## CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### Coram:

- 1. Shri Bhanu Bhushan, Member
- 2. Shri R.Krishnamoorthy, Member

Petition No. 146/2007

#### In the matter of

Determination of final transmission tariff for (i) ICT-I along with associated bays at Meerut sub-station (ii) 800 kV Tehri- Meerut Ckt-I along with associated bays, (iii) 800 kV Tehri- Meerut Ckt-II and 400 kV S/C Meerut -Muzaffarnagar transmission line along with associated bays and (iv) ICT at Muzaffarnagar along with one no 400 kV and one No. 220 kV bay under Tehri Transmission System in Northern Region

#### And in the matter of

Power Grid Corporation of India Limited

....Petitioner

Vs

- 1. Rajasthan Rajya Vidyut Prasaran Nigam Limited, Jaipur
- 2. Ajmer Vidyut Vitaran Nigam Ltd., Ajmer
- 3. Jaipur Vidyut Vitaran Nigam Ltd, Jaipur
- 4. Jodhpur Vidyut Vitaran Nigam Ltd, Jodhpur
- 5. Himachal Pradesh State Electricity Board, Shimla
- 6. Punjab State Electricity Board, Patiala
- 7. Haryana Vidyut Prasaran Nigam Ltd, 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 Ltd., 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

..Respondents

#### The following were present:

- 1. Shri M.G.Ramachandran, Advocate, PGCIL
- 2. Shri V.V.Sharma, PGCIL
- 3. Shri Prashant Sharma, PGCIL
- 4. Shri B.C.Pant, PGCIL
- 5. Shri A.K.Nagpal, PGCIL
- 6. Shri M.M.Mondal, PGCIL
- 7. Shri Shanker Singh, PGCIL
- 8. Ms. Sangeeta Edwards, PGCIL
- 9. Shri S.S.Raiu. PGCIL
- 10. Shri A.K.Nagpal, PGCIL
- 11. Shri S.N.Singh, UPPCL
- 12. Shri R.K.Arora, HPGCL
- 13. Shri T.P.S. Bawa, PSEB

## ORDER (DATE OF HEARING: 10.1.2008)

This petition has been filed for approval of transmission charges for (i) ICT-I along with associated bays at Meerut sub-station (Asset-I), (ii) 800 kV Tehri-Meerut Ckt-I along with associated bays (Asset-II), (iii) 800 kV Tehri-Meerut Ckt-II and 400 kV S/C Meerut-Muzaffarnagar transmission line along with associated bays (Asset-III), and (iv) ICT at Muzaffarnagar along with one No. 400 kV and one No. 220 kV bay (Asset-IV) under Tehri Transmission System (the transmission system) from the date of commercial operation 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") after accounting for additional capitalization during 2005-06 and 2006-07. The petitioner has also prayed for reimbursement of expenditure from the beneficiaries incurred towards publishing of notices in newspapers and the petition filing fee.

2. The provisional transmission charges for the transmission assets covered in the present petition were approved by the Commission in its order dated 15.2.2007 in Petition No.150/2006. The dates of commercial operation of the transmission assets are stated to be as under:

S. No.	Name of the assets	Date of commercial operation
1.	Asset-I	1.8.2005
2.	Asset-II	1.4.2006
3.	Asset-III	1.6.2006
4.	Asset-IV	1.2.2007

3. The original investment approval for the transmission system was accorded by the Central Government in Ministry of Power vide letter dated 15.3.1994 at an estimated cost of Rs. 42100 lakh, which included IDC of Rs. 5000 lakh. Subsequently, revised cost estimate for the transmission system was approved by the

Ministry vide its letter dated 20.8.2002 at an estimated cost of Rs. 70229 lakh which included IDC of Rs.13601 lakh. The cost estimate for the transmission system was again revised by the Ministry vide letter dated 9.1.2006 to Rs. 91384 lakh, which includes IDC of Rs. 26916 lakh.

4. The details of the apportioned approved cost, the estimated completion cost, etc. of the transmission assets are as under:

(Rs. in lakh)

Name of the	Apportioned	Capital expenditure	Capital Expenditure	Balance	Total
assets	approved cost	as on the date of	up to 31.3.2007	Expenditure	estimated
		commercial			completion
		operation			cost
Asset- I	3038.24	2223.60	2391.27	430.40	2821.67
Asset-II	37208.28	35127.95	35168.65	427.91	35596.56
Asset-III	41473.41	38913.10	39574.48	762.87	40337.35
Asst-IV	1085.19	1682.19	1682.19	750.00	2432.19

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

(Rs.in lakh)

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		Ass	et- I		Asset-II			Asset-III			Asset-IV		
	2005- 06(Pro rata)	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	<b>2006-07</b> (Pro rata)	2007-08	2008-09	<b>2006-07</b> (Pro rata)	2007-08	2008-09
Depreciation	44.01	68.91	70.54	70.54	904.66	905.28	905.28	840.22	1017.04	1017.04	10.09	60.56	60.56
Interest on Loan	72.80	110.83	107.16	101.13	1651.53	1445.53	1246.86	1595.04	1701.95	1469.69	17.04	98.94	93.57
Return on Equity	61.90	96.37	98.27	98.27	1431.37	1432.22	1432.22	1366.32	1653.47	1653.47	11.76	70.59	70.59
Advance against Depreciation	0.00	0.00	0.00	0.00	1297.88	1300.90	1172.28	1447.73	1477.74	1229.35	2.66	0.00	0.00
Interest on Working Capital	6.71	10.51	10.84	11.03	131.29	130.12	126.88	129.16	149.76	144.20	1.28	7.42	7.50
O & M Expenses	78.00	121.68	126.52	131.60	106.47	110.56	115.14	146.78	182.97	190.49	10.14	63.26	65.80
Total	263.42	408.30	413.32	412.57	5523.20	5324.60	4998.66	5525.26	6182.94	5704.25	52.97	300.77	298.01

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

		Ass	et- I			Asset-II			Asset-III			Asset-IV		
	<b>2005-06</b> (Pro rata)	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	<b>2006-07</b> (Pro rata)	2007-08	2008-09	<b>2006-07</b> (Pro rata)	2007-08	2008-09	
Maintenance Spares	22.62	24.37	26.28	27.86	351.48	372.78	395.14	392.44	415.37	440.29	16.82	16.99	18.01	
O & M expenses	9.75	10.14	10.54	10.97	8.87	9.21	9.60	14.68	15.25	15.87	5.07	5.27	5.48	
Receivables	65.86	68.05	68.89	68.76	920.53	887.43	833.11	1105.05	1030.49	950.71	52.97	50.13	49.67	
Total	98.23	102.55	105.71	107.58	1280.89	1269.42	1237.85	1280.89	1461.11	1406.87	74.86	72.39	73.16	
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	
Interest	6.71	10.51	10.84	11.03	131.29	130.12	126.88	131.29	149.76	144.20	7.67	7.42	7.50	

7. The reply to the petition has been filed by U.P. Power Corporation Limited (UPPCL). In response to the public notices published by the petitioner in accordance with the procedure specified by the Commission, no comments have been received from the general public.

#### CAPITAL COST

- 8. As per clause (1) of Regulation 52 of the 2004 regulations, subject to prudence check, 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 capitalised initial spares subject to a ceiling norm as 1.5% of original project cost. The regulation is applicable in case of the transmission system declared under commercial operation on or after 1.4.2004.
- 9. The petitioner has claimed additional capitalization for the year 2005-06 for Asset-I and for the year 2006-07 for Asset-I, Asset-II and Asset-III. The capital expenditure on the date of commercial operation and additional capitalization claimed for tariff purposes are given hereunder:

(Rs. in lakh)

Name of the	Capital	Additional capital	Additional capital	Total capital
assets	Expenditure on	expenditure during	expenditure during	expenditure
	the date of the	2005-06	2006-07	
	commercial			
	operation			
Asset- I	2223.60	77.18	90.49	2391.27
Asset-II	35127.95	-	40.70	35168.65
Asset-III	38913.10	-	661.38	39574.48

#### **Additional capitalization**

- 10. Clause (1) of Regulation 53 of the 2004 regulations provides-
  - "(1) The following capital expenditure within the original scope of work actually incurred after the date of commercial operation and up to the cut off date may be admitted by the Commission, subject to prudence check:
  - (i) Deferred liabilities;
  - (ii) Works deferred for execution;
  - (iii) Procurement of initial capital spares in the original scope of works subject to the ceiling norm specified in regulation 52;
  - (iv) Liabilities to meet award of arbitration or compliance of the order or decree of a court; and
  - (v) On account of change in law:

Provided that original scope of work along with estimates of expenditure shall be submitted along with the application for provisional tariff:

Provided further that a list of the deferred liabilities and works deferred for execution shall be submitted along with the application for final tariff after the date of commercial operation of the transmission system."

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

Year		Natu	re of expenditure
2005-06	Asset-I	Land	= Rs. 4.96 lakh
		Building and civil works	= Rs. 4.0 lakh
		Sub-station	= Rs. 68.22 lakh
		Total	= Rs. 77.18 lakh
2006-07	Asset-I	Sub-station	= Rs. 90.49 lakh
	Asset-II	Transmission line	= Rs. 22.77 lakh
		Sub-station	= Rs.17.93 lakh
		Total	= Rs. 40.70 lakh

Asset-III	Transmission line Sub-station	= Rs. 607.86 lakh = Rs. 53.52 lakh
	Total	= Rs. 661.38 lakh

12. The additional capital expenditure claimed is within the original scope of work and is found to be in order as it was against the committed liability. Accordingly, capitalization of the additional expenditure claimed by the petitioner has been allowed for the transmission assets.

#### **Time Over-run**

- 13. As per the original implementation schedule, construction of the transmission system was linked with implementation of generation project. Since the generation project got delayed, implementation of the transmission system also got delayed. The petitioner has submitted that on account of delay in implementation of the transmission system, RCE-I and RCE-II for Tehri transmission system were prepared and approved by the Central Government. It has been explained that commissioning of the transmission assets has generally kept pace with the commissioning of the generating units of the generation projects.
- 14. The commissioning of Asset-I is 5 months ahead of schedule and Asset II has been declared under commercial operation in accordance with specified schedule. The petitioner has explained the delay in commercial operation of Asset-III and Asset-IV as follows:
  - (i) Asset-III was scheduled to be commissioned by March 2006. It was declared under commercial operation on 1.6.2006. There was delay of 3 months in the commissioning. The petitioner has submitted that this may be considered to be in conformity with the commissioning of Tehri generation project which commenced from 17.7.2006. Although anticipated date of start of generation

given by Tehri authorities was April, 2006 but actual commissioning happened in July 2006. Construction of Tehri generation project was stretched for a period as long as more than ten years, delay of two months can be attributed to the uncertainties prevailing in the matter of start of Tehri generation. Since the asset was commissioned prior to commissioning of generation project, the delay in the commissioning of transmission line did not have adverse impact. Therefore, the delay in commissioning of line is condoned for the purpose of tariff.

Asset-IV was scheduled to be commissioned by March 2006. The line (iv) was declared under commercial operation on 1.2.2007. There was delay of 11 months in the commissioning. The petitioner has submitted that the erection and commissioning of the asset was executed as a deposit work on cost plus basis by UPPCL. Although the works related to the bay had been completed by UPPCL in time, the delay in commissioning occured due to the delay in supply of transformer from M/s. Emco. The manufacturing facility of M/s. Emco situated in Mumbai came under heavy water logging and flooding following rains in the city of the Mumbai in July, 2005. The manufacturing facilities of M/s. Emco were badly affected and the production was delayed following this. The petitioner has submitted that manufacturing/supply schedule of transformer was further hampered owing to world-wide shortage of CRGO which forms the basic raw material for manufacturing of the transformer core. In response to the Commission's direction, the petitioner vide affidavit dated 15.2.2008 had placed on record the copy of Vice President (Marketing), EMCO letter dated 31.1.2007 addressed to UPPCL and IEEMA circular regarding shortages in the supply of CRGO in the market. Since floods, heavy rains and shortage of material world wide are akin to force majeure conditions, we have decided to condone the delay in commissioning of Asset-IV as well.

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#### **Cost variation**

- 15. The petitioner has submitted the reasons for cost variation for the transmission assets as under:
  - (i) **Asset-I**: The petitioner has stated that as against the apportioned approved cost of Rs. 3038.24 lakh, the estimated completion cost is Rs. 2821.67 lakh. The cost variation was stated to be on account of difference in estimated and award price.
  - **Asset-II:** The petitioner has submitted that work on major portion of 800 (ii) kV Tehri- Meerut Ckt-I was completed in August 2004 and to prevent theft of conductor and other materials of the completed portion, the partly completed line was charged for anti-theft. In August 2004, a portion of about 600 metre short of gantry was still to be completed. Gantry at switchyard end of Tehri for termination of the line which was to be erected by THDC was not ready by Aug, 2004. THDC had made the gantry ready in September 2005 and petitioner resumed the balance work. In view of considerable rock cutting encountered to maintain safe ground clearance the balance work of the line was completed in March 2006 and consequently the line was test-charged and capitalized. The expenditure incurred on IDC from 20.8.2004 to 24.10.2005 amounting to Rs. 2220.34 lakh due to suspended period of work on account of non-readiness of gantry and other related activities at Tehri end has been charged to revenue as per provisions of AS-16 and accordingly included in the capital cost of the system. As against the apportioned approved cost of Rs. 37208.28 lakh the estimated completion cost is stated to be Rs. 35596.56 lakh. The main reason for cost variation was due to difference in estimated and award price.

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- (iii) Asset-III: The petitioner has submitted that as against the apportioned approved cost of Rs. 41473.41 lakh, the estimated completion cost is Rs. 40337.35 lakh. The actual award price was less as compared to the approved cost. The petitioner has further submitted that a payment of Rs. 74,19,72,621.00/- was made to the Forest Department for 800 kV Tehri Meerut Ckt I & II (combined) transmission line.
- (iv) Asset-IV: The petitioner has submitted that as against the apportioned approved cost of Rs. 1085.48 lakh the estimated completion cost is stated to be Rs. 2432.19 lakh. The variation between approved and actual cost was due to difference in estimated and MoU cost with UPPCL.
- 16. In respect of Asset-I, the petitioner has explained that an expenditure incurred on IDC from 20.8.2004 to 24.10.2005 amounting to Rs. 2220.34 lakh due to suspended period of work on account of non-readiness of gantry and other related activities at Tehri end has been charged to revenue as per provisions of AS-16 and accordingly included in the capital cost of the transmission system for the purpose of tariff. The petitioner has done the same as per the accounting procedure and therefore, IDC of Rs. 2220.34 is being included in the capital cost for the purpose of computation of final tariff. In case of Asset- IV, the capital expenditure of Rs. 1682.19 lakh as on 31.3.2007 exceeds the apportioned approved cost of Rs. 1085.48 lakh by 596.71 lakh. However, the actual cost of Rs. 78816.59 lakh as on 31.3.2007 presently being considered for the purpose of approval of tariff of the all assets is less than the approved cost of Rs. 91383.84 lakh. Therefore, increase in cost for Asset-IV is being allowed.

#### **TOTAL CAPITAL EXPENDITURE**

17. Based on the above, gross block as given below has been considered for the purpose of tariff for the transmission assets, after allowing additional capitalization on woks as claimed by the petitioner, which is within the limits of apportioned approved cost:

(Rs. in lakh)

Name of the	Capital	Additional capital	Additional capital	Total capital
assets	Expenditure on	expenditure up to	expenditure up to	expenditure
	the date of the	31.3.2006	31.3.2007	
	commercial operation			
Asset- I	2223.60	77.18	90.49	2391.27
733Ct- 1		77.10		
Asset-II	35127.95	-	40.70	35168.65
Asset-III	38913.10	-	661.38	39574.48
Asst-IV	1682.19	-	0.00	1682.19

#### .DEBT- EQUITY RATIO

- 18. Clause (1) of Regulation 54 of the 2004 regulations inter alia provides that,-
  - "(1) In case of the existing projects, debt–equity ratio Considered by the Commission for fixation of tariff for the period ending 31.3.2004 shall be considered for determination of tariff with effect from 01.04.2004:

Provided that in cases where the tariff for the period ending 31.3.2004 has not been determined by the Commission, debt-equity ratio shall be as may be decided by the Commission:

Provided further that in case of the existing projects where additional capitalisation has been completed on or after 1.4.2004 and admitted by the Commission under Regulation 53, equity in the additional capitalisation to be considered shall be:-

- (a) 30% of the additional capital expenditure admitted by the Commission, or
- (b) equity approved by the competent authority in the financial package, for additional capitalisation, or
- (c) actual equity employed,

whichever is the least:

Provided further that in case of additional expenditure admitted under the second proviso, the Commission may consider equity of more than 30% if the transmission licensee is able to satisfy the Commission that deployment of such equity of more than 30% was in the interest of general public."

- 19. The Note 1 below Regulations 53 lays down that any expenditure on account of committed liabilities with the original scope of work is to be serviced in the normative debt-equity ratio specified in Regulation 54.
- 20. The petitioner has considered debt-equity ratio of 70.70:29.30, 70.91:29.09, 70.16:29.84 and 70.03:29.97.72 for Asset-I, Asset-II, Asset-III and Asset-IV respectively, as actually deployed on the date of commercial operation. The petitioner has further considered the amount of additional capitalization in the debt-equity ratio of 70.01:29.99 for the year 2005-06 for Asset-I and 70:30 for the transmission Asset-I, Asset-II and Asset-III. In our calculations, actual debt-equity ratio as on the date of commercial operation has been considered and for the additional capital expenditure approved in the ratio of 70:30 in accordance with the 2004 regulations. Accordingly, for the purpose of tariff, equity considered for the transmission assets is as under:

(Rs. in lakh)

	Capital cost	Equity on	Additional	Capital	Additional	Capital	Addition	Equity	Addition	Equity
	as on date of	the date of	capital	cost as on	capital	cost as on	of equity	considered	of equity	considered
	commercial	commercial	expenditure	1.4.2006	expenditure	1.4.2007	during	as on	during	as on
	operation	operation	during 2005-		during 2006-		2005-06	1.4.2006	2006-07	1.4.2007
			06		07					
Asset- I	223.60	651.60	77.18	728.78	90.49	2391.27	23.15	674.75	27.15	701.90
A	25427.05	40047.05	0.00	25427.05	40.70	25460.65	0.00	40047.05	40.04	40000 40
Asset-II	35127.95	10217.95	0.00	35127.95	40.70	35168.65	0.00	10217.95	12.21	10230.16
Asset-III	38913.10	11612.10	0.00	-	661.38	39574.48	0.00	-	198.41	11810.51
Asst-IV	1682.19	504.19	0.00	-	-	1682.19	0.00	-	0.00	504.19

#### RETURN ON EQUITY

21. 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.

22. Equity has been considered as given in the table below 23 above. However, tariff has been allowed on average equity. Accordingly, the petitioner shall be entitled to return on equity as under:

(Rs. in lakh)

Name of	Equity as	Addition due	Average	Addition due	Average		Return on	equity	
the	on the	to additional	equity	to additional	equity	2005-06	2006-07	2007-08	2008-09
asset	date of	capitalization	for	capitalization	2006-07	(Pro rata)	(Pro rata)		
	commercial	for the	2005-06	for the					
	operation	period 2005-		period 2006-					
		06		07					
Asset- I	651.60	23.15	663.18	27.15	688.33	61.90	96.37	98.27	98.27
Asset- II	10217.95	-	-	12.21	10224.06	-	1431.37	1432.22	1432.22
Asset-III	11612.10	-	-	198.41	11711.31	-	1366.32	1653.47	1653.47
Asset-IV	504.19	-	-	0.00	504.19	-	11.76	70.59	70.59

#### **INTEREST ON LOAN**

- 23. 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 refinancing 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."

- 24. The petitioner has claimed interest on loan in the following manner:
  - (i) Gross loans opening has been considered from 2005-06 for Asset-I and from 2006-07 for Asst-II, Asset-III and Asset-IV;
  - (ii) On the basis of actual rate of interest on actual average loan, the weighted average rate of interest on loan is worked out for various years;
  - (iii) SBI-II loan has been replaced by Bond XIII Option-II in case of Asset-I,
    Asset-II and Asset-III and IOB short terms bridge loan has been replaced by Bond XVII in case of Asset-I, Canara Bank short term bridge loan has been replaced by Bond XIX in Asset-III;
  - (iv) Bond XVII has been considered for additional capital expenditure for the year 2005-06 for Asset-I;
  - (v) To the total gross loan of 2005-06, notional loan corresponding to additional capital expenditure for 2005-06 has been added. This resulting amount has been considered as notional loan and the weighted average rate of interest on loan for respective years as per above has been has been multiplied to arrive at interest on loan, considering (deprecation + AAD) as repayment.
- 25. In our calculation, the interest on loan has been worked out as detailed below:

- (i) Gross amount of loan, repayment of instalments and rate of interest submitted by the petitioner have been used to work out weighted average rate of interest on actual loan.
- (ii) Notional loan arising out of additional capitalization from date of commercial operation to 31.3.2007 has been added in loan amount as on date of commercial operation to arrive at total notional loan. This adjusted gross loan has been considered as normative loan for tariff calculations
- (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 has been considered as moratorium and depreciation during the year has been 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 average loan during the year to arrive at the interest on loan.

- (vi) For Asset-I short term bridge loan from IOB has been replaced by Bond XVII. For calculating the interest for the year 2005-06, weighted average rate of interest based on number of days has been considered.
- (vii) Similarly, for Asset-III short term bridge loan from Canara Bank has been replaced by Bond XIX. Therefore, for calculating the interest for the year 2006-07, weighted average rate of interest based on number of days has been considered.
- (viii) Some of the loan carry floating rate of interest and existing rate of interest as per the petition have been considered in the calculations, subject to mutual settlement between the parties in case of any change/resetting of the interest rate during the tariff period.
- 26. Based on the above, the year-wise details of interest worked out are given hereunder:

(Rs.in lakh)

	Asset- I				Asset-II			А	sset-III		Asset-IV		
	2005-06 (Pro rata)	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09
Opening Gross Loan	1572.00	1626.03	1689.37	1689.37	24910.00	24938.49	24938.49	27301.00	27763.97	27763.97	1178.00	1178.00	1178.00
Cumulative Repayment	104.27	148.28	217.19	287.74	5437.48	7640.28	9846.72	6271.13	8559.27	11054.16	25.50	38.25	98.81
Net Loan- Opening	1467.73	1477.75	1472.18	1401.63	19472.52	17298.21	15091.77	21029.87	19204.69	16709.81	1152.50	1139.75	1079.19
Additions due to Additional Capitalisation	54.03	63.34			28.49			462.97			0.00		
Repayment during the year	44.01	68.91	70.54	70.54	2202.80	2206.44	2077.83	2288.14	2494.88	2246.49	12.75	60.56	60.56
Net Loan- Closing	1477.75	1472.18	1401.63	1331.09	17298.21	15091.77	13013.94	19204.69	16709.81	14463.32	1139.75	1079.19	1018.63
Average Loan	1472.74	1474.96	1436.90	1366.36	18385.36	16194.99	14052.86	20117.28	17957.25	15586.56	1146.13	1109.47	1048.91
Weighted Average Rate of Interest on Loan	7.35%	7.51%	7.46%	7.40%	8.98%	8.93%	8.87%	9.51%	9.48%	9.43%	8.92%	8.92%	8.92%
Interest	72.19 (Pro rata)	110.82	107.15	101.13	1651.52	1445.50	1246.80	1595.13 (Pro rata)	1701.96	1469.69	17.04 (Pro rata)	98.94	93.57

27. The detailed calculations in support of the weighted average rate of interest are contained in Annexure-I, Annexure-II, Annexure-III and Annexure IV attached.

#### **DEPRECIATION**

- 28. 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.
- 29. Depreciation allowed has been worked out as below on average gross block:

											(	ini iakii)	
		Asse	et- I		Д	sset-II		<i>F</i>	Asset-II		F	\sset-I\	/
Details of Depreciation	2005-06	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09
Gross block as on the date of commercial operation	2223.60	2300.78	2391.27	2391.27	35127.95	35168.65	35168.65	38913.10	39574.48	39574.48	1682.19	1682.19	1682.19
Additional Capitalisation	77.18	90.49			40.70			661.38			0.00		
Gross Block at the end of the year	2300.78	2391.27	2391.27	2391.27	35168.65	35168.65	35168.65	39574.48	39574.48	39574.48	1682.19	1682.19	1682.19
Rate of Depreciation	2.9185%	2.9375%	2.9500%	2.9500%	2.5738%	2.5741%	2.5741%	2.5692%	2.5699%	2.5699%	3.6000%	3.6000%	3.6000%
Depreciable Value (90%)	1726.56	1799.78	1840.50	1840.50	31321.83	31340.14	31340.14	34696.13	34993.75	34993.75	1513.97	1513.97	1513.97
Remaining Depreciable Value	1726.56	1755.77	1727.57	1657.03	31321.83	29137.34	26930.90	34696.13	32705.60	30210.72	1513.97	1501.22	1440.66
Depreciation	44.01 (Pro rata)	68.91	70.54	70.54	904.66	905.28	905.28	840.22 (Pro rata)	1017.04	1017.04	10.09 (Pro rata)	60.56	60.56

#### **ADVANCE AGAINST DEPRECIATION**

30. 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

- 31. 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.
- 32. The petitioner has claimed advance Against depreciation in the following manner:
  - (i) 1/10th of gross loan considered for tariff calculations
  - (ii) Cumulative loan as well as repayment of notional loan considered during the year.
  - (ii) Depreciation as claimed in the petition.

- 33. In our calculation Advance Against Depreciation has been worked as under:
  - (i) 1/10th of gross loan has been worked out from the Gross Notional Loan as per para 26 above.
  - (ii) Repayment of notional loan during the year has been considered as per para 26 above.
  - (iii) Depreciation as worked out as per para 29 above has bee taken into account.
- 34. The petitioner has not claimed Advance Against Depreciation for Asset-I and accordingly, the details of Advance Against Depreciation for Asset-II, Asset-III and Asset-IV allowed is given hereunder:

(Rs.in lakh)

		Asset-II			Asset-III		A	Asset-I	<b>V</b>
Details of Depreciation	2006-07	2007-08	2008-09	<b>2006-07</b> (Pro rata)	2007-08	2008-09	2006-07 (Pro rata)	2007- 08	2008-09
1/10th of Gross Loan(s)	2491.00	2493.85	2493.85	2730.10	2776.40	2776.40	117.80	117.80	117.80
Repayment of the Loan	2202.80	2206.44	2077.83	2288.14	2494.88	2246.49	12.75	60.56	60.56
Minimum of the above	2202.80	2206.44	2077.83	2288.14	2494.88	2246.49	12.75	60.56	60.56
Depreciation during the year	904.66	905.28	905.28	840.22	1017.04	1017.04	10.09	60.56	60.56
(A) Difference	1298.14	1301.16	1172.55	1447.92	1477.84	1229.45	2.66	0.00	0.00
Cumulative Repayment of the Loan	7640.28	9846.72	11924.55	8559.27	11054.16	13300.65	38.25	98.81	159.37
Cumulative Depreciation/ Advance against Depreciation	904.66	3108.08	5314.52	840.22	3305.18	5800.07	10.09	73.31	133.87
(B) Difference	6735.62	6738.64	6610.03	7719.05	7748.97	7500.58	28.16	25.50	25.50
Advance against Depreciation Minimum of (A) and (B)	1298.14	1301.16	1172.55	1447.92	1477.84	1229.45	2.66	0.00	0.00

#### **OPERATION & MAINTENANCE EXPENSES**

35. 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

36. The petitioner has claimed O & M expenses for 4 bays for Asset-I, 185.489 ckt.km line length and 2 bays for Asset-II, 221.39 ckt km line length and 4 bays for Asset-III and 2 bays for Asset-IV which have been allowed. Accordingly, the petitioner's entitlement to O & M expenses has been worked out as given hereunder:

(Rs. in lakh)

	Asset-I				Asset-II			Asset-III			Asset-IV					
	2005- 06	2006-07 (Pro rata)	2007-08	2008-09		2006-07 (Pro rata)	2007-08	2008-09		2006-07 (Pro rata)	2007- 08	2008- 09		2006- 07 (Pro rata)	2007- 08	2008- 09
O&M expenses for zero ckt km line length	0.00	0.00	0.00	0.00	O&M expenses for 185.489 ckt km line length	45.63	47.30	49.34	O&M expenses for 221.39 ckt km line length	45.38	56.45	58.89	O&M expenses for zero ckt km line length	0.00	0.00	0.00
O&M expenses for 4 bays	78	121.68	126.52	131.60	O&M expenses for 2 bays	60.84	63.26	65.80	O&M expenses for 4 bays	101.40	126.52	131.60	O&M expenses for 2 bays	10.14	63.26	65.80
Total	78	121.68	126.52	131.60	Total	106.47	110.56	115.14	Total	146.78	182.97	190.49	Total	10.14	63.26	65.80

37. The petitioner has submitted that the wage revision of its employees is due with effect from 1.1.2007. Therefore, according to the petitioner, O & M expenses should be subject to revision on account of revision of employee cost from that date. In the alternative, it has been prayed that the increase in employee cost due to wage revision be allowed as per actuals for extra cost to be incurred consequent to wage revision. We are not expressing any view, as this issue does not arise for consideration at this stage. The petitioner may approach for a relief in this regard at an appropriate stage in accordance with law.

#### INTEREST ON WORKING CAPITAL

38. 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. In the present case, element wise capital expenditure on the date of commercial operation which has been considered as the historical cost for the purpose of the present petition and maintenance spares have been worked out accordingly by escalating 1% of the historical cost @ 6% per annum. In this manner, the value of maintenance spares works out to Rs. 22.24 lakh, Rs. 351.28 lakh, RS. 389.13 and Rs. 16.82 lakh for Asset-I, Asset-II, Asset-III and Asst-IV respectively as on date of commercial operation. The necessary details are given hereunder:

Transmission assets	Date of Commercial Operation	Capital Expenditure (Rs. in lakh) on the date of commercial operation	Escalated spares Cost as on 1.4.2004 (Rs. in lakh)
Asset- I	1.8.2005	2223.60	22.24
Asset-II	1.4.2006	35127.95	351.28
Asset-III	1.6.2006	38913.10	389.13
Asset-IV	1.2.2007	1682.19	16.82

#### (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. The petitioner has claimed O&M expenses for 1 month of O&M expenses of the respective year as claimed in the petition. This has been considered in the working capital.

#### (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. The petitioner has claimed the receivables on the basis 2 months' transmission

charges claimed in the petition. 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 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 1.4.2006, which is in accordance with the 2004 regulations and has been allowed.

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

(Rs. in lakh)

		Asse	et- I		A	Asset-II			Asset-III			Asset-IV	1
	2005- 06	<b>2006-07</b> (Pro rata)	2007- 08	2008- 09	<b>2006-07</b> (Pro rata)	2007- 08	2008- 09	2006- 07 (Pro rata)	2007- 08	2008- 09	2006- 07 (Pro rata)	2007- 08	2008- 09
Maintenance Spares	22.24	23.13	24.51	25.98	351.28	372.36	394.70	389.13	408.59	433.10	16.82	16.99	18.01
O & M expenses	9.75	10.14	10.54	10.97	8.87	9.21	9.60	14.68	15.25	15.87	5.07	5.27	5.48
Receivables	65.69	68.03	68.86	68.73	920.57	887.47	833.14	1105.05	1030.39	950.60	52.97	50.13	49.67
Total	97.68	101.29	103.91	105.68	1,280.73	1,269.04	1,237.43	1,508.86	1,454.23	1,399.58	74.86	72.39	73.16
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	6.67	10.38	10.65	10.83	131.27	130.08	126.84	128.88	149.06	143.46	1.28	7.42	7.50

#### TRANSMISSION CHARGES

40. The transmission charges being allowed for the two transmission assets are summarised below:

(Rs.in lakh)

		Ass	et- I		Asset-II			Asset-III			Asset-IV		
	<b>2005-06</b> (Pro rata)	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	<b>2006-07</b> (Pro rata)	2007-08	2008-09	2006-07 (Pro rata)	2007-08	2008-09
Depreciation	44.01	68.91	70.54	70.54	904.66	905.28	905.28	840.22	1017.04	1017.04	10.09	60.56	60.56
Interest on Loan	72.19	110.82	107.15	101.13	1651.52	1445.50	1246.80	1595.13	1701.96	1469.69	17.04	98.94	93.57
Return on Equity	61.90	96.37	98.27	98.27	1431.37	1432.22	1432.22	1366.32	1653.47	1653.47	11.76	70.59	70.59
Advance against Depreciation	0.00	0.00	0.00	0.00	1298.14	1301.16	1172.55	1447.92	1477.84	1229.45	2.66	0.00	0.00
Interest on Working Capital	6.67	10.38	10.65	10.83	131.27	130.08	126.84	128.88	149.06	143.46	1.28	7.42	7.50
O & M Expenses	78.00	121.68	126.52	131.60	106.47	110.56	115.14	146.78	182.97	190.49	10.14	63.26	65.80
Total	262.78	408.16	413.13	412.37	5523.44	5324.79	4998.82	5525.25	6182.34	5703.60	52.97	300.77	298.01

- 41. 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.
- 42. The petitioner has sought approval for the reimbursement of expenditure of Rs.2,48, 695/- incurred on publication of notices in the newspapers. The petitioner shall claim reimbursement of the said expenditure directly from the respondents in one installment in the ratio applicable for sharing of transmission charges. The petitioner has also sought reimbursement of filing fee of Rs.5 lakh paid. A final view on reimbursement of filing fee is yet to be taken by the Commission for which views of the stakeholder have been called for. The view taken on consideration of the comments received shall apply in the present case as regards reimbursement of filing fee.
- 43. This order disposes of Petition No. 146/2007.

Sd/(R.KRISHNAMOORTHY)

MEMBER

Delhi dated the 21st August 2008

sd/-(BHANU BHUSHAN) MEMBER

#### CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

### ICT-I along with associated bays at Meerut sub-station

(Rs. in lakh)

	Details of Loan	2005-06	2006-07	2007-08	2008-09
1	Bond-VI				
	Gross Loan opening	100.00	100.00	100.00	100.00
	Cumulative Repayment upto	30.00	40.00	50.00	60.00
	DOCO/previous year				
	Net Loan-Opening	70.00	60.00	50.00	40.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	10.00	10.00	10.00	10.00
	Net Loan-Closing	60.00	50.00	40.00	30.00
	Average Loan	65.00	55.00	45.00	35.00
	Rate of Interest	13.13%	13.13%	13.13%	13.13%
	Interest	8.53	7.22	5.91	4.60
	Repayment Schedule	0.00		stalments from	
2	Bond-VII		10 Allitual IIIs		0.12.2002
		11.00	11.00	11.00	11.00
	Gross Loan opening Cumulative Repayment up to	11.00 4.40	11.00 6.60	11.00 8.80	11.00 11.00
	DOCO/previous year	4.40	0.00	0.60	11.00
	Net Loan-Opening	6.60	4.40	2.20	0.00
	, ,				0.00
	Additions during the year  Repayment during the year	0.00 2.20	0.00 2.20	0.00 2.20	0.00
	Net Loan-Closing	4.40	2.20	0.00	0.00
	Average Loan	5.50	3.30	1.10	0.00
	Rate of Interest	13.64%	13.64%	13.64%	13.64%
	Interest	0.75	0.45	0.15	0.00
	Repayment Schedule		5 Annual inst	alments from 4	1.8.2003
3	Bond-IX				
	Gross Loan opening	15.00	15.00	15.00	15.00
	Cumulative Repayment up to	3.00	4.50	6.00	7.50
	DOCO/previous year				
	Net Loan-Opening	12.00	10.50	9.00	7.50
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	1.50	1.50	1.50	1.50
	Net Loan-Closing	10.50	9.00	7.50	6.00
	Average Loan	11.25	9.75	8.25	6.75
	Rate of Interest	12.25%	12.25%	12.25%	12.25%
	Interest	1.38	1.19	1.01	0.83
	Repayment Schedule		10 Annual ins	stalments from	22.8.2003
4	Bond-X				
	Gross Loan opening	44.00	44.00	44.00	44.00
	Cumulative Repayment upto	7.33	7.33	11.00	14.66
	DOCO/previous year				
	Net Loan-Opening	36.67	36.67	33.00	29.34
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	3.67	3.67	3.67
	Net Loan-Closing	36.67	33.00	29.34	25.67
	Average Loan	36.67	34.84	31.17	27.50
	Rate of Interest	10.90%	10.90%	10.90%	10.90%
	Interest	4.00	3.80	3.40	3.00

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	Repayment Schedule		12 Annual ins	talments from	21.06.2004
5	Bond-XI Option-I				
	Gross Loan opening	49.00	49.00	49.00	49.00
	Cumulative Repayment up to	0.00	4.08	8.17	12.25
	DOCO/previous year				
	Net Loan-Opening	49.00	44.92	40.83	36.75
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	4.08	4.08	4.08	4.08
	Net Loan-Closing	44.92	40.83	36.75	32.67
	Average Loan	46.96	42.88	38.79	34.71
	Rate of Interest	9.80%	9.80%	9.80%	9.80%
	Interest	4.60	4.20	3.80	3.40
	Repayment Schedule		12 Annual ins	talments from	7.12.2005
6	Bond-XI (Option-II)				
	Gross Loan opening	9.00	9.00	9.00	9.00
	Cumulative Repayment up to	3.00	4.50	6.00	7.50
	DOCO/previous year				
	Net Loan-Opening	6.00	4.50	3.00	1.50
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	1.50	1.50	1.50	1.50
	Net Loan-Closing	4.50	3.00	1.50	0.00
	Average Loan	5.25	3.75	2.25	0.75
	Rate of Interest	9.20%	9.20%	9.20%	9.20%
	Interest	0.48	0.35	0.21	0.07
	Repayment Schedule			alments from 7	
7	Bond-XIII Option-II				
-	Gross Loan opening	9.00	9.00	9.00	9.00
	Cumulative Repayment upto	4.50	4.50	6.00	7.50
	DOCO/previous year				
	Net Loan-Opening	4.50	4.50	3.00	1.50
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	1.50	1.50	1.50
	Net Loan-Closing	4.50	3.00	1.50	0.00
	Average Loan	4.50	3.75	2.25	0.75
	Rate of Interest	7.85%	7.85%	7.85%	7.85%
	Interest	0.35	0.29	0.18	0.06
	Repayment Schedule		6 Annual insta	alments from 3	1.7.2003
8	Bond- XVII				
	Gross Loan opening	900.00	900.00	900.00	900.00
	Cumulative Repayment up to	0.00	0.00	0.00	0.00
	DOCO/previous year				
	Net Loan-Opening	900.00	900.00	900.00	900.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	900.00	900.00	900.00	900.00
	Average Loan	900.00	900.00	900.00	900.00
	Rate of Interest	7.07%	7.39%	7.39%	7.39%
	Interest	63.64	66.51	66.51	66.51
	Repayment Schedule	00.01		talments from	
9	ICICI		10711110011110	tallifornio ironi	
Ŭ	Gross Loan opening	23.00	23.00	23.00	23.00
	Cumulative Repayment upto	6.90	6.90	9.20	11.50
	DOCO/previous year	0.30	0.50	3.20	11.50
	Net Loan-Opening	16.10	16.10	13.80	11.50
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	2.30	2.30	2.30
	Net Loan-Closing	16.10	13.80	11.50	9.20
	THE LOGIT-CIUSING	10.10	13.00	11.50	5.20

Rate of Interest		Average Loan	16.10	14.95	12.65	10.35
Interest   1.18   1.09   0.93   0.08   0.09   0.09   0.00   0.0						7.32%
Repayment Schedule						0.76
PFC   Gross Loan opening						
Gross Loan opening	10			To difficult		20 0 2000
Net Loan-Closing   11.00   1			49.00	49.00	49.00	49.00
Net Loan-Opening						26.95
Additions during the year   2.45   4.90						
Additions during the year   2.45   4.90		Net Loan-Opening	34.30	31.85	26.95	22.05
Repayment during the year   2.45   4.90		<u> </u>				0.00
Net Loan-Closing						4.90
Average Loan   33.08   29.40   24.50   15     Rate of Interest   8.24%   9.25%   9.25%   9.2     Interest   2.73   2.72   2.27     Repayment Schedule   40 equal quarterly instalments from 15.10.2002     PNB-I			31.85	26.95		17.15
Rate of Interest   8.24%   9.25%   9.25%   9.25     Interest   2.73   2.72   2.27     Repayment Schedule   40 equal quarterly instalments from   15.10.2002     PNB-I   Gross Loan opening   11.00   11.00   11.00   11.00     Cumulative Repayment upto   2.20   3.30   4.40   5.5     Cumulative Repayment upto   2.20   3.30   4.40   5.5     Cumulative Repayment upto   2.20   3.30   4.40   5.5     Additions during the year   0.00   0.00   0.00   0.00   0.00     Repayment during the year   1.10   1.10   1.10   1.10     Net Loan-Closing   7.70   6.60   5.50   4.40     Average Loan   8.25   7.15   6.05   4.40     Rate of Interest   8.66%   8.66%   8.66%   8.66     Interest   0.71   0.62   0.52   0.52     Repayment Schedule   10 Annual Instalments from 30.3.200     PNB-II   Gross Loan opening   11.00   11.00   11.00   11.00     Cumulative Repayment up to   0.92   1.84   2.75   3.50     DOCO/previous year   Net Loan-Opening   10.08   9.16   8.25   3.50     Additions during the year   0.92   0.92   0.92   0.92     Net Loan-Closing   9.16   8.25   7.33   0.50     Average Loan   9.62   8.71   7.79   0.50     Rate of Interest   8.60%   8.60%   8.60%   8.60     Rate of Interest   8.60%   8.60%   8.60%   8.60%   8.60%     Interest   0.83   0.75   0.67   0.67     Repayment Schedule   12 Annual Instalments from 8.3.2005			33.08	29.40	24.50	19.60
Interest   2.73   2.72   2.27			8.24%	9.25%	9.25%	9.25%
11   PNB-I		Interest	2.73	2.72		1.81
11   PNB-I		Repayment Schedule		40 equal qua	arterly instalme	nts from
Gross Loan opening					,	
Cumulative Repayment upto DOCO/previous year   Section 2.20   Section 3.30   Se	11	PNB-I				
Net Loan-Opening   8.80   7.70   6.60   5.50   Additions during the year   0.00   0.						11.00
Net Loan-Opening			2.20	3.30	4.40	5.50
Additions during the year   0.00						
Repayment during the year				7.70	6.60	5.50
Net Loan-Closing						0.00
Average Loan   8.25   7.15   6.05   4     Rate of Interest   8.66%   8.66%   8.66%   8.66%   8.66%     Interest   0.71   0.62   0.52   0.52     Repayment Schedule   10 Annual Instalments from 30.3.200     PNB-II						1.10
Rate of Interest   8.66%   8		9				4.40
Interest   0.71   0.62   0.5						4.95
Repayment Schedule						8.66%
The image			0.71			0.43
Gross Loan opening         11.00         11.00         11.00         12.00 <td></td> <td></td> <td></td> <td>10 Annual Ins</td> <td>stalments from</td> <td>30.3.2004</td>				10 Annual Ins	stalments from	30.3.2004
Cumulative Repayment up to DOCO/previous year         0.92         1.84         2.75         3           Net Loan-Opening         10.08         9.16         8.25         7           Additions during the year         0.00         0.00         0.00         0.00           Repayment during the year         0.92         0.92         0.92         0.92           Net Loan-Closing         9.16         8.25         7.33         6           Average Loan         9.62         8.71         7.79         6           Rate of Interest         8.60%         8.60%         8.60%         8.6           Interest         0.83         0.75         0.67         0           Repayment Schedule         12 Annual Instalments from 8.3.2005	12					
DOCO/previous year         10.08         9.16         8.25         7           Additions during the year         0.00						11.00
Net Loan-Opening         10.08         9.16         8.25           Additions during the year         0.00         0.00         0.00           Repayment during the year         0.92         0.92         0.92           Net Loan-Closing         9.16         8.25         7.33         6           Average Loan         9.62         8.71         7.79         6           Rate of Interest         8.60%         8.60%         8.60%         8.6           Interest         0.83         0.75         0.67         0           Repayment Schedule         12 Annual Instalments from 8.3.2005			0.92	1.84	2.75	3.67
Additions during the year         0.00         0.00         0.00         0.00           Repayment during the year         0.92         0.92         0.92         0.92           Net Loan-Closing         9.16         8.25         7.33         6           Average Loan         9.62         8.71         7.79         6           Rate of Interest         8.60%         8.60%         8.60%         8.6           Interest         0.83         0.75         0.67         0           Repayment Schedule         12 Annual Instalments from 8.3.2005			10.08	9.16	8 25	7.33
Repayment during the year       0.92       0.92       0.92       0.92         Net Loan-Closing       9.16       8.25       7.33       6         Average Loan       9.62       8.71       7.79       6         Rate of Interest       8.60%       8.60%       8.60%       8.6         Interest       0.83       0.75       0.67       0         Repayment Schedule       12 Annual Instalments from 8.3.2005		. 0				0.00
Net Loan-Closing         9.16         8.25         7.33         6           Average Loan         9.62         8.71         7.79         6           Rate of Interest         8.60%         8.60%         8.60%         8.6           Interest         0.83         0.75         0.67         0           Repayment Schedule         12 Annual Instalments from 8.3.2005						0.92
Average Loan         9.62         8.71         7.79         6           Rate of Interest         8.60%         8.60%         8.60%         8.60%           Interest         0.83         0.75         0.67         0           Repayment Schedule         12 Annual Instalments from 8.3.2005						6.41
Rate of Interest         8.60%         8.60%         8.60%         8.60%           Interest         0.83         0.75         0.67         0           Repayment Schedule         12 Annual Instalments from 8.3.2005						6.87
Interest0.830.750.670Repayment Schedule12 Annual Instalments from 8.3.2005						8.60%
Repayment Schedule 12 Annual Instalments from 8.3.2005						0.59
			0.00			
13 Corporation Bank	13	Corporation Bank				0.0.2000
	10	•	5.00	5.00	5.00	5.00
						2.25
DOCO/previous year						
Net Loan-Opening         4.25         3.75         3.25		Net Loan-Opening	4.25	3.75	3.25	2.75
						0.00
Repayment during the year 0.50 0.50 0.50 0		Repayment during the year	0.50	0.50	0.50	0.50
			3.75	3.25	2.75	2.25
			4.00	3.50	3.00	2.50
			9.15%	9.15%	9.15%	9.15%
						0.23
Repayment Schedule 20 HY equal Instalments from 10.3.20					Instalments fro	
14 OBC	14	OBC				
Gross Loan opening         8.00         8.00         8.00         8		Gross Loan opening	8.00	8.00	8.00	8.00

5.33 0.00
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0.67
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0.00
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241.78
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6.2004
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0.00
0.00
54.00
54.00
7.39%
3.99
2009
626.13
242.03
384.09
0.00
49.90
334.19
359.14
7.40%
100.60

## 800 kV Tehri-Merrut CKT-I along with associated bays

	Details of Loan	2006-07	2007-08	2008-09
1	Bond-VI			
	Gross Loan opening	147.00	147.00	147.00
	Cumulative Repayment upto DOCO/previous	58.80	73.50	88.20
	year			
	Net Loan-Opening	88.20	73.50	58.80
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	14.70	14.70	14.70
	Net Loan-Closing	73.50	58.80	44.10
	Average Loan	80.85	66.15	51.45
	Rate of Interest	13.13%	13.13%	13.13%
	Interest	10.62	8.69	6.76
	Repayment Schedule	10 Annual in: 6.12.2002	stalments fr	om
2	Bond-VII			
	Gross Loan opening	642.00	642.00	642.00
	Cumulative Repayment upto DOCO/previous year	385.20	513.60	642.00
	Net Loan-Opening	256.80	128.40	0.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	128.40	128.40	0.00
	Net Loan-Closing	128.40	0.00	0.00
	Average Loan	192.60	64.20	0.00
	Rate of Interest	13.64%	13.64%	13.64%
	Interest	26.27	8.76	0.00
	Repayment Schedule	5 Annual inst	alments fro	m 4.8.2003
3	Bond-IX			
	Gross Loan opening	500.00	500.00	500.00
	Cumulative Repayment upto DOCO/previous year	150.00	200.00	250.00
	Net Loan-Opening	350.00	300.00	250.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	50.00	50.00	50.00
	Net Loan-Closing	300.00	250.00	200.00
	Average Loan	325.00	275.00	225.00
	Rate of Interest	12.25%	12.25%	12.25%
	Interest	39.81	33.69	27.56
	Repayment Schedule	10 Annual in		om
		22.08.2003		
4	Bond-X			
	Gross Loan opening	3863.00	3863.00	3863.00
	Cumulative Repayment upto DOCO/previous year	643.83	965.75	1287.67
	Net Loan-Opening	3219.17	2897.25	2575.33
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	321.92	321.92	321.92
	Net Loan-Closing	2897.25	2575.33	2253.41
	Average Loan	3058.21	2736.29	2414.37
	Rate of Interest	10.90%	10.90%	10.90%
	Interest	333.34	298.26	263.17
	Repayment Schedule	12 Annual in	stalments fr	om

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		21.06.2004		
5	Bond-XI Option-I			
	Gross Loan opening	4295.00	4295.00	4295.00
	Cumulative Repayment upto DOCO/previous year	357.92	715.84	1073.76
	Net Loan-Opening	3937.08	3579.16	3221.24
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	357.92	357.92	357.92
	Net Loan-Closing	3579.16	3221.24	2863.32
	Average Loan	3758.12	3400.20	3042.28
	Rate of Interest	9.80%	9.80%	9.80%
	Interest	368.30	333.22	298.14
	Repayment Schedule	12 Annual in 07.12.2005	stalments fro	om
6	Bond-XI (Option-II)	0111212000		
	Gross Loan opening	752.00	752.00	752.00
	Cumulative Repayment upto DOCO/previous	376.00	501.33	626.66
	year			
	Net Loan-Opening	376.00	250.67	125.34
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	125.33	125.33	125.33
	Net Loan-Closing	250.67	125.34	0.01
	Average Loan	313.34	188.01	62.68
	Rate of Interest	9.20%	9.20%	9.20%
	Interest	28.83	17.30	5.77
	Repayment Schedule	6 Annual ins	talments fror	n
		07.12.2003		
7	Bond-XIII Option-II			
	Gross Loan opening	717.00	717.00	717.00
	Cumulative Repayment upto DOCO/previous	358.50	478.00	597.50
	year			
	Net Loan-Opening	358.50	239.00	119.50
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	119.50	119.50	119.50
	Net Loan-Closing	239.00	119.50	0.00
	Average Loan Rate of Interest	298.75	179.25	59.75 7.85%
	Interest	7.85% 23.45	7.85% 14.07	4.69
	Repayment Schedule	6 Annual ins		
	Repayment Scriedule	31.07.2003	taiments noi	11
8	Bond- XVII	01.07.2000		
	Gross Loan opening	1143.00	1143.00	1143.00
	Cumulative Repayment upto DOCO/previous	0.00	0.00	0.00
	year			
	Net Loan-Opening	1143.00	1143.00	1143.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	1143.00	1143.00	1143.00
	Average Loan	1143.00	1143.00	1143.00
	Rate of Interest	7.39%	7.39%	7.39%
	Interest	84.47	84.47	84.47
	Repayment Schedule	10 Annual In		
		22.09.2009		
9	ICICI			
<u> </u>	Gross Loan opening	2016.00	2016.00	2016.00
	Cumulative Repayment upto DOCO/previous	604.80	806.40	1008.00
	year	1		
<u> </u>	Net Loan-Opening	1411.20	1209.60	1008.00

	Additions during the year	0.00	0.00	0.00
	Additions during the year Repayment during the year	0.00 201.60	0.00 201.60	0.00 201.60
	Net Loan-Closing	1209.60	1008.00	806.40
	Average Loan	1310.40	1108.80	907.20
	Rate of Interest	7.32%	7.32%	7.32%
	Interest	95.92	81.16	66.41
	Repayment Schedule	10 annual in 2003	atalments fro	m 29-6-
10	PFC			
	Gross Loan opening	4304.00	4304.00	4304.00
	Cumulative Repayment upto DOCO/previous year	1506.40	1936.80	2367.20
	Net Loan-Opening	2797.60	2367.20	1936.80
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	430.40	430.40	430.40
	Net Loan-Closing	2367.20	1936.80	1506.40
		2582.40	2152.00	
	Average Loan			1721.60
	Rate of Interest	9.25%	9.25%	9.25%
	Interest	238.87	199.06	159.25
	Repayment Schedule	40 equal qtr 15.10.2002	ly inatalments	s from
11	PNB-I			
	Gross Loan opening	922.00	922.00	922.00
	Cumulative Repayment upto DOCO/previous year	276.60	368.80	461.00
	Net Loan-Opening	645.40	553.20	461.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	92.20	92.20	92.20
	Net Loan-Closing	553.20	461.00	368.80
	Average Loan	599.30	507.10	414.90
	Rate of Interest	8.66%	8.66%	8.66%
	Interest	51.90	43.91	35.93
			nstalments fro	
	Repayment Schedule	30.3.2004	istaiments no	)
12	PNB-II			
	Gross Loan opening	899.00	899.00	899.00
	Cumulative Repayment upto DOCO/previous year	149.83	224.75	299.67
	Net Loan-Opening	749.17	674.25	599.33
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	74.92	74.92	74.92
	Net Loan-Closing	674.25	599.33	524.41
	Average Loan	711.71	636.79	561.87
	Rate of Interest	8.60%	8.60%	8.60%
	Interest	61.21	54.76	48.32
	Repayment Schedule		nstalments fro	
13	Corporation Bank	30.0.2000	Ī	
13	Gross Loan opening	461.00	461.00	461.00
	Cumulative Repayment upto DOCO/previous	115.25	161.60	207.95
	Net Loan-Opening	345.75	299.40	253.05
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	46.35	46.35	46.35
	Net Loan-Closing	299.40	253.05	206.70
	Average Loan	322.58	276.23	229.88
-	Rate of Interest			
	rate of interest	9.15%	9.15%	9.15%

1	Interest	29.52	25.27	21.03
	Repayment Schedule	20 HY equa	I Instalments	from
	10.3.2004			
14	OBC			
	Gross Loan opening	164.00	164.00	164.00
	Cumulative Repayment upto DOCO/previous	27.33	41.00	54.67
	year			
	Net Loan-Opening	136.67	123.00	109.33
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	13.67	13.67	13.67
	Net Loan-Closing	123.00	109.33	95.66
	Average Loan	129.84	116.17	102.50
	Rate of Interest	8.60%	8.60%	8.60%
	Interest	11.17	9.99	8.81
	Repayment Schedule	12 Annual Ir	nstalments fro	om
		22.3.2005		
15	BOI (Foreign Currency Loan)			
	Gross Loan opening	3820.75	3820.75	3820.75
	Cumulative Repayment upto DOCO/previous	402.18	603.28	804.37
	year			
	Net Loan-Opening	3418.57	3217.47	3016.38
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	201.09	201.09	201.09
	Net Loan-Closing	3217.47	3016.38	2815.29
	Average Loan	3318.02	3116.93	2915.84
	Rate of Interest	6.74%	6.74%	6.74%
	Interest	223.63	210.08	196.53
	Repayment Schedule		H Y Instalm	
		10.06.2004		
16	Bond- XII			
	Gross Loan opening	97.00	97.00	97.00
	Cumulative Repayment upto DOCO/previous	8.08	16.16	24.24
	year			
			80.84	
	Net Loan-Opening	88.92	00.04	72.76
	Additions during the year	88.92 0.00	0.00	72.76 0.00
	Additions during the year Repayment during the year	0.00 8.08	0.00	0.00
	Additions during the year	0.00	0.00	0.00
	Additions during the year Repayment during the year	0.00 8.08	0.00	0.00
	Additions during the year Repayment during the year Net Loan-Closing	0.00 8.08 80.84	0.00 8.08 72.76	0.00 8.08 64.68
	Additions during the year Repayment during the year Net Loan-Closing Average Loan	0.00 8.08 80.84 84.88	0.00 8.08 72.76 76.80	0.00 8.08 64.68 68.72
	Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest	0.00 8.08 80.84 84.88 9.70% 8.23	0.00 8.08 72.76 76.80 9.70%	0.00 8.08 64.68 68.72 9.70% 6.67
	Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule	0.00 8.08 80.84 84.88 9.70% 8.23	0.00 8.08 72.76 76.80 9.70% 7.45	0.00 8.08 64.68 68.72 9.70% 6.67
17	Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule  Bond- VIII	0.00 8.08 80.84 84.88 9.70% 8.23 10 Annual Ir 22.09.2009	0.00 8.08 72.76 76.80 9.70% 7.45 nstalments fro	0.00 8.08 64.68 68.72 9.70% 6.67
17	Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule  Bond- VIII Gross Loan opening	0.00 8.08 80.84 84.88 9.70% 8.23 10 Annual Ir 22.09.2009	0.00 8.08 72.76 76.80 9.70% 7.45 nstalments fro	0.00 8.08 64.68 68.72 9.70% 6.67 om
17	Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule  Bond- VIII Gross Loan opening Cumulative Repayment upto DOCO/previous	0.00 8.08 80.84 84.88 9.70% 8.23 10 Annual Ir 22.09.2009	0.00 8.08 72.76 76.80 9.70% 7.45 nstalments fro	0.00 8.08 64.68 68.72 9.70% 6.67
17	Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule  Bond- VIII Gross Loan opening Cumulative Repayment upto DOCO/previous year	0.00 8.08 80.84 84.88 9.70% 8.23 10 Annual Ir 22.09.2009 167.00 16.70	0.00 8.08 72.76 76.80 9.70% 7.45 nstalments from	0.00 8.08 64.68 68.72 9.70% 6.67 om
17	Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule  Bond- VIII Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening	0.00 8.08 80.84 84.88 9.70% 8.23 10 Annual Ir 22.09.2009 167.00 16.70	0.00 8.08 72.76 76.80 9.70% 7.45 nstalments from 167.00 33.40	0.00 8.08 64.68 68.72 9.70% 6.67 om 167.00 50.10
17	Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule  Bond- VIII Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year	0.00 8.08 80.84 84.88 9.70% 8.23 10 Annual Ir 22.09.2009 167.00 16.70	0.00 8.08 72.76 76.80 9.70% 7.45 nstalments fro 167.00 33.40	0.00 8.08 64.68 68.72 9.70% 6.67 om 167.00 50.10
17	Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule  Bond- VIII Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year	0.00 8.08 80.84 84.88 9.70% 8.23 10 Annual Ir 22.09.2009 167.00 150.30 0.00 16.70	0.00 8.08 72.76 76.80 9.70% 7.45 nstalments fro  167.00 33.40 133.60 0.00 16.70	0.00 8.08 64.68 68.72 9.70% 6.67 om 167.00 50.10 116.90 0.00 16.70
17	Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule  Bond- VIII Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year Net Loan-Closing	0.00 8.08 80.84 84.88 9.70% 8.23 10 Annual Ir 22.09.2009 167.00 150.30 0.00 16.70 133.60	0.00 8.08 72.76 76.80 9.70% 7.45 nstalments fro  167.00 33.40  133.60 0.00 16.70 116.90	0.00 8.08 64.68 68.72 9.70% 6.67 om 167.00 50.10 116.90 0.00 16.70 100.20
17	Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule  Bond- VIII 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	0.00 8.08 80.84 84.88 9.70% 8.23 10 Annual Ir 22.09.2009 167.00 150.30 0.00 16.70 133.60 141.95	0.00 8.08 72.76 76.80 9.70% 7.45 nstalments fro  167.00 33.40 133.60 0.00 16.70 116.90 125.25	0.00 8.08 64.68 68.72 9.70% 6.67 om 167.00 50.10 116.90 0.00 16.70 100.20 108.55
17	Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule  Bond- VIII 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	0.00 8.08 80.84 84.88 9.70% 8.23 10 Annual Ir 22.09.2009 167.00 150.30 0.00 16.70 133.60 141.95 10.35%	0.00 8.08 72.76 76.80 9.70% 7.45 nstalments fro  167.00 33.40  133.60 0.00 16.70 116.90 125.25 10.35%	0.00 8.08 64.68 68.72 9.70% 6.67 om 167.00 50.10 116.90 0.00 16.70 100.20 108.55 10.35%
17	Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule  Bond- VIII 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	0.00 8.08 80.84 84.88 9.70% 8.23 10 Annual Ir 22.09.2009 167.00 150.30 0.00 16.70 133.60 141.95 10.35% 14.69	0.00 8.08 72.76 76.80 9.70% 7.45 nstalments fro  167.00 33.40 133.60 0.00 16.70 116.90 125.25 10.35% 12.96	0.00 8.08 64.68 68.72 9.70% 6.67 om 167.00 50.10 116.90 0.00 16.70 100.20 108.55 10.35% 11.23
17	Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule  Bond- VIII 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	0.00 8.08 80.84 84.88 9.70% 8.23 10 Annual Ir 22.09.2009 167.00 150.30 0.00 16.70 133.60 141.95 10.35% 14.69 10 Annual Ir	0.00 8.08 72.76 76.80 9.70% 7.45 nstalments fro  167.00 33.40  133.60 0.00 16.70 116.90 125.25 10.35%	0.00 8.08 64.68 68.72 9.70% 6.67 om 167.00 50.10 116.90 0.00 16.70 100.20 108.55 10.35% 11.23
17	Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule  Bond- VIII 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	0.00 8.08 80.84 84.88 9.70% 8.23 10 Annual Ir 22.09.2009 167.00 150.30 0.00 16.70 133.60 141.95 10.35% 14.69	0.00 8.08 72.76 76.80 9.70% 7.45 nstalments fro  167.00 33.40 133.60 0.00 16.70 116.90 125.25 10.35% 12.96	0.00 8.08 64.68 68.72 9.70% 6.67 om 167.00 50.10 116.90 0.00 16.70 100.20 108.55 10.35% 11.23
17	Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule  Bond- VIII 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	0.00 8.08 80.84 84.88 9.70% 8.23 10 Annual Ir 22.09.2009 167.00 150.30 0.00 16.70 133.60 141.95 10.35% 14.69 10 Annual Ir	0.00 8.08 72.76 76.80 9.70% 7.45 nstalments fro  167.00 33.40 133.60 0.00 16.70 116.90 125.25 10.35% 12.96	0.00 8.08 64.68 68.72 9.70% 6.67 om 167.00 50.10 116.90 0.00 16.70 100.20 108.55 10.35% 11.23

C	Cumulative Repayment up to DOCO/previous	5437.42	7640.21	9842.99
У	/ear			
N	Net Loan-Opening	19472.33	17269.54	15066.76
Α	Additions during the year	0.00	0.00	0.00
F	Repayment during the year	2202.78	2202.78	2074.38
N	Net Loan-Closing	17269.54	15066.76	12992.38
A	Average Loan	18370.93	16168.15	14029.57
F	Rate of Interest	8.98%	8.93%	8.87%
li	nterest	1650.23	1443.10	1244.73

# 800 kV Tehri-Merrut ckt0ll and 400 kV S/C Meerut-Muzaffarnagar transmission line along with associated bays

(Rs. in lakh)

1	B ( !) ( !	1 0000 5-	222 22	(Rs. in lakh)
	Details of Loan	2006-07	2007-08	2008-09
1	Bond-VI			
	Gross Loan opening	149.00	149.00	149.00
	Cumulative Repayment upto	59.60	74.50	89.40
	DOCO/previous year			
	Net Loan-Opening	89.40	74.50	59.60
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	14.90	14.90	14.90
	Net Loan-Closing	74.50	59.60	44.70
	Average Loan	81.95	67.05	52.15
	Rate of Interest	13.13%	13.13%	13.13%
	Interest	10.76	8.80	6.85
	Repayment Schedule	10 Annual instalm	ents from 6.	12.2002
2	Bond-VII			
	Gross Loan opening	1212.00	1212.00	1212.00
	Cumulative Repayment upto	727.20	969.60	1212.00
	DOCO/previous year		230.00	
	Net Loan-Opening	484.80	242.40	0.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	242.40	242.40	0.00
	Net Loan-Closing	242.40	0.00	0.00
	Average Loan	363.60	121.20	0.00
	Rate of Interest	13.64%	13.64%	13.64%
	Interest	49.60	16.53	0.00
		5 Annual instalme		
	Repayment Schedule  Bond-IX	5 Annuai instaime	riis irom 4.0	8.2003
3		04.40.00	04.40.00	04.40.00
	Gross Loan opening	2146.00	2146.00 858.40	2146.00 1073.00
	Cumulative Repayment upto DOCO/previous year	643.80	030.40	1073.00
	-	4500.00	4007.00	4070.00
	Net Loan-Opening	1502.20	1287.60	1073.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	214.60	214.60	214.60
	Net Loan-Closing	1287.60	1073.00	858.40
	Average Loan	1394.90	1180.30	965.70
	Rate of Interest	12.25%	12.25%	12.25%
	Interest	170.88	144.59	118.30
	Repayment Schedule	10 Annual instalm	ents from 22	2.8.2003
4	Bond-X			
	Gross Loan opening	3903.00	3903.00	3903.00
	Cumulative Repayment upto	650.50	975.75	1301.00
	DOCO/previous year	0050 50	0007.05	0000.00
	Net Loan-Opening	3252.50	2927.25	2602.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	325.25	325.25	325.25
	Net Loan-Closing	2927.25	2602.00	2276.75
	Average Loan	3089.88	2764.63	2439.38
	Rate of Interest	10.90%	10.90%	10.90%
	Interest	336.80	301.34	265.89

	Repayment Schedule	12 Annual instalm	ents from 21	.6.2004
5	Bond-XI Option-I			
	Gross Loan opening	4340.00	4340.00	4340.00
	Cumulative Repayment upto	361.67	723.34	1085.01
	DOCO/previous year			
	Net Loan-Opening	3978.33	3616.66	3254.99
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	361.67	361.67	361.67
	Net Loan-Closing	3616.66	3254.99	2893.32
	Average Loan	3797.50	3435.83	3074.16
	Rate of Interest	9.80%	9.80%	9.80%
	Interest	372.15	336.71	301.27
_	Repayment Schedule	12 Annual instalm	ents from 7.	12.2005
6	Bond-XI (Option-II) Gross Loan opening	759.00	759.00	759.00
	Cumulative Repayment upto	379.50	506.00	632.50
	DOCO/previous year	37 9.50	300.00	032.30
	* *	379.50	252.00	126.50
	Net Loan-Opening		253.00	
	Additions during the year Repayment during the year	0.00 126.50	0.00 126.50	0.00 126.50
	Net Loan-Closing	253.00	126.50	0.00
	Average Loan	316.25	189.75	63.25
	Rate of Interest	9.20%	9.20%	9.20%
	Interest	29.10	17.46	5.82
	Repayment Schedule	6 Annual instalme		
7	Bond-XIII Option-II	o / timadi motamie	110 110111 7 : 12	2000
	Gross Loan opening	717.00	717.00	717.00
	Cumulative Repayment upto	358.50	478.00	597.50
	DOCO/previous year			
	Net Loan-Opening	358.50	239.00	119.50
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	119.50	119.50	119.50
	Net Loan-Closing	239.00	119.50	0.00
	Average Loan	298.75	179.25	59.75
	Rate of Interest	7.85%	7.85%	7.85%
	Interest	23.45	14.07	4.69
	Repayment Schedule	6 Annual instalme	ents from 31.7	7.2003
8	Bond- XVII			
	Gross Loan opening	1226.00	1226.00	1226.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	1226.00	1226.00	1226.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	1226.00	1226.00	1226.00
	Average Loan	1226.00	1226.00	1226.00
	Rate of Interest	7.39%	7.39%	7.39%
	Interest	90.60	90.60	90.60
	Repayment Schedule	10 Annual Instalm	ents from 22	.9.2009
9	ICICI			
	Gross Loan opening	2037.00	2037.00	2037.00
	Cumulative Repayment upto	611.10	814.80	1018.50
	DOCO/previous year			
	Net Loan-Opening	1425.90	1222.20	1018.50
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	203.70	203.70	203.70
	Net Loan-Closing	1222.20	1018.50	814.80

	Average Loan	1324.05	1120.35	916.65	
	Rate of Interest	7.32%	7.32%	7.32%	
	Interest	96.92	82.01	67.10	
	Repayment Schedule				
40	PFC	10 annuai matam	10 annual inatalments from 29-6-2003		
10	Gross Loan opening	4349.00	4349.00	4349.00	
	Cumulative Repayment upto	1630.88	1957.06	2391.96	
	DOCO/previous year	1030.88	1937.00	2391.90	
	·	0740.40	0204.05	4057.05	
	Net Loan-Opening	2718.12	2391.95	1957.05	
	Additions during the year	0.00 326.18	0.00	0.00 434.90	
	Repayment during the year  Net Loan-Closing		434.90		
	,	2391.95	1957.05	1522.15	
	Average Loan	2555.03	2174.50	1739.60	
	Rate of Interest	9.25%	9.25%	9.25%	
	Interest	236.34	201.14	160.91	
	Repayment Schedule	40 equal quarterl	y inatalments	s from	
4.4	DND I	15.10.2002			
11	PNB-I	000.00	000.00	000.00	
	Gross Loan opening	932.00 279.60	932.00	932.00	
	Cumulative Repayment upto DOCO/previous year	2/9.60	372.80	466.00	
	<u> </u>	050.40	FF0 00	400.00	
	Net Loan-Opening	652.40	559.20	466.00	
	Additions during the year	0.00	0.00	0.00	
	Repayment during the year	93.20	93.20	93.20	
	Net Loan-Closing	559.20	466.00	372.80	
	Average Loan	605.80	512.60	419.40	
	Rate of Interest	9.16%	9.16%	9.16%	
	Interest	55.49	46.95	38.42	
	Repayment Schedule	10 Annual Instalm	nents from 30	).3.2004	
12	PNB-II				
	Gross Loan opening	909.00	909.00	909.00	
	Cumulative Repayment upto	151.50	227.25	303.00	
	DOCO/previous year Net Loan-Opening	757.50	604.75	606.00	
	. 0		681.75		
	Additions during the year Repayment during the year	0.00 75.75	0.00 75.75	0.00 75.75	
	. ,				
	Net Loan-Closing	681.75	606.00	530.25	
	Average Loan	719.63	643.88	568.13	
	Rate of Interest	9.10%	9.10%	9.10%	
	Interest	65.49	58.59	51.70	
	Repayment Schedule	12 Annual Instalm	nents from 8.	3.2005	
13	Corporation Bank				
	Gross Loan opening	466.00	466.00	466.00	
	Cumulative Repayment upto	116.50	163.10	209.70	
	DOCO/previous year	2.12.55	000.00	050.00	
	Mattaga On '	040.50	302.90	256.30	
	Net Loan-Opening	349.50			
	Additions during the year	0.00	0.00	0.00	
	Additions during the year Repayment during the year	0.00 46.60	0.00 46.60	0.00 46.60	
	Additions during the year Repayment during the year Net Loan-Closing	0.00 46.60 302.90	0.00 46.60 256.30	0.00 46.60 209.70	
	Additions during the year Repayment during the year Net Loan-Closing Average Loan	0.00 46.60 302.90 326.20	0.00 46.60 256.30 279.60	0.00 46.60 209.70 233.00	
	Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest	0.00 46.60 302.90 326.20 9.90%	0.00 46.60 256.30 279.60 9.90%	0.00 46.60 209.70 233.00 9.90%	
	Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest	0.00 46.60 302.90 326.20 9.90% 32.29	0.00 46.60 256.30 279.60 9.90% 27.68	0.00 46.60 209.70 233.00 9.90% 23.07	
	Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule	0.00 46.60 302.90 326.20 9.90%	0.00 46.60 256.30 279.60 9.90% 27.68	0.00 46.60 209.70 233.00 9.90% 23.07	
14	Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule OBC	0.00 46.60 302.90 326.20 9.90% 32.29 20 HY equal Insta	0.00 46.60 256.30 279.60 9.90% 27.68 alments from	0.00 46.60 209.70 233.00 9.90% 23.07 10.3.2004	
14	Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule OBC Gross Loan opening	0.00 46.60 302.90 326.20 9.90% 32.29 20 HY equal Insta	0.00 46.60 256.30 279.60 9.90% 27.68 alments from 1017.00	0.00 46.60 209.70 233.00 9.90% 23.07 10.3.2004	
14	Additions during the year Repayment during the year Net Loan-Closing Average Loan Rate of Interest Interest Repayment Schedule OBC	0.00 46.60 302.90 326.20 9.90% 32.29 20 HY equal Insta	0.00 46.60 256.30 279.60 9.90% 27.68 alments from	0.00 46.60 209.70 233.00 9.90% 23.07 10.3.2004	

	Net Loan-Opening	847.50	762.75	678.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	84.75	84.75	84.75
	Net Loan-Closing	762.75	678.00	593.25
	Average Loan	805.13	720.38	635.63
	Rate of Interest	9.10%	9.10%	9.10%
	Interest	73.27	65.55	57.84
	Repayment Schedule	12 Annual Instalm		
15	BOI (Foreign Currency Loan)			
	Gross Loan opening	850.54	850.54	850.54
	Cumulative Repayment upto	89.41	134.34	179.28
	DOCO/previous year			
	Net Loan-Opening	761.13	716.19	671.26
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	44.94	44.94	44.94
	Net Loan-Closing	716.19	671.26	626.32
	Average Loan	738.66	693.72	648.79
	Rate of Interest	6.99%	6.99%	6.99%
	Interest	51.63	48.49	45.35
	Repayment Schedule	38 Equal H Y Inst		
16	Bond- XII			
-10	Gross Loan opening	98.00	98.00	98.00
	Cumulative Repayment upto	8.17	16.34	24.51
	DOCO/previous year	0.17	10.01	2
	Net Loan-Opening	89.83	81.66	73.49
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	8.17	8.17	8.17
	Net Loan-Closing	81.66	73.49	65.32
	Average Loan	85.75	77.58	69.41
	Rate of Interest	9.70%	9.70%	9.70%
	Interest	8.32	7.52	6.73
	Repayment Schedule	12 Annual Instalm		
17	Bond- VIII	12 Allitual Ilistalli		5.5.2000
17	Gross Loan opening	168.00	168.00	168.00
	Cumulative Repayment upto	33.60	33.60	50.30
	DOCO/previous year	33.00	33.00	30.30
	Net Loan-Opening	134.40	134.40	117.70
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	16.70	16.70
	Net Loan-Closing	134.40	117.70	101.00
	Average Loan	134.40	126.05	109.35
	Rate of Interest	10.35%	10.35%	10.35%
	Interest	13.91	13.05	11.32
	Repayment Schedule	1 10 Annuai instaim	ents from 27	
12	Repayment Schedule  Bond- XV	10 Annual Instalm	ents from 27	.00.2000
18	Bond- XV			
18	Bond- XV Gross Loan opening	254.00	254.00	254.00
18	Bond- XV			
18	Bond- XV Gross Loan opening Cumulative Repayment upto	254.00	254.00	254.00
18	Bond- XV Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening	254.00 0.00	254.00 0.00	254.00 21.17
18	Bond- XV Gross Loan opening Cumulative Repayment upto DOCO/previous year	254.00 0.00 254.00	254.00 0.00 254.00	254.00 21.17 232.83
18	Bond- XV Gross Loan opening Cumulative Repayment upto DOCO/previous year Net Loan-Opening Additions during the year Repayment during the year	254.00 0.00 254.00 0.00	254.00 0.00 254.00 0.00	254.00 21.17 232.83 0.00
18	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	254.00 0.00 254.00 0.00 0.00 254.00	254.00 0.00 254.00 0.00 21.17 232.83	254.00 21.17 232.83 0.00 21.17 211.66
18	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	254.00 0.00 254.00 0.00 0.00 254.00 254.00	254.00 0.00 254.00 0.00 21.17 232.83 243.42	254.00 21.17 232.83 0.00 21.17 211.66 222.25
18	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	254.00 0.00 254.00 0.00 0.00 254.00 254.00 6.68%	254.00 0.00 254.00 0.00 21.17 232.83 243.42 6.68%	254.00 21.17 232.83 0.00 21.17 211.66 222.25 6.68%
18	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	254.00 0.00 254.00 0.00 0.00 254.00 254.00	254.00 0.00 254.00 0.00 21.17 232.83 243.42 6.68% 16.26	254.00 21.17 232.83 0.00 21.17 211.66 222.25 6.68% 14.85

19	Bond- XIX			
	Gross Loan opening	1768.00	1768.00	1768.00
	Cumulative Repayment upto	0.00	0.00	0.00
	DOCO/previous year			
	Net Loan-Opening	1768.00	1768.00	1768.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	1768.00	1768.00	1768.00
	Average Loan	1768.00	1768.00	1768.00
	Rate of Interest	8.94%	9.25%	9.25%
	Interest	158.15	163.54	163.54
	Repayment Schedule	12 Annual Instalm	nents from 24	1.7.2010
	Total Loan			
	Gross Loan opening	27300.54	27300.54	27300.54
	Cumulative Repayment upto	6271.03	8559.13	10993.83
	DOCO/previous year			
	Net Loan-Opening	21029.51	18741.41	16306.71
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	2288.10	2434.70	2192.30
	Net Loan-Closing	18741.41	16306.71	14114.41
	Average Loan	19885.46	17524.06	15210.56
	Rate of Interest	9.51%	9.48%	9.43%
	Interest	1892.10	1660.90	1434.24

### **Annexure-IV**

## ICT at Muzaffarnagar along with one No 400 kV and one No. 220 kV bay

(Rs. in lakh)

	B 4 11 41	0000 0=	0007.00	(Rs. in lakh)
	Details of Loan	2006-07	2007-08	2008-09
1	Bond- XVII	4		
	Gross Loan opening	147.00	147.00	147.00
	Cumulative Repayment upto DOCO/previous	0.00	0.00	0.00
	year			
	Net Loan-Opening	147.00	147.00	147.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	147.00	147.00	147.00
	Average Loan	147.00	147.00	147.00
	Rate of Interest	7.39%	7.39%	7.39%
	Interest	10.86	10.86	10.86
	Repayment Schedule	10 Annual	Instalments fro	om 22.9.2009
2	OBC			
	Gross Loan opening	153.00	153.00	153.00
	Cumulative Repayment upto DOCO/previous	25.50		51.00
	year			
	Net Loan-Opening	127.50	114.75	102.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	12.75	5 12.75	12.75
	Net Loan-Closing	114.7	5 102.00	89.25
	Average Loan	121.13	3 108.38	95.63
	Rate of Interest	9.35%		9.35%
	Interest	11.33		8.94
	Repayment Schedule		Instalments fro	
3	Bond- XV	1274111441		
3	Gross Loan opening	46.00	0 46.00	46.00
	Cumulative Repayment upto DOCO/previous	0.00		3.83
	year	0.00	0.00	0.00
	Net Loan-Opening	46.00	3 46.00	42.17
	Additions during the year	0.00		0.00
	Repayment during the year	0.00		3.83
	Net Loan-Closing	46.00		38.34
	Average Loan	46.00		40.26
	Rate of Interest	6.68%		6.68%
	Interest	3.0		2.69
$\vdash$	Repayment Schedule	12 Annual	Instalments fro	ルロ 23.2.2UU8 
4	Bond- XIX	200.00	2 000 00	000.00
	Gross Loan opening	832.00		832.00
	Cumulative Repayment upto DOCO/previous	0.00	0.00	0.00
	year	200.0	2 600.00	000.00
	Net Loan-Opening	832.00		832.00
	Additions during the year	0.00	-	0.00
	Repayment during the year	0.00		0.00
	Net Loan-Closing	832.00		832.00
	Average Loan	832.00		832.00
	Rate of Interest	9.25%		9.25%
	Interest	76.96	76.96	76.96

Repayment Schedule	12 Annual Instalments from 24.7.2010		
Total Loan			
Gross Loan opening	1178.00	1178.00	1178.00
Cumulative Repayment upto DOCO/previous year	25.50	38.25	54.83
Net Loan-Opening	1152.50	1139.75	1123.17
Additions during the year	0.00	0.00	0.00
Repayment during the year	12.75	16.58	16.58
Net Loan-Closing	1139.75	1123.17	1106.59
Average Loan	1146.13	1131.46	1114.88
Rate of Interest	8.92%	8.92%	8.92%
Interest	102.22	100.90	99.45