

**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. 70/2009**

**In the matter of**

Revision of tariff due to additional capital expenditure incurred during 2006-07 and 2007-08 for Rihand Stage-II Transmission System in Northern Region for the period from 1.4.2006 to 31.3.2009.

**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 U.K.Tyagi, PGCIL
2. Shri V.V.Sharma, PGCIL
3. Shri M.M.Mondal, PGCIL
4. Shri R.Prasad, PGCIL

**ORDER  
(DATE OF HEARING: 25.6.2009)**

This petition has been filed for revision of transmission tariff for additional capital expenditure incurred during 2006-07 and 2007-08 in respect of

transmission elements and their date of commercial operation given in the table below under Rihand Stage-II Transmission System (the transmission system) in Northern Region for the period from 1.4.2006 to 31.3.2009, based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004, (hereinafter referred to as “the 2004 regulations:

S.No.	Name of Asset	Date of the commercial operation
1.	400 kV D/C Rihand-Allahabad-Mainpuri-Ballabgarh transmission lines with associated bays <b>(Asset-I)</b>	1.6.2005
2.	ICT-I at Patiala sub-station, LILO of Nalagarh-Hissar transmission line at Kaithal, 400 kV S/C Patiala-Malerkotla transmission line & ICT-III at Abdullapur sub-station with associated bays <b>(Asset-II)</b>	1.10.2005
3.	ICT- I & II at Kaithal and 4 no 220 kV line bays at Kaithal sub-station <b>(Asset-III)</b>	1.11.2005
4.	ICT-II at Patiala sub-station and LILO of one ckt (400 kV) of Nalagarh-Hissar transmission line at Patiala sub-station with associated bays <b>(Asset-IV)</b>	1.12.2005
5.	315 MVA, 400/220 Kv ICT-I & ICT-II along with associated bays and four nos 220 kV line bays at Mainpuri sub-station <b>(Asset-V)</b>	1.1.2006
6	400 kV S/C Dadri-Panipat transmission line with associated bays <b>(Asset-VI)</b>	1.4.2006
7.	2 nos of 220 kV bays at Abdullapur sub-station <b>(Asset-VII)</b>	1.11.2006

2. The investment approval for the transmission system was accorded by the Central Government in Ministry of Power under letter dated 9.12.2002 at an estimated cost of Rs.104444 lakh (2nd quarter 2002 price level), including IDC of Rs.15749 lakh.

3. The transmission charges for the Asset-I, Asset-II, Asset-IV and Asset-VI were approved by the Commission in its order dated 27.9.2007 in Petition No 2/2007. The transmission charges for Asset-III, Asset-V and Asset-VII were approved in the order dated 3.2.2009 in Petition Nos.68/2008 from the date of commercial operation to 31.3.2009, after considering additional capital expenditure for the year 2005-06.

4. The details of the respective transmission asset, apportioned approved cost and other details of the capital cost as indicated by the petitioner are as under:

(Rs in lakh)

Name of Asset	Apportioned approved cost	Expenditure up to the date of commercial operation	Capital expenditure from date of commercial operation to 31.3.2006	Additional Capitalization during 2006-07	Capital expenditure as on 1.4.2007	Additional Capitalization during 2007-08	Capital expenditure as on 1.4.2008
Asset-I	72537.88	58947.08	1324.59	489.52	60761.19	109.44	60870.63
Asset-II	12269.03	9924.98	1020.93	193.85	11139.76	-	11139.76
Asset-III	4490.94	2823.92	642.33	339.36	3805.61	102.40	3908.01
Asset-IV	5458.33	2910.10	673.51	405.53	3989.14	131.96	4121.10
Asset-V	4064.18	3254.73	368.33	114.01	3737.07	192.73	3929.80
Asset-VI	5622.76	5500.27	5500.27	303.49	5803.76	9.35	5813.11
Asset-VII	0.00	355.94	N.A.	38.45	394.39	24.45	418.84
Total	104443.12						90201.25

5. Based on the above additional capital expenditure, the petitioner has claimed the transmission charges for the years 2006-07 to 2008-09 as under:

(Rs. in lakh)

	Asset-I			Asset-II			Asset-III			Asset-IV		
	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09
Depreciation	1596.47	1604.72	1606.56	321.64	324.29	324.29	125.72	132.75	134.59	120.10	128.91	130.89
Interest on Loan	2889.89	2787.62	2605.17	533.16	516.15	489.80	180.60	184.48	177.70	196.24	203.25	197.43
Return on Equity	2497.44	2510.02	2512.32	470.45	474.52	474.52	151.13	160.41	162.56	147.84	159.12	161.90
Advance against Depreciation	0.00	140.08	1878.42	0.00	0.00	103.41	0.00	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	205.12	210.74	242.80	42.43	43.24	45.62	17.31	18.10	18.51	16.07	16.92	17.30
O & M Expenses	736.48	764.40	796.43	335.25	348.48	362.57	243.36	253.04	263.20	188.15	195.61	203.48
Total	<b>7925.40</b>	<b>8017.58</b>	<b>9641.70</b>	<b>1702.93</b>	<b>1706.68</b>	<b>1800.21</b>	<b>718.12</b>	<b>748.78</b>	<b>756.56</b>	<b>668.40</b>	<b>703.81</b>	<b>711.00</b>

(Rs. in lakh)

	Asset-V			Asset-VI			Asset-VII		
	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09
Depreciation	124.91	129.28	131.62	154.04	158.51	158.63	5.77	14.98	15.42
Interest on Loan	179.77	179.15	174.89	292.66	290.67	276.64	7.99	20.23	19.68
Return on Equity	156.99	163.43	167.48	219.63	226.20	226.40	8.06	20.65	21.17
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00	92.40	0.00	0.00	0.00
Interest on Working Capital	17.81	18.45	18.97	19.65	20.24	22.08	1.19	3.00	3.10
O & M Expenses	243.36	253.04	263.20	89.54	93.01	96.83	25.35	63.26	65.80
<b>Total</b>	<b>722.84</b>	<b>743.35</b>	<b>756.16</b>	<b>775.52</b>	<b>788.63</b>	<b>872.98</b>	<b>48.36</b>	<b>122.12</b>	<b>125.17</b>

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

(Rs. in lakh)

	Asset-I			Asset-II			Asset-III			Asset-IV		
	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09
Maintenance Spares	618.94	656.08	695.45	102.23	108.36	114.86	28.95	30.68	32.52	29.68	31.46	33.35
O & M expenses	61.37	63.70	66.37	27.94	29.04	30.21	20.28	21.09	21.93	15.68	16.30	16.96
Receivables	1320.90	1336.26	1606.95	283.82	284.45	300.04	119.69	124.80	126.09	111.40	117.30	118.50
<b>Total</b>	<b>2001.21</b>	<b>2056.04</b>	<b>2368.77</b>	<b>413.99</b>	<b>421.85</b>	<b>445.11</b>	<b>168.92</b>	<b>176.57</b>	<b>180.54</b>	<b>156.76</b>	<b>165.06</b>	<b>168.81</b>
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%
Interest	205.12	210.74	242.80	42.43	43.24	45.62	17.31	18.10	18.51	16.07	16.92	17.30

(Rs. in lakh)

	Asset-V			Asset-VI			Asset-VII		
	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09
Maintenance Spares	33.04	35.02	37.12	55.00	58.30	61.80	3.56	3.65	3.87
O & M expenses	20.28	21.09	21.93	7.46	7.75	8.07	5.07	5.27	5.48
Receivables	120.47	123.89	126.03	129.25	131.44	145.50	19.34	20.35	20.86
<b>Total</b>	<b>173.79</b>	<b>180.00</b>	<b>185.08</b>	<b>191.71</b>	<b>197.49</b>	<b>215.37</b>	<b>27.97</b>	<b>29.27</b>	<b>30.21</b>
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	17.81	18.45	18.97	19.65	20.24	22.08	1.19	3.00	3.10

7. None of the respondents has filed any reply.

### **CAPITAL COST**

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

Asset-I			Asset-II			Asset-III			Asset-IV		
Year	Amount (Rs. in lakh)	Nature and details of expenditure	Year	Amount (Rs. in lakh)	Nature and details of expenditure	Year	Amount (Rs. in lakh)	Nature and details of expenditure	Year	Amount (Rs. in lakh)	Nature and details of expenditure
2006-07	Transmission line and sub-station = Rs. 489.52 lakh	Balance /retention payments	2006-07	Building, transmission line, sub-station and PLCC = Rs. 193.85 lakh	Balance /retention payments	2006-07	-	-	2006-07	Building and sub-station = Rs. 405.53 lakh	Balance /retention payments
2007-08	Transmission line and sub-station = Rs. 109.44 lakh	Balance /retention payments	2007-08	-	-	2007-08	Sub-station= Rs. 102.40 lakh	Balance /retention payments	2007-08	Building and sub-station = Rs. 131.96 lakh	Balance /retention payments

Asset-V			Asset-VI			Asset-VII		
Year	Amount (Rs. in lakh)	Nature and details of expenditure	Year	Amount (Rs. in lakh)	Nature and details of expenditure	Year	Amount (Rs. in lakh)	Nature and details of expenditure
2006-07	-	-	2006-07	Transmission line and sub-station = Rs. 303.49 lakh	Balance /retention payments	2006-07	-	-
2007-08	Building and sub-station = Rs. 192.73 lakh	Balance /retention payments	2007-08	Transmission line=Rs. 9.35 lakh	Balance /retention payments	2007-08	Sub-station = Rs.24.45 lakh	Balance /retention payments

9. It is found that the additional capital expenditure claimed is in respect of balance payments. These are part of the deferred liabilities relating to works/services 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

### **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:

(Rs. in lakh)

Name of Asset	Expenditure up to the date of commercial operation	Capital expenditure from the date of commercial operation to 31.3.2006	Capital expenditure on 1.4.2006	Additional Capitalization during 2006-07	Capital expenditure as on 1.4.2007	Additional Capitalization during 2007-08	Capital expenditure as on 1.4.2008
Asset-I	58947.08	1324.59	60271.67	489.52	60761.19	109.44	60870.63
Asset-II	9924.98	1020.93	10945.91	193.85	11139.76	-	11139.76
Asset-III	2823.92	642.33	3466.25	339.36	3805.61	102.40	3908.01
Asset-IV	2910.10	673.51	3583.61	405.53	3989.14	131.96	4121.10
Asset-V	3254.73	368.33	3623.06	114.01	3737.07	192.73	3929.80
Asset-VI	5500.27	-	5500.27	303.49	5803.76	9.35	5813.11
Asset-VII	355.94	-	355.94	38.45	394.39	24.45	418.84

### **DEBT- EQUITY RATIO**

11. The petitioner has 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 the date of the commercial operation	Notional additional equity during 2005-06	Average equity during 2005-06	Equity as on 1.4.2006	Notional additional equity during 2006-07	Average equity during 2006-07	Equity as on 1.4.2007	Notional additional equity during 2007-08	Average equity for 2006-07	Equity as on 1.4.2008
Asset-I	17368.08	397.38	17566.77	17765.46	146.86	17838.89	17912.31	32.83	17928.73	17945.15
Asset-II	3024.98	306.28	3178.12	3331.26	58.16	3360.34	3389.41	0.00	3389.41	3389.41
Asset-III	835.92	192.70	932.27	1028.62	101.81	1079.52	1130.43	30.72	1145.79	1161.15
Asset-IV	793.10	202.05	894.13	995.15	121.66	1055.98	1116.81	39.59	1136.61	1156.40
Asset-V	993.73	110.50	1048.98	1104.23	34.20	1121.33	1138.43	57.82	1167.34	1196.25
Asset-VI	1523.27	-	1523.27	1523.27	91.05	1568.79	1614.32	2.81	1615.72	1617.12
Asset-VII	132.32	-	132.32	132.32	11.54	138.09	143.86	7.34	147.52	151.19

### **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 in the table under para 11 above has been considered. However, tariff for the years 2006-07 and 2007-08 has been allowed pro rata on average equity. Accordingly, return on equity allowed each year is given as under:

(Rs. in lakh)

Name of the asset	Return on equity		
	2006-07	2007-08	2008-09
Asset-I	2497.44	2510.02	2512.32
Asset-II	470.45	474.52	474.52
Asset-III	151.13	160.41	162.56
Asset-IV	147.84	159.12	161.90
Asset-V	156.99	163.43	167.48
Asset-VI	219.63	226.20	226.40
Asset-VII	8.06	20.65	21.17

### **INTEREST ON LOAN**

14. Clause (i) of regulation 56 of the 2004 regulations *inter alia* provides that,-

“(a) Interest on loan capital shall be computed loan wise on the loans arrived at in the manner indicated in regulation 54.

(b) The loan outstanding as on 1.4.2004 shall be worked out as the gross loan in accordance with Regulation 54 minus cumulative repayment as admitted by the Commission or any other authority having power to do so, up to 31.3.2004. The repayment for the period 2004-09 shall be worked out on a normative basis.

(c) The transmission licensee shall make every effort to re-finance the loan as long as it results in net benefit to the beneficiaries. The costs associated with such re-financing shall be borne by the beneficiaries.

(d) The changes to the loan terms and conditions shall be reflected from the date of such re-financing and benefit passed on to the beneficiaries.

(e) In case of dispute, any of the parties may approach the Commission with proper application. However, the beneficiaries shall not withhold any payment ordered by the Commission to the transmission licensee during pendency of any dispute relating to re-financing of loan;

(f) In case any moratorium period is availed of by the transmission licensee, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly.

(g) The transmission licensee shall not make any profit on account of re-financing of loan and interest on loan;

(h) The transmission licensee may, at its discretion, swap loans having floating rate of interest with loans having fixed rate of interest, or vice versa, at its own cost and gains or losses as a result of such swapping shall accrue to the transmission licensee:

Provided that the beneficiaries shall be liable to pay interest for the loans initially contracted, whether on floating or fixed rate of interest.”

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

(i) Gross amount of loan, repayment of instalments and rate of interest and weighted average rate of interest on actual loan as per earlier orders dated 27.9.2007 and 3.2.2009 in Petition Nos. 2/2007 and 68/2008, respectively have been considered. Bond XXII have been raised after the date of commercial operation for financing additional capital expenditure during the year 2006-07

(ii) Notional loan arising out of additional capitalisation for the years 2006-07 and 2007-08 has been added in loan amount as on 1.4.2006 and 1.4.2007 to arrive at total Notional loans. This adjusted Gross loan is considered as normative loans for tariff calculations.

(iii) Tariff is worked out considering normative loan and normative repayments. Once the normative loan is arrived at, it is considered



for all purposes in the tariff. Normative repayment is worked out by the following formula:

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

- (iv) Moratorium in repayment of loan is considered with reference to normative loan and if the normative repayment of loan during the year is less than the depreciation during the year, it is considered as moratorium and depreciation during the year is deemed as normative repayment of loan during the year.
- (v) Weighted average rate of interest on actual loan worked out as per (i) above is applied on the notional average loan during the year to arrive at the interest on loan.

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

(Rs. in lakh)

	Asset-I			Asset-II			Asset-III			Asset-IV		
	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	42506.21	42848.88	42925.49	7614.65	7750.35	7750.35	2437.63	2675.18	2746.86	2588.46	2872.33	2964.70
Cumulative Repayment upto DOCO/Previous Year	1313.86	2910.33	4655.13	152.32	473.96	798.25	45.79	171.51	304.26	34.07	154.18	283.09
Net Loan-Opening	41192.35	39938.55	38270.36	7462.33	7276.38	6952.09	2391.84	2503.67	2442.60	2554.38	2718.15	2681.61
Additions including additions due to Additional Capitalisation	342.66	76.61	-	135.70	0.00	-	237.55	71.68	-	283.87	92.37	-
Repayment during the year	1596.47	1744.80	3484.98	321.64	324.29	427.70	125.72	132.75	134.59	120.10	128.91	130.89
Net Loan-Closing	39938.55	38270.36	34785.38	7276.38	6952.09	6524.40	2503.67	2442.60	2308.01	2718.15	2681.61	2550.72
Average Loan	40565.45	39104.45	36527.87	7369.36	7114.24	6738.24	2447.76	2473.14	2375.31	2636.27	2699.88	2616.17
Weighted Average Rate of Interest on Loan	7.12%	7.129%	7.13%	7.23%	7.255%	7.27%	7.38%	7.459%	7.48%	7.44%	7.528%	7.55%
Interest	2889.89	2787.62	2605.18	533.16	516.15	489.80	180.60	184.48	177.70	196.24	203.25	197.43

(Rs. in lakh)

	Asset-V			Asset-VI			Asset-VII		
	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09
Opening Gross Loan	2518.83	2598.64	2733.55	3977.00	4189.44	4195.99	223.62	250.54	267.65
Cumulative Repayment upto DOCO/Previous Year	29.06	153.97	283.25	0.00	154.04	312.56	0.00	5.77	20.75
Net Loan-Opening	2489.77	2444.67	2450.30	3977.00	4035.40	3883.43	223.62	244.76	246.90
Additions including additions due to Additional Capitalisation	79.81	134.91		212.44	6.55		26.92	17.12	0.00
Repayment during the year	124.91	129.28	131.62	154.04	158.51	251.03	5.77	14.98	15.42
Net Loan-Closing	2444.67	2450.30	2318.68	4035.40	3883.43	3632.40	244.76	246.90	231.48
Average Loan	2467.22	2447.48	2384.49	4006.20	3959.42	3757.92	234.19	245.83	239.19
Weighted Average Rate of Interest on Loan	7.29%	7.320%	7.33%	7.31%	7.34%	7.36%	8.19%	8.23%	8.23%
Interest	179.77	179.15	174.89	292.66	290.67	276.64	7.99	20.23	19.68

17. The detailed calculations in support of the weighted average rate of interest are contained in Annexure-I, Annexure-II Annexure-III, Annexure-IV Annexure-V Annexure-VI and Annexure VII 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.

(c) Variation up to 31.3.2004 already allowed by the Central Government/Commission.

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

(e) Depreciation shall be chargeable from the first year of operation. In case of operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

19. Depreciation allowed for the years 2006-07, 2007-08 and 2008-09 has been worked out as below:

(Rs. in lakh)

	Asset-I			Asset-II			Asset-III			Asset-IV		
	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09
As on the date of commercial operation	60271.67	60761.19	60870.63	10945.91	11139.76	11139.76	3466.25	3805.61	3908.01	3583.61	3989.14	4121.10
Addition due to Additional Capitalisation	489.52	109.44	-	193.85	0.00	-	339.36	102.40	-	405.53	131.96	-
Gross block	60761.19	60870.63	60870.63	11139.76	11139.76	11139.76	3805.61	3908.01	3908.01	3989.14	4121.10	4121.10
Rate of Depreciation	2.6381%	2.6386%	2.6393%	2.9127%	2.9111%	2.9111%	3.4577%	3.4419%	3.4440%	3.1720%	3.1789%	3.1762%
Depreciable Value	54402.89	54672.43	54721.67	9564.50	9651.74	9651.74	3272.34	3471.13	3517.21	3407.74	3649.61	3708.99
Balance Useful life of the asset	-	-	-	-	-	-	-	-	-	-	-	-
Remaining Depreciable Value	53093.36	51766.42	50070.88	9412.18	9177.77	8853.48	3226.55	3299.62	3212.95	3373.66	3495.43	3425.90
Depreciation	1596.47	1604.72	1606.56	321.64	324.29	324.29	125.72	132.75	134.59	120.10	128.91	130.89
Cumulative Depreciation/advance against Depreciation	2906.00	4650.80	8135.77	473.96	798.25	1225.95	171.51	304.26	438.85	154.18	283.09	413.98

(Rs. in lakh)

	Asset-V			Asset-VI			Asset-VII		
	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09
As on the date of commercial operation	3623.06	3737.07	3929.80	5500.27	5803.76	5813.11	355.94	394.39	418.84
Addition due to Additional Capitalisation	114.01	192.73	-	303.49	9.35	-	38.45	24.45	0.00
Gross block	3737.07	3929.80	3929.80	5803.76	5813.11	5813.11	394.39	418.84	418.84
Rate of Depreciation	3.3941%	3.3724%	3.3494%	2.7255%	2.7290%	2.7289%	3.6914%	3.6843%	3.6818%
Depreciable Value	3187.40	3325.43	3412.16	5086.81	5227.59	5231.80	337.65	365.95	376.96
Balance Useful life of the asset	-	-	-	-	-	-	-	-	-
Remaining Depreciable Value	3158.34	3171.46	3128.91	5086.81	5073.55	4919.24	337.65	360.18	356.20
Depreciation	124.91	129.28	131.62	154.04	158.51	158.63	5.77	14.98	15.42
Cumulative Depreciation/ Advance against Depreciation	153.97	283.25	414.87	154.04	312.56	563.58	5.77	20.75	36.17

## **ADVANCE AGAINST DEPRECIATION**

20. As per sub-clause (b) of clause (ii) of Regulation 56 of the 2004 regulations, in addition to allowable depreciation, the transmission licensee is entitled to Advance Against Depreciation, computed in the manner given hereunder:

AAD = Loan repayment amount as per regulation 56 (i) subject to a ceiling of 1/10th of loan amount as per regulation 54 minus depreciation as per schedule

21. It is provided that Advance Against Depreciation shall be permitted only if the cumulative repayment up to a particular year exceeds the cumulative depreciation up to that year. It is further provided that Advance Against Depreciation in a year shall be restricted to the extent of difference between cumulative repayment and cumulative depreciation up to that year.

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

- (a) 1/10th of gross loan is worked out from the Gross Notional Loan as per para 16 above.
- (b) Repayment of notional loan during the year is considered as per para 16 above.
- (c) Depreciation is worked out as per para 19 above.

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

23. Details of revised Advance Against Depreciation in respect of Asset-I, Asset-II and Asset-VI allowed are given hereunder:

(Rs. in lakh)

	Asset-I			Asset-II			Asset-VI		
	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09
1/10th of Gross Loan (s)	4250.62	4284.89	4292.55	761.47	775.03	775.03	397.70	418.94	419.60
Repayment of the Loan	1596.47	1744.80	3484.98	321.64	324.29	427.70	154.04	158.51	251.03
Minimum of the above	1596.47	1744.80	3484.98	321.64	324.29	427.70	154.04	158.51	251.03
Depreciation during the year	1596.47	1604.72	1606.56	321.64	324.29	324.29	154.04	158.51	158.63
(A) Difference	0.00	140.08	1878.42	0.00	0.00	103.41	0.00	0.00	92.40
Cumulative Repayment of the Loan	2910.33	4655.13	8140.10	473.96	798.25	1225.95	154.04	312.56	563.58
Cumulative Depreciation/ Advance against Depreciation	2906.00	4510.72	6257.35	473.96	798.25	1122.55	154.04	312.56	471.19
(B) Difference	4.33	144.41	1882.75	0.00	0.00	103.41	0.00	0.00	92.40
Advance against Depreciation Minimum of (A) and (B)	<b>0.00</b>	<b>140.08</b>	<b>1878.42</b>	<b>0.00</b>	<b>0.00</b>	<b>103.41</b>	<b>0.00</b>	<b>0.00</b>	<b>92.40</b>

### **OPERATION & MAINTENANCE EXPENSES**

24. In accordance with clause (iv) of Regulation 56 the 2004 regulations, the following norms are prescribed for O & M expenses:

	Year				
	2004-05	2005-06	2006-07	2007-08	2008-09
O&M expenses (Rs in lakh per ckt-km)	0.227	0.236	0.246	0.255	0.266
O&M expenses (Rs in lakh per bay)	28.12	29.25	30.42	31.63	32.90

25. O&M expenses as taken for the tariff calculations as per orders dated 27.9.2007 and 3.2.2009 in Petition Nos. 2/2007 and 68/2008, respectively have been considered, since line length and number of bays remain unchanged.

## **INTEREST ON WORKING CAPITAL**

26. The components of the working capital and the interest thereon are discussed hereunder:

### **(b) 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. TNEB in its reply has urged to retain the cost of maintenance spare at 1% of the project cost as on the date of commercial operation as already considered for award of tariff.

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 orders dated 27.9.2007 and 3.2.2009 in Petition Nos. 2/2007 and 68/2008, respectively 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 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.

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

(Rs. in lakh)

	Asset-I			Asset-II			Asset-III			Asset-IV		
	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09
Maintenance Spares	618.94	656.08	695.45	102.23	108.36	114.86	28.95	30.68	32.52	29.68	31.46	33.35
O & M expenses	61.37	63.70	66.37	27.94	29.04	30.21	20.28	21.09	21.93	15.68	16.30	16.96
Receivables	1320.90	1336.26	1606.95	283.82	284.45	300.04	119.69	124.80	126.09	111.40	117.30	118.50
Total	2,001.22	2,056.04	2,368.77	413.99	421.85	445.11	168.91	176.56	180.55	156.76	165.07	168.81
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%
Interest	205.13	210.74	242.80	42.43	43.24	45.62	17.31	18.10	18.51	16.07	16.92	17.30

(Rs. in lakh)

	Asset-V			Asset-VI			Asset-VII		
	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09
Maintenance Spares	33.04	35.02	37.12	55.00	58.30	61.80	3.56	3.65	3.87
O & M expenses	20.28	21.09	21.93	7.46	7.75	8.07	5.07	5.27	5.48
Receivables	120.47	123.89	126.03	129.25	131.44	145.49	19.35	20.35	20.86
Total	173.79	179.99	185.08	191.72	197.49	215.36	27.97	29.27	30.21
Rate of interest	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	17.81	18.45	18.97	19.65	20.24	22.07	1.19	3.00	3.10

### TRANSMISSION CHARGES

28. The revised transmission charges being allowed for the two transmission assets for the years 2006-07 to 2008-09 are summarised below:

(Rs. in lakh)

	Asset-I			Asset-II			Asset-III			Asset-IV		
	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09
Depreciation	1596.47	1604.72	1606.56	321.64	324.29	324.29	125.72	132.75	134.59	120.10	128.91	130.89
Interest on Loan	2889.89	2787.62	2605.18	533.16	516.15	489.80	180.60	184.48	177.70	196.24	203.25	197.43
Return on Equity	2497.44	2510.02	2512.32	470.45	474.52	474.52	151.13	160.41	162.56	147.84	159.12	161.90
Advance against Depreciation	0.00	140.08	1878.42	0.00	0.00	103.41	0.00	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	205.13	210.74	242.80	42.43	43.24	45.62	17.31	18.10	18.51	16.07	16.92	17.30
O & M Expenses	736.48	764.40	796.43	335.25	348.48	362.57	243.36	253.04	263.20	188.15	195.61	203.48
<b>Total</b>	<b>7925.41</b>	<b>8017.58</b>	<b>9641.70</b>	<b>1702.93</b>	<b>1706.68</b>	<b>1800.21</b>	<b>718.13</b>	<b>748.78</b>	<b>756.56</b>	<b>668.39</b>	<b>703.81</b>	<b>711.01</b>

(Rs. in lakh)

	Asset-V			Asset-VI			Asset-VII		
	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09	2006-07	2007-08	2008-09
Depreciation	124.91	129.28	131.62	154.04	158.51	158.63	5.77	14.98	15.42
Interest on Loan	179.77	179.15	174.89	292.66	290.67	276.64	7.99	20.23	19.68
Return on Equity	156.99	163.43	167.48	219.63	226.20	226.40	8.06	20.65	21.17
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00	92.40	0.00	0.00	0.00
Interest on Working Capital	17.81	18.45	18.97	19.65	20.24	22.07	1.19	3.00	3.10
O & M Expenses	243.36	253.04	263.20	89.54	93.01	96.83	25.35	63.26	65.80
<b>Total</b>	<b>722.83</b>	<b>743.34</b>	<b>756.16</b>	<b>775.52</b>	<b>788.63</b>	<b>872.97</b>	<b>48.36</b>	<b>122.12</b>	<b>125.16</b>

29. 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.

30. 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.

31. This order disposes of Petition No. 70/2009.

Sd/-

sd/-

sd/-

sd/-

**(V.S.VERMA)**  
**MEMBER**

**(S.JAYARAMAN)**  
**MEMBER**

**(R.KRISHNAMOORTHY)**  
**MEMBER**

**(DR.PRAMOD DEO)**  
**CHAIRPERSON**

**New Delhi dated the 7<sup>th</sup> September 2009**

**Annexure-I****CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN**

(Rs. In lakh)

	Details of Loan	2005-06	2006-07	2007-08	2008-09
<b>1</b>	<b>Bond XIII Option-I</b>				
	Gross Loan opening	4551.00	4551.00	4551.00	4551.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	379.25	758.50
	Net Loan-Opening	4551.00	4551.00	4171.75	3792.50
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	379.25	379.25	379.25
	Net Loan-Closing	4551.00	4171.75	3792.50	3413.25
	Average Loan	4551.00	4361.38	3982.13	3602.88
	Rate of Interest	8.63%	8.63%	8.63%	8.63%
	Interest	392.75	376.39	343.66	310.93
	Repayment Schedule	12 Annual instalments from 31.7.2006			
<b>2</b>	<b>Bond XIV</b>				
	Gross Loan opening	52.00	52.00	52.00	52.00
	Cumulative Repayment up to DOCO/previous year	4.33	8.66	12.99	17.32
	Net Loan-Opening	47.67	43.34	39.01	34.68
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	4.33	4.33	4.33	4.33
	Net Loan-Closing	43.34	39.01	34.68	30.35
	Average Loan	45.51	41.18	36.85	32.52
	Rate of Interest	6.10%	6.10%	6.10%	6.10%
	Interest	2.776	2.512	2.248	1.983
	Repayment Schedule	12 Annual instalments from 17.7.2004			
<b>3</b>	<b>Bond XV</b>				
	Gross Loan opening	17940.00	17940.00	17940.00	17940.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	0.00	1495.00
	Net Loan-Opening	17940.00	17940.00	17940.00	16445.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	1495.00	1495.00
	Net Loan-Closing	17940.00	17940.00	16445.00	14950.00
	Average Loan	17940.00	17940.00	17192.50	15697.50
	Rate of Interest	6.68%	6.68%	6.68%	6.68%
	Interest	1198.39	1198.39	1148.46	1048.59
	Repayment Schedule	12 Annual instalments from 23.2.2008			
<b>4</b>	<b>BOND XVI</b>				
	Gross Loan opening	18661.00	18661.00	18661.00	18661.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	18661.00	18661.00	18661.00	18661.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	1866.10
	Net Loan-Closing	18661.00	18661.00	18661.00	16794.90
	Average Loan	18661.00	18661.00	18661.00	17727.95
	Rate of Interest	7.10%	7.10%	7.10%	7.10%
	Interest	1324.93	1324.93	1324.93	1258.68
	Repayment Schedule	10 Annual instalments from 18.02.2009			
<b>5</b>	<b>BOND XVII</b>				
	Gross Loan opening	375.00	375.00	375.00	375.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	375.00	375.00	375.00	375.00
	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	375.00	375.00	375.00	375.00
	Average Loan	375.00	375.00	375.00	375.00
	Rate of Interest	6.99%	7.39%	7.39%	7.39%

	Interest	26.21	27.71	27.71	27.71
	Repayment Schedule	10 Annual instalments from 22.09.2009			
<b>6</b>	<b>BOND XVIII (ADDCAP FOR 2005-06)</b>				
	Gross Loan opening	0.00	1324.59	1324.59	1324.59
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	1324.59	1324.59	1324.59
	Additions during the year	1324.59	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	1324.59	1324.59	1324.59	1324.59
	Average Loan	662.30	1324.59	1324.59	1324.59
	Rate of Interest	8.15%	8.15%	8.15%	8.15%
	Interest	53.98	107.95	107.95	107.95
	Repayment Schedule	12 Annual instalments from 9.3.2010			
<b>7</b>	<b>Bond XIX (addcap for 2006-07)</b>				
	Gross Loan opening	0.00	0.00	170.00	170.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	0.00	170.00	170.00
	Additions during the year	0.00	170.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	170.00	170.00	170.00
	Average Loan	0.00	85.00	170.00	170.00
	Rate of Interest	9.25%	9.25%	9.25%	9.25%
	Interest	0.00	7.86	15.73	15.73
	Repayment Schedule	12 Annual instalments from 24-07-2010			
<b>8</b>	<b>Bond XXII (addcap for 2006-07)</b>				
	Gross Loan opening	0.00	0.00	319.52	319.52
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	0.00	319.52	319.52
	Additions during the year	0.00	319.52	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	319.52	319.52	319.52
	Average Loan	0.00	159.76	319.52	319.52
	Rate of Interest	8.68%	8.68%	8.68%	8.68%
	Interest	0.00	13.87	27.73	27.73
	Repayment Schedule	12 Annual instalments from 07-12-2010			
	Gross Loan opening	41579.00	42903.59	43393.11	43393.11
	Cumulative Repayment upto DOCO/previous year	4.33	8.66	392.24	2270.82
	Net Loan-Opening	41574.67	42894.93	43000.87	41122.29
	Additions during the year	1324.59	489.52	0.00	0.00
	Repayment during the year	4.33	383.58	1878.58	3744.68
	Net Loan-Closing	42894.93	43000.87	41122.29	37377.61
	Average Loan	42234.80	42947.90	42061.58	39249.95
	Rate of Interest	7.101%	7.124%	7.129%	7.132%
	Interest	2999.04	3059.62	2998.42	2799.31

## Asset-II

## Annexure-II

(Rs. in lakh)

	Details of Loan	2005-06	2006-07	2007-08	2008-09
<b>1</b>	<b>Bond XIII Option-I</b>				
	Gross Loan opening	300.00	300.00	300.00	300.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	25.00	50.00
	Net Loan-Opening	300.00	300.00	275.00	250.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	25.00	25.00	25.00
	Net Loan-Closing	300.00	275.00	250.00	225.00
	Average Loan	300.00	287.50	262.50	237.50
	Rate of Interest	8.63%	8.63%	8.63%	8.63%
	Interest	25.89	24.81	22.65	20.50
	Repayment Schedule	12 Annual instalments from 31.07.2006			
<b>2</b>	<b>Bond XV</b>				
	Gross Loan opening	2500.00	2500.00	2500.00	2500.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	208.33
	Net Loan-Opening	2500.00	2500.00	2500.00	2291.67
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	208.33	208.33
	Net Loan-Closing	2500.00	2500.00	2291.67	2083.33
	Average Loan	2500.00	2500.00	2395.83	2187.50
	Rate of Interest	6.68%	6.68%	6.68%	6.68%
	Interest	167.00	167.00	160.04	146.13
	Repayment Schedule	12 Annual instalments from 23.02.2008			
<b>3</b>	<b>BOND XVI</b>				
	Gross Loan opening	2500.00	2500.00	2500.00	2500.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	2500.00	2500.00	2500.00	2500.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	250.00
	Net Loan-Closing	2500.00	2500.00	2500.00	2250.00
	Average Loan	2500.00	2500.00	2500.00	2375.00
	Rate of Interest	7.10%	7.10%	7.10%	7.10%
	Interest	177.50	177.50	177.50	168.63
	Repayment Schedule	10 Annual instalments from 18.02.2009			
<b>4</b>	<b>BOND XVII</b>				
	Gross Loan opening	1600.00	1600.00	1600.00	1600.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	1600.00	1600.00	1600.00	1600.00
	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	1600.00	1600.00	1600.00	1600.00
	Average Loan	1600.00	1600.00	1600.00	1600.00
	Rate of Interest	7.39%	7.39%	7.39%	7.39%

	Interest	118.24	118.24	118.24	118.24
	Repayment Schedule	10 Annual instalments from 22.09.2009			
<b>5</b>	<b>BOND XVIII (ADDCAP FOR 2005-06)</b>				
	Gross Loan opening	0.00	1020.93	1020.93	1020.93
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	1020.93	1020.93	1020.93
	Additions during the year	1020.93	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	1020.93	1020.93	1020.93	1020.93
	Average Loan	510.47	1020.93	1020.93	1020.93
	Rate of Interest	8.15%	8.15%	8.15%	8.15%
	Interest	41.60	83.21	83.21	83.21
	Repayment Schedule	12 Annual instalments from 09.03.2010			
<b>6</b>	<b>Bond XXII (addcap for 2006-07)</b>				
	Gross Loan opening	0.00	0.00	193.85	193.85
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	0.00	193.85	193.85
	Additions during the year	0.00	193.85	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	193.85	193.85	193.85
	Average Loan	0.00	96.93	193.85	193.85
	Rate of Interest	8.68%	8.68%	8.68%	8.68%
	Interest	0.00	8.41	16.83	16.83
	Repayment Schedule	12 Annual instalments from 07-12-2010			
	Gross Loan opening	6900.00	7920.93	8114.78	8114.78
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	25.00	258.33
	Net Loan-Opening	6900.00	7920.93	8089.78	7856.45
	Additions during the year	1020.93	193.85	0.00	0.00
	Repayment during the year	0.00	25.00	233.33	483.33
	Net Loan-Closing	7920.93	8089.78	7856.45	7373.11
	Average Loan	7410.47	8005.36	7973.11	7614.78
	Rate of Interest	7.16%	7.23%	7.26%	7.27%
	Interest	530.23	579.17	578.47	553.52

## Asset-III

(Rs. in lakh)

	Details of Loan	2005-06	2006-07	2007-08	2008-09
<b>1</b>	<b>Bond XIII Option-I</b>				
	Gross Loan opening	62.00	62.00	62.00	62.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	5.17	10.33
	Net Loan-Opening	62.00	62.00	56.83	51.67
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	5.17	5.17	5.17
	Net Loan-Closing	62.00	56.83	51.67	46.50
	Average Loan	62.00	59.42	54.25	49.08
	Rate of Interest	8.63%	8.63%	8.63%	8.63%
	Interest	5.35	5.13	4.68	4.24
	Repayment Schedule	12 Annual instalments from 31.07.2006			
<b>2</b>	<b>Bond XV</b>				
	Gross Loan opening	798.00	798.00	798.00	798.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	66.50
	Net Loan-Opening	798.00	798.00	798.00	731.50
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	66.50	66.50
	Net Loan-Closing	798.00	798.00	731.50	665.00
	Average Loan	798.00	798.00	764.75	698.25
	Rate of Interest	6.68%	6.68%	6.68%	6.68%
	Interest	53.31	53.31	51.09	46.64
	Repayment Schedule	12 Annual instalments from 23.02.2008			
<b>3</b>	<b>BOND XVI</b>				
	Gross Loan opening	853.00	853.00	853.00	853.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	853.00	853.00	853.00	853.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	85.30
	Net Loan-Closing	853.00	853.00	853.00	767.70
	Average Loan	853.00	853.00	853.00	810.35
	Rate of Interest	7.10%	7.10%	7.10%	7.10%
	Interest	60.56	60.56	60.56	57.53
	Repayment Schedule	10 Annual instalments from 18.02.2009			
<b>4</b>	<b>BOND XVII</b>				
	Gross Loan opening	275.00	275.00	275.00	275.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	275.00	275.00	275.00	275.00
	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	275.00	275.00	275.00	275.00
	Average Loan	275.00	275.00	275.00	275.00

	Rate of Interest	7.39%	7.39%	7.39%	7.39%
	Interest	20.32	20.32	20.32	20.32
	Repayment Schedule	10 Annual instalments from 22.09.2009			
<b>5</b>	<b>BOND XVIII (ADDCAP FOR 2005-06)</b>				
	Gross Loan opening	0.00	642.33	642.33	642.33
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	642.33	642.33	642.33
	Additions during the year	642.33	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	642.33	642.33	642.33	642.33
	Average Loan	321.17	642.33	642.33	642.33
	Rate of Interest	8.15%	8.15%	8.15%	8.15%
	Interest	26.17	52.35	52.35	52.35
	Repayment Schedule	12 Annual instalments from 09.03.2010			
<b>6</b>	<b>Bond XXII (addcap for 2006-07)</b>				
	Gross Loan opening	0.00	0.00	339.36	339.36
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	0.00	339.36	339.36
	Additions during the year	0.00	339.36	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	339.36	339.36	339.36
	Average Loan	0.00	169.68	339.36	339.36
	Rate of Interest	8.68%	8.68%	8.68%	8.68%
	Interest	0.00	14.73	29.46	29.46
	Repayment Schedule	12 Annual instalments from 07-12-2010			
	Gross Loan opening	1988.00	2630.33	2969.69	2969.69
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	5.17	76.83
	Net Loan-Opening	1988.00	2630.33	2964.52	2892.86
	Additions during the year	642.33	339.36	0.00	0.00
	Repayment during the year	0.00	5.17	71.67	156.97
	Net Loan-Closing	2630.33	2964.52	2892.86	2735.89
	Average Loan	2309.17	2797.43	2928.69	2814.37
	Rate of Interest	7.18%	7.38%	7.46%	7.48%
	Interest	165.72	206.40	218.46	210.54

## Asset-IV

(Rs. in lakh)

	Details of Loan	2005-06	2006-07	2007-08	2008-09
<b>1</b>	<b>Bond XIII Option-I</b>				
	Gross Loan opening	51.00	51.00	51.00	51.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	4.25	8.50
	Net Loan-Opening	51.00	51.00	46.75	42.50
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	4.25	4.25	4.25
	Net Loan-Closing	51.00	46.75	42.50	38.25
	Average Loan	51.00	48.88	44.63	40.38
	Rate of Interest	8.63%	8.63%	8.63%	8.63%
	Interest	4.40	4.22	3.85	3.48
	Repayment Schedule	12 Annual instalments from 31.07.2006			
<b>2</b>	<b>Bond XV</b>				
	Gross Loan opening	660.00	660.00	660.00	660.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	55.00
	Net Loan-Opening	660.00	660.00	660.00	605.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	55.00	55.00
	Net Loan-Closing	660.00	660.00	605.00	550.00
	Average Loan	660.00	660.00	632.50	577.50
	Rate of Interest	6.68%	6.68%	6.68%	6.68%
	Interest	44.09	44.09	42.25	38.58
	Repayment Schedule	12 Annual instalments from 23.02.2008			
<b>3</b>	<b>BOND XVI</b>				
	Gross Loan opening	706.00	706.00	706.00	706.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	706.00	706.00	706.00	706.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	70.60
	Net Loan-Closing	706.00	706.00	706.00	635.40
	Average Loan	706.00	706.00	706.00	670.70
	Rate of Interest	7.10%	7.10%	7.10%	7.10%
	Interest	50.13	50.13	50.13	47.62
	Repayment Schedule	10 Annual instalments from 18.02.2009			
<b>4</b>	<b>BOND XVII</b>				
	Gross Loan opening	700.00	700.00	700.00	700.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	700.00	700.00	700.00	700.00
	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	700.00	700.00	700.00	700.00
	Average Loan	700.00	700.00	700.00	700.00



	Rate of Interest	7.39%	7.39%	7.39%	7.39%
	Interest	51.73	51.73	51.73	51.73
	Repayment Schedule	10 Annual instalments from 22.09.2009			
<b>5</b>	<b>BOND XVIII (ADDCAP FOR 2005-06)</b>				
	Gross Loan opening	0.00	673.51	673.51	673.51
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	673.51	673.51	673.51
	Additions during the year	673.51	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	673.51	673.51	673.51	673.51
	Average Loan	336.76	673.51	673.51	673.51
	Rate of Interest	8.15%	8.15%	8.15%	8.15%
	Interest	27.45	54.89	54.89	54.89
	Repayment Schedule	12 Annual instalments from 09.03.2010			
<b>6</b>	<b>Bond XXII (addcap for 2006-07)</b>				
	Gross Loan opening	0.00	0.00	405.53	405.53
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	0.00	405.53	405.53
	Additions during the year	0.00	405.53	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	405.53	405.53	405.53
	Average Loan	0.00	202.77	405.53	405.53
	Rate of Interest	8.68%	8.68%	8.68%	8.68%
	Interest	0.00	17.60	35.20	35.20
	Repayment Schedule	12 Annual instalments from 07-12-2010			
	Gross Loan opening	2117.00	2790.51	3196.04	3196.04
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	4.25	63.50
	Net Loan-Opening	2117.00	2790.51	3191.79	3132.54
	Additions during the year	673.51	405.53	0.00	0.00
	Repayment during the year	0.00	4.25	59.25	129.85
	Net Loan-Closing	2790.51	3191.79	3132.54	3002.69
	Average Loan	2453.76	2991.15	3162.17	3067.62
	Rate of Interest	7.25%	7.44%	7.53%	7.55%
	Interest	177.79	222.65	238.05	231.50

## Asset-V

(Rs. in lakh)

	Details of Loan	2005-06	2006-07	2007-08	2008-09
<b>1</b>	<b>Bond XIII Option-I</b>				
	Gross Loan opening	53.00	53.00	53.00	53.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	4.42	8.83
	Net Loan-Opening	53.00	53.00	48.58	44.17
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	4.42	4.42	4.42
	Net Loan-Closing	53.00	48.58	44.17	39.75
	Average Loan	53.00	50.79	46.38	41.96
	Rate of Interest	8.63%	8.63%	8.63%	8.63%
	Interest	4.57	4.38	4.00	3.62
	Repayment Schedule	12 Annual instalments from 31.07.2006			
<b>2</b>	<b>Bond XV</b>				
	Gross Loan opening	681.00	681.00	681.00	681.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	56.75
	Net Loan-Opening	681.00	681.00	681.00	624.25
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	56.75	56.75
	Net Loan-Closing	681.00	681.00	624.25	567.50
	Average Loan	681.00	681.00	652.63	595.88
	Rate of Interest	6.68%	6.68%	6.68%	6.68%
	Interest	45.49	45.49	43.60	39.80
	Repayment Schedule	12 Annual instalments from 23.02.2008			
<b>3</b>	<b>BOND XVI</b>				
	Gross Loan opening	727.00	727.00	727.00	727.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	727.00	727.00	727.00	727.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	72.70
	Net Loan-Closing	727.00	727.00	727.00	654.30
	Average Loan	727.00	727.00	727.00	690.65
	Rate of Interest	7.10%	7.10%	7.10%	7.10%
	Interest	51.62	51.62	51.62	49.04
	Repayment Schedule	10 Annual instalments from 18.02.2009			
<b>4</b>	<b>BOND XVII</b>				
	Gross Loan opening	800.00	800.00	800.00	800.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	800.00	800.00	800.00	800.00
	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	800.00	800.00	800.00	800.00
	Average Loan	800.00	800.00	800.00	800.00
	Rate of Interest	7.39%	7.39%	7.39%	7.39%

	Interest	59.12	59.12	59.12	59.12
	Repayment Schedule	10 Annual instalments from 22.09.2009			
<b>5</b>	<b>BOND XVIII (ADDCAP FOR 2005-06)</b>				
	Gross Loan opening	0.00	367.53	367.53	367.53
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	367.53	367.53	367.53
	Additions during the year	367.53	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	367.53	367.53	367.53	367.53
	Average Loan	183.77	367.53	367.53	367.53
	Rate of Interest	8.15%	8.15%	8.15%	8.15%
	Interest	14.98	29.95	29.95	29.95
	Repayment Schedule	12 Annual instalments from 09.03.2010			
<b>6</b>	<b>Bond XXII (addcap for 2006-07)</b>				
	Gross Loan opening	0.00	0.00	114.01	114.01
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	0.00	114.01	114.01
	Additions during the year	0.00	114.01	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	0.00	114.01	114.01	114.01
	Average Loan	0.00	57.01	114.01	114.01
	Rate of Interest	8.68%	8.68%	8.68%	8.68%
	Interest	0.00	4.95	9.90	9.90
	Repayment Schedule	12 Annual instalments from 07-12-2010			
	Gross Loan opening	2261.00	2628.53	2742.54	2742.54
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	4.42	65.58
	Net Loan-Opening	2261.00	2628.53	2738.12	2676.96
	Additions during the year	367.53	114.01	0.00	0.00
	Repayment during the year	0.00	4.42	61.17	133.87
	Net Loan-Closing	2628.53	2738.12	2676.96	2543.09
	Average Loan	2444.77	2683.33	2707.54	2610.02
	Rate of Interest	7.19%	7.29%	7.32%	7.33%
	Interest	175.78	195.51	198.18	191.43

## Asset-VI

(Rs. in lakh)

	Details of Loan	2006-07	2007-08	2008-09
<b>1</b>	<b>BOND XIII OPTION I</b>			
	Gross Loan opening	107.00	107.00	107.00
	Cumulative Repayment upto DOCO/previous year	0.00	8.92	17.83
	Net Loan-Opening	107.00	98.08	89.17
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	8.92	8.92	8.92
	Net Loan-Closing	98.08	89.17	80.25
	Average Loan	102.54	93.63	84.71
	Rate of Interest	8.63%	8.63%	8.63%
	Interest	8.85	8.08	7.31
	Repayment Schedule			
<b>2</b>	<b>BOND XV</b>			
	Gross Loan opening	1363.00	1363.00	1363.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	113.58
	Net Loan-Opening	1363.00	1363.00	1249.42
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	113.58	113.58
	Net Loan-Closing	1363.00	1249.42	1135.83
	Average Loan	1363.00	1306.21	1192.63
	Rate of Interest	6.68%	6.68%	6.68%
	Interest	91.05	87.25	79.67
	Repayment Schedule			
<b>3</b>	<b>BOND XVI</b>			
	Gross Loan opening	1457.00	1457.00	1457.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	1457.00	1457.00	1457.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	145.70
	Net Loan-Closing	1457.00	1457.00	1311.30
	Average Loan	1457.00	1457.00	1384.15
	Rate of Interest	7.10%	7.10%	7.10%
	Interest	103.45	103.45	98.27
	Repayment Schedule			
<b>4</b>	<b>BOND XVIII (Including addcap for 2006-07)</b>			
	Gross Loan opening	1050.00	1353.49	1353.49
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	1050.00	1353.49	1353.49
	Additions during the year	303.49	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	1353.49	1353.49	1353.49
	Average Loan	1201.75	1353.49	1353.49

	Rate of Interest	8.15%	8.15%	8.15%
	Interest	97.94	110.31	110.31
	Repayment Schedule			
	Gross Loan opening	3977.00	4280.49	4280.49
	Cumulative Repayment upto DOCO/previous year	0.00	8.92	131.42
	Net Loan-Opening	3977.00	4271.57	4149.07
	Additions during the year	303.49	0.00	0.00
	Repayment during the year	8.92	122.50	268.20
	Net Loan-Closing	4271.57	4149.07	3880.87
	Average Loan	4124.29	4210.32	4014.97
	Rate of Interest	7.31%	7.34%	7.36%
	Interest	301.29	309.09	295.56

## Annexure-VII

## Asset-VII

(Rs. in lakh)

		(Rs. in laks)		
	Details of Loan	2006-07	2007-08	2008-09
<b>1</b>	<b>BOND XVIII</b>			
	Gross Loan opening	223.62	223.62	223.62
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	223.62	223.62	223.62
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	223.62	223.62	223.62
	Average Loan	223.62	223.62	223.62
	Rate of Interest	8.15%	8.15%	8.15%
	Interest	18.23	18.23	18.23
	Repayment Schedule	12 annual inatalments from 9-3-2010		
<b>2</b>	<b>BOND XXII ( ADDCAP FOR 2006-07)</b>			
	Gross Loan opening	0.00	38.45	38.45
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	0.00	38.45	38.45
	Additions during the year	38.45	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	38.45	38.45	38.45
	Average Loan	19.23	38.45	38.45
	Rate of Interest	8.68%	8.68%	8.68%
	Interest	1.67	3.34	3.34
	Repayment Schedule	12 Annual instalments from 7-12-2010		
	Gross Loan opening	223.62	262.07	262.07
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00
	Net Loan-Opening	223.62	262.07	262.07
	Additions during the year	38.45	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	262.07	262.07	262.07
	Average Loan	242.85	262.07	262.07
	Rate of Interest	8.1920%	8.2278%	8.2278%
	Interest	19.89	21.56	21.56