan opening	427.00	427.00
	Cumulative Repayment up to the date of commercial operation/previous year	71.17	106.75
	Net Loan-Opening	355.83	320.25
	Add: drawal during the year	0.00	0.00
	Repayment during the year	35.58	35.58
	Net Loan-Closing	320.25	284.67
	Average Loan	338.04	302.46
	Rate of Interest	9.70%	9.70%
	Interest	32.79	29.34
	Repayment Schedule	12 Annual Instalments from 28.3.2006	
2	Bond XIII Option I		
	Gross Loan opening	2051.00	2051.00
	Cumulative Repayment up to the date of commercial operation /previous year	170.92	341.83
	Net Loan-Opening	1880.08	1709.17
	Add: drawal during the year	0.00	0.00
	Repayment during the year	170.92	170.92
	Net Loan-Closing	1709.17	1538.25
	Average Loan	1794.63	1623.71
	Rate of Interest	8.63%	8.63%
	Interest	154.88	140.13
	Repayment Schedule	12 Annual Instalments from 31.7.2006	
3	Bond XV		
	Gross Loan opening	2151.00	2151.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	179.25
	Net Loan-Opening	2151.00	1971.75
	Add: drawal during the year	0.00	0.00
	Repayment during the year	179.25	179.25
	Net Loan-Closing	1971.75	1792.50
	Average Loan	2061.38	1882.13
	Rate of Interest	6.68%	6.68%
	Interest	137.70	125.73
	Repayment Schedule	12 Annual Instalments from 23.2.2008	
4	Bond XVI		
	Gross Loan opening	1132.00	1132.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	1132.00	1132.00
	Add: drawal during the year	0.00	0.00
	Repayment during the year	0.00	113.20
	Net Loan-Closing	1132.00	1018.80

	Average Loan	1132.00	1075.40
	Rate of Interest as on DOCO	7.10%	7.10%
	Interest	80.37	76.35
	Repayment Schedule	10 Annual Instalments from 18.2.2009	
5	OBC		
	Gross Loan opening	417.00	417.00
	Cumulative Repayment up to the date of commercial operation /previous year	104.25	139.00
	Net Loan-Opening	312.75	278.00
	Add: drawal during the year	0.00	0.00
	Repayment during the year	34.75	34.75
	Net Loan-Closing	278.00	243.25
	Average Loan	295.38	260.63
	Rate of Interest as on DOCO	8.60%	8.60%
	Interest	25.40	22.41
	Repayment Schedule	12 Annual Instalments from 22.3.2005	
6	SEB (Foreign Currency Loan)-Tranche 13 to 29		
	Gross Loan opening	17030.03	17030.03
	Cumulative Repayment up to the date of commercial operation /previous year	2838.34	4257.51
	Net Loan-Opening	14191.69	12772.52
	Add: drawal during the year	0.00	0.00
	Repayment during the year	1419.17	1419.17
	Net Loan-Closing	12772.52	11353.35
	Average Loan	13482.11	12062.94
	Rate of Interest	2.38%	2.38%
	Interest	320.62	286.87
	Repayment Schedule	24 Equal Half yearly instalments from 1.9.2005	
7	SEB (Foreign Currency Loan)-Tranche 30		
	Gross Loan opening	179.55	179.55
	Cumulative Repayment up to the date of commercial operation /previous year	29.93	44.89
	Net Loan-Opening	149.63	134.66
	Add: drawal during the year	0.00	0.00
	Repayment during the year	14.96	14.96
	Net Loan-Closing	134.66	119.70
	Average Loan	142.15	127.18
	Rate of Interest	2.20%	2.20%
	Interest	3.13	2.80
	Repayment Schedule	24 Equal Half yearly instalments from 1.9.2005	
8	SEB (Foreign Currency Loan)-Tranche 31		
	Gross Loan opening	155.24	155.24
	Cumulative Repayment up to the date of commercial operation /previous year	25.87	38.81
	Net Loan-Opening	129.37	116.43
	Add: drawal during the year	0.00	0.00
	Repayment during the year	12.94	12.94
	Net Loan-Closing	116.43	103.49
	Average Loan	122.90	109.96

	Rate of Interest	2.23%	2.23%
	Interest	2.74	2.45
	Repayment Schedule	24 Equal Half yearly instalments from 1.9.2005	
9	SEB (Foreign Currency Loan)-Tranche 32		
	Gross Loan opening	350.20	350.20
	Cumulative Repayment up to the date of commercial operation /previous year	58.37	87.55
	Net Loan-Opening	291.83	262.65
	Add: drawal during the year	0.00	0.00
	Repayment during the year	29.18	29.18
	Net Loan-Closing	262.65	233.47
	Average Loan	277.24	248.06
	Rate of Interest	2.25%	2.25%
	Interest	6.23	5.58
	Repayment Schedule	24 Equal Half yearly instalments from 1.9.2005	
10	SEB (Foreign Currency Loan)-Tranche 33		
	Gross Loan opening	620.89	620.89
	Cumulative Repayment up to the date of commercial operation /previous year	103.48	155.22
	Net Loan-Opening	517.41	465.67
	Add: drawal during the year	0.00	0.00
	Repayment during the year	51.74	51.74
	Net Loan-Closing	465.67	413.92
	Average Loan	491.54	439.80
	Rate of Interest	2.25%	2.25%
	Interest	11.06	9.90
	Repayment Schedule	24 Equal Half yearly instalments from 1.9.2005	
11	Bond XVII (Loan for ACE during 2005-06 and 2006-07) drawn on 22.09.05		
	Gross Loan opening	327.38	327.38
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	327.38	327.38
	Add: drawal during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	327.38	327.38
	Average Loan	327.38	327.38
	Rate of Interest	7.39%	7.39%
	Interest	24.19	24.19
	Repayment Schedule	10 equal annual installments from 22-9-2009	
12	SEB (Foreign Currency Loan)-Date of Drawl 26.04.05 to 23.09.05		
	Gross Loan opening	1811.45	1811.45
	Cumulative Repayment up to the date of commercial operation /previous year	301.91	452.86
	Net Loan-Opening	1509.54	1358.59
	Add: drawal during the year	0.00	0.00
	Repayment during the year	150.95	150.95
	Net Loan-Closing	1358.59	1207.63

	Average Loan	1434.06	1283.11
	Rate of Interest (wt. average as per petition)	2.04%	2.04%
	Interest	29.25	26.18
	Repayment Schedule	24 equal Half Yearly installments from 15-9-2005	
13	Bond XXVII (ADDCAP FOR 2007-08 DRAWL ON 31.03.2008)		
	Gross Loan opening	0.00	4.60
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	0.00	4.60
	Add: drawal during the year	4.60	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	4.60	4.60
	Average Loan	2.30	4.60
	Rate of Interest as on DOCO	9.47%	9.47%
	Interest	0.22	0.44
	Repayment Schedule	12 Annual Instalments from 31.3.2012	
	Total Loan		
	Gross Loan opening	26652.74	26657.34
	Cumulative Repayment up to the date of commercial operation /previous year	3704.23	5803.67
	Net Loan-Opening	22948.52	20853.67
	Add: drawal during the year	4.60	0.00
	Repayment during the year	2099.45	2212.65
	Net Loan-Closing	20853.67	18641.02
	Average Loan	21901.09	19747.34
	Rate of Interest	3.78%	3.81%
	Interest	828.58	752.35

Asset-II

	Details of Loan	2007-08	2008-09
1	Bond-XII		
	Gross Loan opening	579.00	579.00
	Cumulative Repayment up to the date of commercial operation /previous year	96.50	144.75
	Net Loan-Opening	482.50	434.25
	Add: drawal during the year	0.00	0.00
	Repayment during the year	48.25	48.25
	Net Loan-Closing	434.25	386.00
	Average Loan	458.38	410.13
	Rate of Interest	9.70%	9.70%
	Interest	44.46	39.78
	Repayment Schedule	12 Annual Instalments from 28.3.2006	
2	Bond XIII Option I		
	Gross Loan opening	10496.00	10496.00
	Cumulative Repayment up to the date of commercial operation /previous year	874.67	1749.34
	Net Loan-Opening	9621.33	8746.66
	Add: drawal during the year	0.00	0.00
	Repayment during the year	874.67	874.67
	Net Loan-Closing	8746.66	7871.99
	Average Loan	9184.00	8309.33
	Rate of Interest	8.63%	8.63%
	Interest	792.58	717.09
	Repayment Schedule	12 Annual Instalments from 31.7.2006	
3	Bond XV		
	Gross Loan opening	2912.00	2912.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	242.67
	Net Loan-Opening	2912.00	2669.33
	Add: drawal during the year	0.00	0.00
	Repayment during the year	242.67	242.67
	Net Loan-Closing	2669.33	2426.66
	Average Loan	2790.67	2548.00
	Rate of Interest	6.68%	6.68%
	Interest	186.42	170.21
	Repayment Schedule	12 Annual Instalments from 23.2.2008	
4	Bond XVI		
	Gross Loan opening	1533.00	1533.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	1533.00	1533.00
	Add: drawal during the year	0.00	0.00
	Repayment during the year	0.00	153.30
	Net Loan-Closing	1533.00	1379.70
	Average Loan	1533.00	1456.35
	Rate of Interest as on up to the date of	7.10%	7.10%

	commercial operation		
	Interest	108.84	103.40
	Repayment Schedule	10 Annual Instalments from 18.2.2009	
5	OBC		
	Gross Loan opening	565.00	565.00
	Cumulative Repayment up to the date of commercial operation /previous year	141.24	188.32
	Net Loan-Opening	423.76	376.68
	Add: drawal during the year	0.00	0.00
	Repayment during the year	47.08	47.08
	Net Loan-Closing	376.68	329.60
	Average Loan	400.22	353.14
	Rate of Interest as on up to the date of commercial operation	8.60%	8.60%
	Interest	34.42	30.37
	Repayment Schedule	12 Annual Instalments from 22.3.2005	
6	Bond XVII (Loan for ACE during 2005-06 and 2006-07)		
	Gross Loan opening	1505.89	1505.89
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	1505.89	1505.89
	Add: drawal during the year	0.00	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	1505.89	1505.89
	Average Loan	1505.89	1505.89
	Rate of Interest	7.39%	7.39%
	Interest	111.29	111.29
	Repayment Schedule	10 equal annual installments from 22-9-2009	
7	Bond XXVII (ADDCAP FOR 2007-08 DRAWL ON 31.03.2008)		
	Gross Loan opening	0.00	28.04
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00
	Net Loan-Opening	0.00	28.04
	Add: drawal during the year	28.04	0.00
	Repayment during the year	0.00	0.00
	Net Loan-Closing	28.04	28.04
	Average Loan	14.02	28.04
	Rate of Interest as on DOCO	9.47%	9.47%
	Interest	1.33	2.66
	Repayment Schedule	12 Annual Instalments from 31.3.2012	
8	Bond XXVII (ADDCAP FOR 2008-09 DRAWL ON 31.03.2009)		
	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
	Add: drawal during the year	0.00	39.50
	Repayment during the year	0.00	0.00

Net Loan-Closing	0.00	39.50
Average Loan	0.00	19.75
Rate of Interest as on up to the date of commercial operation	9.47%	9.47%
Interest	0.00	1.87
Repayment Schedule	12 Annual Instalments from 31.3.2012	
Total Loan		
Gross Loan opening	17590.89	17618.93
Cumulative Repayment up to the date of commercial operation /previous year	1112.41	2325.08
Net Loan-Opening	16478.48	15293.85
Add: drawal during the year	28.04	39.50
Repayment during the year	1212.67	1365.97
Net Loan-Closing	15293.85	13967.38
Average Loan	15886.17	14630.62
Rate of Interest	8.05%	8.04%
Interest	1279.33	1176.66