CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Coram:

- 1. Dr. Parmod Deo, Chairperson
- 2. Shri R.Krishnamoorthy, Member
- 3. Shri S.Jayaraman, Member
- 4. Shri V.S.Verma, Member

Petition No.18/2009

In the matter of

Determination of revised transmission tariff due to additional capitalization incurred during 2004-05 and 2005-07 for 400 kV S/C Meramundali-Jeypore transmission line along with extension of Meramundali and Jeypore sub-stations in Eastern Region for the period 1.6.2004 to 31.3.2009.

And in the matter of

1.

Power Grid Corporation of India Ltd., Gurgaon Petitioner

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

The following were present:

- 1. Shri U.K.Tyagi, PGCIL
- 2. Shri V.V.Sharma, PGCIL
- 3. Shri A.K.Nagpal, PGCIL
- 4. Shri B.C.Pant, PGCIL
- 5. Shri Harmeet Singh, PGCIL
- 6. Shri Mohd. Mohsin, PGCIL
- 7. Shri R.B.Sharma, Advocate, BSEB

ORDER (DATE OF HEARING: 16.4.2009)

This petition has been filed for revision of transmission tariff for

additional capital expenditure incurred during 2004-05 and 2005-07 for 400 kV

S/C Meramundali-Jeypore transmission line along with extension of Meramundali

and Jeypore sub-stations (hereinafter referred to as "the transmission line") in

Eastern Region for the period 1.6.2004 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 and other expenditure .in connection with the filing of the petition.

2. The investment approval for the transmission line was accorded by Board of Directors of the petitioner company under its letter dated 22.11.2000 at an estimated cost of Rs. 16651 lakh, including IDC of Rs. 1826 lakh. The transmission line was declared under commercial operation 1.6.2004.

3. The transmission charges for the transmission line were approved by the Commission in its order dated 6.2.2007 in Petition No. 48/2006 for the period 1.6.2004 to 31.3.2009 based on capital cost of Rs. 14832.22 lakh. The summary of the transmission charges approved by the said order dated 6.2.2007 is extracted hereunder:

				(Rs.in lakh)				
	2004-05	2005-06	2007-08	2008-09				
	(Pro rata)							
Depreciation	332.63	399.16	399.16	399.16	399.16			
Interest on Loan	862.01	997.50	936.48	853.49	766.95			
Return on Equity	357.14	428.57	428.57	428.57	428.57			
Advance against Depreciation	0.00	36.15	463.45	569.45	569.45			
Interest on Working Capital	43.94	53.69	61.24	62.87	62.69			
O & M Expenses	156.56	195.37	203.44	211.17	220.00			
Total	1752.29	2110.43	2492.33	2524.71	2446.82			

4. The relevant details of the approved cost, completion cost etc. of the transmission assets claimed by the petitioner are as under:

							(Rs.in lakh)
Capital	Additional	Capital	Additional	Capital	Balance	IEDC/IDC from	Estimated
expenditure	Capitalization	expenditure	Capitalization	expenditure as	estimated	1.1.204 to	completion
up to	during 2004-	as on	during 2005-06	on 1.4.2007	expenditure	31.5.2004	cost
1.1.2004	05	1.4.2005	-				
14363.57	354.00	14717.57	920.66	15638.23	170.40	458.65	16277.27

5. Based on the above additional capital expenditure, the petitioner has claimed the revised transmission charges for the period 2004-05 to 2005-06 as under:

- 2 -

				(Rs.in	ı lakh)
	2004-05 (Pro rata)	2005-06	2006-07	2007-08	2008-09
Depreciation	336.58	420.57	432.51	432.51	432.51
.Interest on Loan	871.08	1044.75	1008.70	924.51	836.73
Return on Equity	363.34	462.77	482.11	482.11	482.11
Advance against Depreciation	0.00	24.02	442.56	550.09	550.09
Interest on Working Capital	44.28	55.26	63.64	65.28	65.08
O & M Expenses	156.56	195.37	203.44	211.17	220.00
Total	1771.84	2202.74	2632.96	2665.67	2586.52

6. The details submitted by the petitioner in support of its claim for interest on

working capital are given hereunder:

				(Rs	. in lakh)
	2004-05 (Pro rata)	2005-06	2006-07	2007-08	2008-09
Maintenance Spares	148.32	155.74	165.08	174.99	185.49
O & M expenses	15.66	16.28	16.95	17.60	18.33
Receivables	354.37	367.12	438.83	444.28	431.09
Total	518.35	539.14	620.86	636.87	634.91
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	44.28	55.26	63.64	65.28	65.08

7. The reply to the petition has been filed by Bihar State Electricity Board (BSEB).

CAPITAL COST

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

SI. No.	Year	Amount	Nature and details of expenditure
		(Rs. in lakh)	
1.	2004-05	354.00	Retention/final payments
2.	2005-06	920.66	Retention/final payments

9. It is found that the additional capital expenditure claimed is in respect of retention/ final payments. These are part of the deferred liabilities relating to works/services which have materialised, and are within the original scope of work. Therefore, the additional expenditure sought to be capitalised is allowed under clauses (1) and (2) of Regulation 53 of the 2004 regulations. The

expenditure on IEDC/IDC beyond the date of the capitalization and up to the date of commercial operation, that is, 1.4.2004 to 31.5.2004 has been worked out, based on audited accounts. Therefore, the expenditure has been debited to profit and loss account of the respective years.

TOTAL CAPITAL COST

10. Based on the above, capital cost for the purpose of tariff for each of the transmission asset, works out as under, which is within the approved cost estimate:

				(Rs.in lakh)
Admitted capital	Additional	Capital	Additional	Capital
cost as on	Capitalization	expenditure as	Capitalization	expenditure as on
1.6.2004	during 2004-05	on 1.4.2005	during 2005-06	1.4.2006
	-		-	
14832.22	354.00	15186.22	920.66	16106.88

DEBT- EQUITY RATIO

11. Vide order dated 6.2.2007 in Petition No. 48/2006 debt-equity ratio of 79.36:20.64 was considered for the purpose of tariff. The petitioner has been considered same debt-equity ratio. The petitioner has also considered the amount of additional capitalization 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 1.6.2004 (As	Notional additional	Average equity	Equity as on	Notional additional	Average equity for 2005-06	Equity as on 1.4.2006
per order dated 6.2.2007)	equity during 2004-05	during 2004-05	1.4.2005	equity during 2005-06	2005-06	
3061.22	106.20	3114.32	3167.42	276.20	3305.52	3443.62

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. For the reasons already recorded, equity as given the table under para 11 above has been considered. However, tariff for the years 2004-05 and 2005-06 has been allowed pro rata on average equity. Accordingly, revised return on equity allowed each year is given as under:

(Rs. in lakh)

	Return on equity								
2004-05 (Pro rata)	2005-06	2006-07	2007-08	2008-09					
363.34	462.77	482.11	482.11	482.11					

INTEREST ON LOAN

14. Clause (1) 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 as per earlier order dated 6.2.2007 in Petition No. 48/2006 have been considered.

(b) Notional loan arising out of additional capital expenditure up to 31.3.2006 has been added in loan amount as on 1.6.2004 to arrive at total notional loan. This adjusted gross loan is considered as normative loan for tariff calculations.

(c) Tariff has been worked out considering normative loan and normative repayments. Normative repayments are worked out by the following formula :

Actual repayment of actual loan during the year ------X Opening balance of normative Opening balance of actual loan during the year loan during the year

(d) Moratorium in repayment of loan is 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, then 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

(i) above is applied on the notional average loan during the year to arrive at the interest on loan.

16. Based on above, revised year-wise interest on loan has been worked out as under:

				(Rs. i	n lakh)
Details	2004-05	2005-06	2006-07	2007-08	2008-09
Gross Normative Loan	(Pro rata) 11771.00	12018.80	12663.26	12663.26	12663.26
Cumulative Repayment up to Previous	8.20	344.78	789.37	1664.44	2647.03
Year/date of commercial operation					
Net Loan-Opening	11762.80	11674.02	11873.89	10998.83	10016.23
Addition due to Additional Capitalisation	247.80	644.46	-	-	-
Repayment during the year	336.58	444.59	875.07	982.60	982.60
Net Loan-Closing	11674.02	11873.89	10998.83	10016.23	9033.63
Average Loan	11718.41	11773.96	11436.36	10507.53	9524.93
Weighted Average Rate of Interest on Loan	8.9201%	8.8734%	8.8202%	8.7986%	8.7846%
Interest	871.07	1044.75	1008.70	924.51	836.73

17. The detailed calculations in support of the weighted revised average rate of interest are contained in Annexure 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:

(a) The value base for the purpose of depreciation shall be the historical cost of the asset.

(b) 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.

(c) On repayment of entire loan, the remaining depreciable value shall be spread over the balance useful life of the asset.

(d) 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.

				(Rs. in	lakh)
	2004-05 (Pro rata)	2005-06	2006-07	2007-08	2008-09
Rate of Depreciation	2.6910%	2.6879%	2.6852%	2.6852%	2.6852%
Depreciable Value	13508.30	14081.90	14496.19	14496.19	14496.19
Balance Useful life of the asset	-	-	-	-	-
Remaining Depreciable Value	13508.30	13745.32	13715.02	12839.96	11857.36
Depreciation	336.58	420.57	432.51	432.51	432.51
Cumulative Depreciation/ Advance against Depreciation	336.58	781.17	1656.24	2638.83	3621.43

19. Depreciation allowed has been worked out as below:

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. The Commission vide its order dated 6.2.2007 in Petition No. 48/2006 had allowed Advance Against Depreciation for the year 2005-06 onwards. The petitioner has claimed Advance Against Depreciation for the years 2005-06 onwards also as the date of commercial operation of the transmission line was prior to 6.1.2006.

23. 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

- 9 -

out the Advance Against Depreciation. Therefore the figure of cumulative depreciation/ Advance Against Depreciation is different from the figure appearing under the similar head elsewhere in tariff calculations where Advance Against Depreciation for the current year is also included for 90% restriction of the depreciation.

24. Details of revised Advance Against Depreciation allowed are given hereunder:

				(Rs. in	lakh)
	2004-05	2005-06	2006-07	2007-08	2008-09
	(Pro rata)				
1/10th of Gross Loan(s)	1177.10	1201.88	1266.33	1266.33	1266.33
Repayment of the Loan	336.58	444.59	875.07	982.60	982.60
Minimum of the above	336.58	444.59	875.07	982.60	982.60
Depreciation during the year	336.58	420.57	432.51	432.51	432.51
(A) Difference	0.00	24.02	442.56	550.09	550.09
Cumulative Repayment of the Loan	344.78	789.37	1664.44	2647.03	3629.63
Cumulative Depreciation/ Advance against	336.58	757.15	1213.68	2088.74	3071.34
Depreciation					
(B) Difference	8.20	32.22	450.76	558.29	558.29
Advance against Depreciation Minimum of (A) and (B)	0.00	24.02	442.56	550.09	550.09

OPERATION & MAINTENANCE EXPENSES

25. 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	

26. O&M expenses as taken for the tariff calculations as per order dated 6.2.2007 in Petition No. 48/2006 have been considered, since line length and number of bays remain unchanged.

INTEREST ON WORKING CAPITAL

27. 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 the present. Therefore, the petitioner's claim in this regard is not being allowed. Accordingly, maintenance spares have been worked out on the historical cost and 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 6.2.2007 in Petition No. 48/2006 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 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

- 11 -

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 @ 10.25% based on SBI PLR as on 1.4.2004, which is in accordance with the 2004 regulations and has been allowed.

28. The necessary computations in support of interest revised on working capital, as revised, are appended herein below:

(Rs. in						
	2004-05	2005-06	2006-07	2007-08	2008-09	
Maintenance Spares	(Pro rata) 148.32	155.74	165.08	174.99	185.49	
O & M expenses	15.66	16.28	16.95	17.60	18.33	
Receivables	354.37	367.12	438.83	444.28	431.09	
Total	518.34	539.14	620.86	636.86	634.91	
Rate of interest	10.25%	10.25%	10.25%	10.25%	10.25%	
Interest	44.28	55.26	63.64	65.28	65.08	

TRANSMISSION CHARGES

29. The revised transmission charges being allowed for the transmission assets for the period 2005-06 to 2008-09 are summarised below:

				(Rs	s. in lakh)
	2004-05	2005-06	2006-07	2007-08	2008-09
	(Pro rata)				
Depreciation	336.58	420.57	432.51	432.51	432.51
Interest on Loan	871.07	1044.75	1008.70	924.51	836.73
Return on Equity	363.34	462.77	482.11	482.11	482.11
Advance against Depreciation	0.00	24.02	442.56	550.09	550.09
Interest on Working Capital	44.28	55.26	63.64	65.28	65.08
O & M Expenses	156.56	195.37	203.44	211.17	220.00
Total	1771.83	2202.74	2632.95	2665.67	2586.51

30. The petitioner shall recover from the beneficiaries the additional transmission charges in three monthly instalments. 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 has decided that the petitioner shall not be allowed reimbursement of the petition filing fee.

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. These transmission charges shall be included in the regional transmission tariff for Eastern Region and shall be shared by the regional beneficiaries in accordance with the 2004 regulations.

32. This order disposes of Petition No.18/2009.

Sd/-sd/-sd/-(V.S.VERMA)(S.JAYARAMAN)(R.KRISHNAMOORTHY)(DR.PRAMOD DEO)MEMBERMEMBERMEMBERCHAIRPERSONNew Delhi dated the13th May 2009CHAIRPERSON

<u>Annexure</u>

Details of calculations in support of the weighted revised average rate of interest.

				(۲	Rs. in lał	(h)	
(Details of Loan	2004-05	2005-06	2006-07	2007-08	2008-09	
1	Bond IX						
	Gross Loan opening	82.00	82.00	82.00	82.00	82.00	
	Cumulative Repayment upto DOCO/previous year	8.20	16.40	24.60	32.80	41.00	
	Net Loan-Opening	73.80	65.60	57.40	49.20	41.00	
	Additions during the year	0.00	0.00	0.00	0.00	0.00	
	Repayment during the year	8.20	8.20	8.20	8.20	8.20	
	Net Loan-Closing	65.60	57.40	49.20	41.00	32.80	
	Average Loan	69.70	61.50	53.30	45.10	36.90	
	Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%	
	Interest	8.54	7.53	6.53	5.52	4.52	
2	Repayment Schedule Bond X	10 Annual I	10 Annual instalments from 22. 8.2003				
2		071.00	971.00	971.00	071.00	071.00	
	Gross Loan opening Cumulative Repayment upto DOCO/previous year	971.00 0.00	80.92	161.83	971.00 242.75	971.00 323.67	
	Net Loan-Opening	971.00	80.92	809.17	728.25	647.33	
		0.00				0.00	
	Additions during the year	80.92	0.00 80.92	0.00 80.92	0.00 80.92	80.92	
	Repayment during the year						
	Net Loan-Closing	890.08	809.17	728.25	647.33	566.42	
	Average Loan Rate of Interest	930.54 10.90%	849.63 10.90%	768.71	687.79 10.90%	606.88 10.90%	
	Interest	10.90%	92.61	83.79	74.97	66.15	
						00.15	
3	Repayment Schedule Bond XI Option-I	12 Annual I	nstalments fron	1 21.06.2004			
3		074.00	074.00	074.00	074.00	074.00	
	Gross Loan opening Cumulative Repayment upto DOCO/previous year	974.00 0.00	974.00	974.00	974.00	974.00 243.50	
		974.00	0.00 974.00	81.17	162.33	730.50	
	Net Loan-Opening			892.83	811.67		
	Additions during the year	0.00	0.00	0.00	0.00	0.00	
	Repayment during the year	0.00	81.17	81.17	81.17	81.17	
	Net Loan-Closing	974.00	892.83	811.67	730.50	649.33	
	Average Loan	974.00	933.42	852.25	771.08	689.92	
	Rate of Interest	9.80%	9.80%	9.80%	9.80%	9.80%	
	Interest	95.45	91.47	83.52	75.57	67.61	
4	Repayment Schedule Bond-XII	12 Annual	12 Annual Installments from 7.12.05				
4		2200.00	0000.00	0000.00	2200.00	2202 00	
	Gross Loan opening Cumulative Repayment upto DOCO/previous year	2268.00	2268.00	2268.00	2268.00	2268.00	
		0.00	0.00	189.00	378.00	567.00	
	Net Loan-Opening	2268.00	2268.00	2079.00	1890.00	1701.00	
	Additions during the year	0.00	0.00	0.00	0.00	0.00	
	Repayment during the year	0.00	189.00	189.00	189.00	189.00	
	Net Loan-Closing	2268.00	2079.00	1890.00	1701.00	1512.00	
	Average Loan				4705 50	1000 50	
		2268.00	2173.50	1984.50	1795.50	1606.50	
	Rate of Interest	9.70%	9.70%	9.70%	9.70%	9.70%	
	Rate of Interest Interest	9.70% 220.00	9.70% 210.83	9.70% 192.50			
5	Rate of Interest Interest Repayment Schedule	9.70% 220.00	9.70%	9.70% 192.50	9.70%	9.70%	
5	Rate of Interest Interest Repayment Schedule Bond XIII Option I	9.70% 220.00 12 Annual	9.70% 210.83 Instalments fror	9.70% 192.50 n 28. 3.2006	9.70% 174.16	<u>9.70%</u> 155.83	
5	Rate of Interest Interest Repayment Schedule Bond XIII Option I Gross Loan opening	9.70% 220.00 12 Annual 5200.00	9.70% 210.83 Instalments from 5200.00	9.70% 192.50 n 28. 3.2006 5200.00	9.70% 174.16 5200.00	9.70% 155.83 5200.00	
5	Rate of Interest Interest Repayment Schedule Bond XIII Option I Gross Loan opening Cumulative Repayment upto DOCO/previous year	9.70% 220.00 12 Annual 5200.00 0.00	9.70% 210.83 nstalments from 5200.00 0.00	9.70% 192.50 n 28. 3.2006 5200.00 0.00	9.70% 174.16 5200.00 433.33	9.70% 155.83 5200.00 866.67	
5	Rate of Interest Interest Repayment Schedule Bond XIII Option I Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening	9.70% 220.00 12 Annual 5200.00 0.00 5200.00	9.70% 210.83 nstalments from 5200.00 0.00 5200.00	9.70% 192.50 n 28. 3.2006 5200.00 0.00 5200.00	9.70% 174.16 5200.00 433.33 4766.67	9.70% 155.83 5200.00 866.67 4333.33	
5	Rate of Interest Interest Repayment Schedule Bond XIII Option I Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year	9.70% 220.00 12 Annual 5200.00 0.00 5200.00 0.00	9.70% 210.83 nstalments from 5200.00 0.00 5200.00 0.00	9.70% 192.50 n 28. 3.2006 5200.00 0.00 5200.00 0.00	9.70% 174.16 5200.00 433.33 4766.67 0.00	9.70% 155.83 5200.00 866.67 4333.33 0.00	
5	Rate of Interest Interest Repayment Schedule Bond XIII Option I Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year	9.70% 220.00 12 Annual 5200.00 0.00 5200.00 0.00 0.00 0.00	9.70% 210.83 nstalments from 5200.00 0.00 5200.00 0.00 0.00	9.70% 192.50 n 28. 3.2006 5200.00 5200.00 5200.00 0.00 433.33	9.70% 174.16 5200.00 433.33 4766.67 0.00 433.33	9.70% 155.83 5200.00 866.67 4333.33 0.00 433.33	
5	Rate of Interest Interest Repayment Schedule Bond XIII Option I Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing	9.70% 220.00 12 Annual 5200.00 5200.00 0.00 0.00 0.00 0.00 5200.00 0.00	9.70% 210.83 nstalments fror 5200.00 5200.00 0.00 0.00 5200.00	9.70% 192.50 n 28. 3.2006 5200.00 5200.00 5200.00 0.00 433.33 4766.67	9.70% 174.16 5200.00 433.33 4766.67 0.00 433.33 4333.33	9.70% 155.83 5200.00 866.67 4333.33 0.00 433.33 3900.00	
5	Rate of Interest Interest Repayment Schedule Bond XIII Option I Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan	9.70% 220.00 12 Annual 5200.00 5200.00 0.00 5200.00 0.00 5200.00 5200.00 5200.00 5200.00	9.70% 210.83 nstalments from 5200.00 5200.00 0.00 0.00 5200.00 5200.00	9.70% 192.50 n 28. 3.2006 5200.00 0.00 5200.00 0.00 433.33 4766.67 4983.33	9.70% 174.16 5200.00 433.33 4766.67 0.00 433.33 4333.33 4550.00	9.70% 155.83 5200.00 866.67 433.33 0.00 433.33 3900.00 4116.67	
5	Rate of Interest Interest Repayment Schedule Bond XIII Option I Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest	9.70% 220.00 12 Annual 5200.00 5200.00 0.00 0.00 5200.00 0.00	9.70% 210.83 nstalments from 5200.00 5200.00 0.00 0.00 5200.00 5200.00 5200.00 8.63%	9.70% 192.50 n 28. 3.2006 5200.00 5200.00 0.00 433.33 4766.67 4983.33 8.63%	9.70% 174.16 5200.00 433.33 4766.67 0.00 433.33 4333.33 4333.33 4550.00 8.63%	9.70% 155.83 5200.00 866.67 4333.33 0.00 433.33 3900.00 4116.67 8.63%	
5	Rate of Interest Interest Repayment Schedule Bond XIII Option I Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest	9.70% 220.00 12 Annual 5200.00 5200.00 0.00 0.00 5200.00 5200.00 5200.00 5200.00 5200.00 448.76	9.70% 210.83 nstalments fror 5200.00 5200.00 0.00 0.00 5200.00 5200.00 5200.00 8.63% 448.76	9.70% 192.50 n 28. 3.2006 5200.00 5200.00 0.00 433.33 4766.67 4983.33 8.63% 430.06	9.70% 174.16 5200.00 433.33 4766.67 0.00 433.33 4333.33 4550.00	9.70% 155.83 5200.00 866.67 4333.33 0.00 433.33 3900.00 4116.67	
	Rate of Interest Interest Repayment Schedule Bond XIII Option I Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule	9.70% 220.00 12 Annual 5200.00 5200.00 0.00 0.00 5200.00 5200.00 5200.00 5200.00 5200.00 448.76	9.70% 210.83 nstalments from 5200.00 5200.00 0.00 0.00 5200.00 5200.00 5200.00 8.63%	9.70% 192.50 n 28. 3.2006 5200.00 5200.00 0.00 433.33 4766.67 4983.33 8.63% 430.06	9.70% 174.16 5200.00 433.33 4766.67 0.00 433.33 4333.33 4350.00 8.63%	9.70% 155.83 5200.00 866.67 4333.33 0.00 433.33 3900.00 4116.67 8.63%	
5	Rate of Interest Interest Repayment Schedule Bond XIII Option I Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule Bond XV	9.70% 220.00 12 Annual 5200.00 0.00 5200.00 0.00 5200.00 5200.00 5200.00 5200.00 8.63% 448.76 12 Annual	9.70% 210.83 nstalments fror 5200.00 0.00 5200.00 5200.00 5200.00 8.63% 448.76 nstalments fror	9.70% 192.50 n 28. 3.2006 5200.00 5200.00 0.00 433.33 4766.67 4983.33 8.63% 430.06 n 31. 7.2006	9.70% 174.16 5200.00 433.33 4766.67 0.00 433.33 4333.33 4550.00 8.63% 392.67	9.70% 155.83 5200.00 866.67 4333.33 0.00 433.33 3900.00 4116.67 8.63% 355.27	
	Rate of Interest Interest Repayment Schedule Bond XIII Option I Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule Bond XV Gross Loan opening	9.70% 220.00 12 Annual 5200.00 0.00 5200.00 0.00 5200.00 5200.00 5200.00 5200.00 8.63% 448.76 12 Annual 1290.00	9.70% 210.83 nstalments fror 5200.00 0.00 5200.00 5200.00 5200.00 8.63% 448.76 nstalments fror 1290.00	9.70% 192.50 n 28. 3.2006 5200.00 0.00 5200.00 0.00 433.33 4766.67 4983.33 8.63% 430.06 n 31. 7.2006 1290.00	9.70% 174.16 5200.00 433.33 4766.67 0.00 433.33 4333.33 4550.00 8.63% 392.67 1290.00	9.70% 155.83 5200.00 866.67 4333.33 0.00 433.33 3900.00 4116.67 8.63% 355.27 1290.00	
	Rate of Interest Interest Repayment Schedule Bond XIII Option I Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule Bond XV Gross Loan opening Cumulative Repayment upto DOCO/previous year	9.70% 220.00 12 Annual 5200.00 5200.00 0.00 5200.00 5200.00 5200.00 8.63% 448.76 12 Annual 1290.00 0.00	9.70% 210.83 nstalments fror 5200.00 5200.00 5200.00 5200.00 5200.00 8.63% 448.76 nstalments fror 1290.00 0.00	9.70% 192.50 n 28. 3.2006 5200.00 5200.00 0.00 433.33 4766.67 4983.33 8.63% 430.06 n 31. 7.2006 1290.00 0.00	9.70% 174.16 5200.00 433.33 4766.67 0.00 433.33 4333.33 4550.00 8.63% 392.67 1290.00 0.00	9.70% 155.83 5200.00 866.67 4333.33 0.00 433.33 3900.00 4116.67 8.63% 355.27 1290.00 107.50	
	Rate of Interest Interest Repayment Schedule Bond XIII Option I Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule Bond XV Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening	9.70% 220.00 12 Annual 5200.00 5200.00 0.00 5200.00 5200.00 5200.00 8.63% 448.76 12 Annual 1290.00 0.00 1290.00	9.70% 210.83 nstalments fror 5200.00 5200.00 0.00 5200.00 5200.00 5200.00 8.63% 448.76 nstalments fror 1290.00 0.00 1290.00	9.70% 192.50 n 28. 3.2006 5200.00 5200.00 0.00 433.33 4766.67 4983.33 8.63% 430.06 n 31. 7.2006 1290.00 0.00 1290.00	9.70% 174.16 5200.00 433.33 4766.67 0.00 433.33 4333.33 4550.00 8.63% 392.67 1290.00 0.00 1290.00	9.70% 155.83 5200.00 866.67 4333.33 0.00 433.33 3900.00 4116.67 8.63% 355.27 1290.00 107.50 1182.50	
	Rate of Interest Interest Repayment Schedule Bond XIII Option I Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule Bond XV Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year	9.70% 220.00 12 Annual 5200.00 5200.00 5200.00 5200.00 5200.00 5200.00 8.63% 448.76 12 Annual 1290.00 0.00 1290.00 0.00	9.70% 210.83 nstalments from 5200.00 5200.00 0.00 5200.00 5200.00 5200.00 8.63% 448.76 nstalments from 1290.00 0.00 1290.00 0.00	9.70% 192.50 n 28. 3.2006 5200.00 5200.00 0.00 433.33 4766.67 4983.33 8.63% 430.06 n 31. 7.2006 1290.00 0.00 1290.00 0.00	9.70% 174.16 5200.00 433.33 4766.67 0.00 433.33 4333.33 4550.00 8.63% 392.67 1290.00 0.00 1290.00 0.00	9.70% 155.83 5200.00 866.67 4333.33 0.00 433.33 3900.00 4116.67 8.63% 355.27 1290.00 107.50 1182.50 0.00	
	Rate of Interest Interest Repayment Schedule Bond XIII Option I Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule Bond XV Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment Schedule Bond XV Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year	9.70% 220.00 12 Annual 5200.00 5200.00 0.00 5200.00 5200.00 5200.00 5200.00 8.63% 448.76 12 Annual 1290.00 1290.00 1290.00 0.00 0.00	9.70% 210.83 nstalments fror 5200.00 5200.00 0.00 5200.00 5200.00 5200.00 8.63% 448.76 nstalments fror 1290.00 0.00 1290.00 0.00	9.70% 192.50 n 28. 3.2006 5200.00 0.00 5200.00 0.00 433.33 4766.67 4983.33 8.63% 430.06 n 31. 7.2006 1290.00 0.00 1290.00 0.00 0.00	9.70% 174.16 5200.00 433.33 4766.67 0.00 433.33 4333.33 4550.00 8.63% 392.67 1290.00 0.00 1290.00 0.00 1290.00 0.00	9.70% 155.83 5200.00 866.67 4333.33 0.00 433.33 3900.00 4116.67 8.63% 355.27 1290.00 107.50 1182.50 0.00 107.50	
	Rate of Interest Interest Repayment Schedule Bond XIII Option I Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule Bond XV Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment Schedule Bond XV Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Repayment during the year Net Loan-Closing	9.70% 220.00 12 Annual 5200.00 5200.00 5200.00 5200.00 5200.00 5200.00 5200.00 5200.00 8.63% 448.76 12 Annual 1290.00 1290.00 0.00 1290.00 0.00 1290.00	9.70% 210.83 nstalments fror 5200.00 5200.00 5200.00 5200.00 5200.00 5200.00 8.63% 448.76 nstalments fror 1290.00 0.00 1290.00 0.00 0.00	9.70% 192.50 n 28. 3.2006 5200.00 0.00 5200.00 0.00 433.33 4766.67 4983.33 8.63% 430.06 n 31. 7.2006 1290.00 0.00 1290.00 0.00 0.00 1290.00	9.70% 174.16 5200.00 433.33 4766.67 0.00 433.33 4333.33 4550.00 8.63% 392.67 1290.00 0.00 1290.00 0.00 1290.00 0.00 1290.00 107.50 1182.50	9.70% 155.83 5200.00 866.67 4333.33 0.00 433.33 3900.00 4116.67 8.63% 355.27 1290.00 107.50 107.50 107.50	
	Rate of Interest Interest Repayment Schedule Bond XIII Option I Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule Bond XV Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment Schedule Bond XV Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Repayment during the year Net Loan-Closing Average Loan	9.70% 220.00 12 Annual 5200.00 5200.00 5200.00 5200.00 5200.00 5200.00 5200.00 8.63% 448.76 12 Annual 1290.00 1290.00 0.00 1290.00 1290.00 1290.00 1290.00	9.70% 210.83 nstalments fror 5200.00 5200.00 5200.00 5200.00 5200.00 5200.00 5200.00 8.63% 448.76 nstalments fror 1290.00 1290.00 0.00 0.00 1290.00	9.70% 192.50 n 28. 3.2006 5200.00 0.00 5200.00 0.00 433.33 4766.67 4983.33 8.63% 430.06 n 31. 7.2006 1290.00 0.00 0.00 0.00 0.00 0.00 1290.00 1290.00	9.70% 174.16 5200.00 433.33 4766.67 0.00 433.33 4550.00 8.63% 392.67 1290.00 0.00 1290.00 0.00 1290.00 0.00 1290.00 1182.50 1236.25	9.70% 155.83 5200.00 866.67 4333.33 0.00 433.33 3900.00 4116.67 8.63% 355.27 1290.00 107.50 1182.50 0.00 1075.00 1128.75	
	Rate of Interest Interest Repayment Schedule Bond XIII Option I Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule Bond XV Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment Schedule Bond XV Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest	9.70% 220.00 12 Annual 5200.00 5200.00 5200.00 5200.00 5200.00 5200.00 5200.00 5200.00 8.63% 448.76 12 Annual 1290.00	9.70% 210.83 nstalments fror 5200.00 5200.00 5200.00 5200.00 5200.00 5200.00 5200.00 8.63% 448.76 nstalments fror 1290.00 0.00 0.00 0.00 1290.00 1290.00 1290.00 6.68%	9.70% 192.50 n 28. 3.2006 5200.00 0.00 5200.00 433.33 4766.67 4983.33 8.63% 430.06 n 31. 7.2006 1290.00 0.00 1290.00 1290.00 1290.00 1290.00 6.68%	9.70% 174.16 5200.00 433.33 4766.67 0.00 433.33 433.33 4550.00 8.63% 392.67 1290.00 0.00 1290.00 0.00 1290.00 0.00 129	9.70% 155.83 5200.00 866.67 4333.33 0.00 433.33 3900.00 4116.67 8.63% 355.27 1290.00 107.50 1182.50 0.00 107.500 1128.75 6.68%	
	Rate of Interest Interest Repayment Schedule Bond XIII Option I Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule Bond XV Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment Schedule Bond XV Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Repayment during the year Net Loan-Closing Average Loan	9.70% 220.00 12 Annual 5200.00 5200.00 5200.00 5200.00 5200.00 5200.00 5200.00 8.63% 448.76 12 Annual 1290.00 0.00 1290.00 1290.00 1290.00 1290.00 1290.00 1290.00 1290.00 6.68% 86.17	9.70% 210.83 nstalments fror 5200.00 5200.00 5200.00 5200.00 5200.00 5200.00 5200.00 8.63% 448.76 nstalments fror 1290.00 1290.00 0.00 0.00 1290.00	9.70% 192.50 n 28. 3.2006 5200.00 0.00 5200.00 0.00 433.33 4766.67 4983.33 8.63% 430.06 n 31. 7.2006 1290.00 0.00 1290.00 1290.00 1290.00 6.68% 86.17	9.70% 174.16 5200.00 433.33 4766.67 0.00 433.33 4550.00 8.63% 392.67 1290.00 0.00 1290.00 0.00 1290.00 0.00 1290.00 1182.50 1236.25	9.70% 155.83 5200.00 866.67 4333.33 0.00 433.33 3900.00 4116.67 8.63% 355.27 1290.00 107.50 1182.50 0.00 1075.00 1128.75	

7	PNB-II							
	Gross Loan opening	538.00	538.00	538.00	538.00	538.00		
	Cumulative Repayment upto DOCO/previous year	0.00	44.83	89.67	134.50	179.33		
	Net Loan-Opening	538.00	493.17	448.33	403.50	358.67		
	Additions during the year	0.00	0.00	0.00	0.00	0.00		
	Repayment during the year	44.83	44.83	44.83	44.83	44.83		
	Net Loan-Closing	493.17	448.33	403.50	358.67	313.83		
	Average Loan	515.58	470.75	425.92	381.08	336.25		
	Rate of Interest as on DOCO	8.60%	8.60%	8.60%	8.60%	8.60%		
	Interest	44.34	40.48	36.63	32.77	28.92		
	Repayment Schedule	12 Annual I	nstalments fror					
8	OBC							
	Gross Loan opening	448.00	448.00	448.00	448.00	448.00		
	Cumulative Repayment upto DOCO/previous year	0.00	37.33	74.67	112.00	149.33		
	Net Loan-Opening	448.00	410.67	373.33	336.00	298.67		
	Additions during the year	0.00	0.00	0.00	0.00	0.00		
	Repayment during the year	37.33	37.33	37.33	37.33	37.33		
	Net Loan-Closing	410.67	373.33	336.00	298.67	261.33		
	Average Loan	429.33	392.00	354.67	317.33	280.00		
	Rate of Interest as on DOCO	8.60%	8.60%	8.60%	8.60%	8.60%		
	Interest	36.92	33.71	30.50	27.29	24.08		
	Repayment Schedule	12 Annual I	nnual Instalments from 22.03.2005					
9	Bond XVIII (Add Cap for 2005-06)							
	Gross Loan opening	0.00	0.00	720.00	720.00	720.00		
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00		
	Net Loan-Opening	0.00	0.00	720.00	720.00	720.00		
	Additions during the year	0.00	720.00	0.00	0.00	0.00		
	Repayment during the year	0.00	0.00	0.00	0.00	0.00		
	Net Loan-Closing	0.00	720.00	720.00	720.00	720.00		
	Average Loan	0.00	360.00	720.00	720.00	720.00		
	Rate of Interest as on DOCO	8.15%	8.15%	8.15%	8.15%	8.15%		
	Interest	0.00	29.34	58.68	58.68	58.68		
	Repayment Schedule	12 Annual I	nstalments fror	Iments from 09.03.2010				
	Total Loan							
	Gross Loan opening	11771.00	11771.00	12491.00	12491.00	12491.00		
	Cumulative Repayment upto DOCO/previous year	8.20	179.48	620.93	1495.72	2478.00		
<u> </u>	Net Loan-Opening	11762.80	11591.52	11870.07	10995.28	10013.00		
	Additions during the year	0.00	720.00	0.00	0.00	0.00		
	Repayment during the year	171.28	441.45	874.78	982.28	982.28		
	Net Loan-Closing	11591.52	11870.07	10995.28	10013.00	9030.72		
	Average Loan	11677.16	11730.79	11432.68	10504.14	9521.86		
	Rate of Interest	8.9201%	8.8734%	8.8202%	8.7986%	8.7846%		
1	Interest	1041.61	1040.92	1008.38	924.21	836.46		