

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No.270/2010

**Coram: Dr. Pramod Deo, Chairperson
Shri S.Jayaraman, Member
Shri V.S.Verma, Member
Shri M.Deena Dayalan, Member**

DATE OF HEARING: 20.1.2011

DATE OF ORDER: 27.4.2011

In the matter of

Determination of transmission tariff for Combined Assets of (i) LILO of Korba-Raipur at Sipat(DOCO: 01.05.2006), (ii) 765 kV Sipat- Seoni Ckt-I... (DOCO: 01.11.2007), (iii) 400/220 kV ICT-I at Seoni...(DOCO: 01.12.2007), (iv) Ckt-II of 400 kV Nagda- Dehgam line (DOCO: 01.01.2008), (v) Ckt-I of Nagda- Dehgam line (DOCO: 01.02.2008), (vi) 400 kV Seoni- Khandwa T/L , 80 MVAR Bus Reactor, 765/400 kV ICT-II at Seoni S/S, LILO of Sardar- Sarovar- Nagda line at Rajgarh (DOCO: 01.04.2008) and (vii) 765 kV Sipat- Seoni Ckt-II (DOCO: 01.05.2008) (Notional DOCO: 01.05.2008) & Combined assets of (i) 315 MVA 400/220 kV ICT-II at Seoni S/S, 315 MVA 400/220 kV ICT-I at Rajgarh (DOCO: 01.04.2008) and (ii) 315 MVA ICT-II at Rajgarh (DOCO: 01.04.2009) (Notional DOCO: 01.04.2009) under Sipat-I Transmission System in Western Region for the period from 01.04.2009 to 31.03.2014.

And in the matter of

Power Grid Corporation of India Ltd.,Gurgaon
Vs

.... Petitioner

1. Madhya Pradesh Power Trading Co. Ltd.
2. Maharashtra State Electricity Distribution Co. Ltd
3. Gujrat Urja Vikas Nigam Ltd
4. Electricity Department, Govt of Goa
5. Electricity Department, Administration of Daman & Diu
6. Electricity Department, Administration of Dadra Nagar Haveli
7. Chattisgarh State Electricity Board
8. Madhya Pradesh Audyogik Kendra

.....Respondents

The following were present:

1. Shri Rajeev Gupta, PGCIL
2. Shri M.M. Mondal, PGCIL

ORDER

The petition has been filed by Power Grid Corporation of India Limited for approval of tariff for (i) LILO of Korba – Raipur at Sipat, (ii) 765 kV Sipat – Seoni Ckt. I, (iii) 400/220 kV ICT I at Seoni, (iv) Ckt. II of 400 kV Nagda – Dehgam line, (v) Ckt. I of Nagda – Dehgam line, (vi) 400 kV D/C Seoni –



Khandwa TL, 80 MVAR Bus Reactor, 765/400 kV ICT. II at Seoni S/S LILO of Sardar – Sarovar – Nagda line at Rajgarh, (vii) 765 kV Sipat – Seoni Ckt. II; (viii) 315 MVA 400/220 kV ICT II at Seoni S/S, 315 MVA 400/220 kV ICT I at Rajgarh, (ix) MVA ICT II at Rajgarh. Under Sipat I Transmission System in Western Region for the Period from 01.04.2009 to 31.03.2014, (hereinafter collectively referred to as the “transmission assets”) for the period 2009-14 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as “the 2009 regulations”) after accounting for additional capital expenditure incurred during 2009-10 and 2010-11. The petitioner has additionally prayed for the following:

(a) Allow the grossing up of the base rate of return with the applicable tax rate as per the relevant Finance Acts and direct settlement of tax liability between the generating company/ transmission licensee and the beneficiaries/long term customers on year to year basis.

(b) Allow the petitioner, in case of the assets being combined, to calculate the transmission charges to recover full depreciation (90% of the gross block) of the assets during the useful life (25 years for S/S and 35 years for Transmission lines) reckoning from the actual date of commissioning and permit the petitioner to treat the recovery of depreciation after achieving the useful life by an asset in accordance with para 8.3 of the petition.

(c) Approve the reimbursement, of expenditure, by the beneficiaries towards petition filing fee, and publishing of notices in newspapers in terms of Regulation 42 of the 2009 regulations, and other expenditure (if any) in relation to the filing of petition.

(d) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in interest rate on account of floating rate of interest applicable during 2009-14 period, if any, from the respondents

(e) Allow the petitioner to bill and recover Service Tax on Transmission charges from the respondents if at any time exemption from Service Tax is withdrawn and transmission of Power is notified as a taxable Service.

(f) Allow the petitioner to bill and recover licence fee separately from the respondents

(g) Pass such other relief as the Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.

2. The petitioner has submitted that various assets of Sipat-I Transmission System have been executed progressively from 2006 to 2008 as per the details given overleaf.



Asset	Name of Asset	Date of Commercial Operation
Asset-I	LILO of korba-Raipur 400 kV S/C line	1.5.2006
Asset-II	765 kV Sipat-Seoni Ckt 1 along with associated bays, 765/400 kV ICT-I at Seoni and LILO of 400 kV Bhilai-Satpura line along with bay equipment	1.11.2007
Asset-III	400/220 kV ICT along with two 220 kV line bays	1.12.2007
Asset-IV	Ckt II of 400 kV D/C Nagda-Dehgam line	1.1.2008
Asset-V	Ckt 1 of 400 kV D/C Nagda-Dehgam line	1.2.2008
Asset-VI	400 kV D/C Seoni-Khandwa TL, 80 MVAR Bus reactor, 765/400 kV ICT II at Seoni S/S, LILO of Sarda-Sarovar-Nagda line	1.4.2008
Asset-VII	765 kV Sipat-Seoni Ckt II	1.5.2008
Asset-VIII	315 MVA 400/220 kV ICT II at Seoni S/S, 315 MVA 400/220 kV ICT I	1.4.2008
Asset-IX	315 MVA ICT II	1.4.2009

3. In terms of the procedure for combining of assets decided by the Commission vide order dated 23.10.2009, Assets I to VII have been combined with notional date of commercial operation as 1.5.2008 (referred as Combined Assets Part I in this order) and Assets VIII to IX have been combined with notional date of commercial operation as 1.4.2009 (referred as Combined Assets Part II in this order).

4. The petitioner has claimed the transmission charges during 2009-14 as under:

(i) Combined Assets Part-I

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	11295.63	11492.59	11604.53	11604.53	11604.53
Interest on Loan	9536.89	8969.61	8248.26	7400.16	6556.01
Return on Equity	11262.23	11462.50	11575.70	11575.70	11575.70
Interest on Working Capital	783.62	786.65	783.23	772.91	763.04
O & M Expenses	2292.85	2424.40	2562.80	2709.78	2864.21
Total	35171.22	35135.75	34774.52	34063.08	33363.49

(ii) Combined Assets Part-II

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	319.19	332.50	334.91	334.91	334.91
Interest on Loan	317.01	306.10	281.75	254.12	226.31
Return on Equity	318.48	331.91	334.31	334.31	334.31
Interest on Working Capital	44.27	46.00	47.07	48.05	49.12
O & M Expenses	487.32	515.22	544.71	575.82	608.76
Total	1486.27	1531.73	1542.75	1547.21	1553.41

5. The details submitted by the petitioner in support of its claim for Interest on Working Capital are given hereunder:

(i) Combined Assets Part-I

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	343.93	363.66	384.42	406.47	429.63
O & M expenses	191.07	202.03	213.57	225.82	238.68
Receivables	5861.87	5855.96	5795.75	5677.18	5560.58
Total	6396.87	6421.65	6393.74	6309.47	6228.89
Interest	783.62	786.65	783.23	772.91	763.04
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%

(ii) Combined Assets Part-II

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	73.10	77.28	81.71	86.37	91.31
O & M expenses	40.61	42.94	45.39	47.99	50.73
Receivables	247.71	255.29	257.13	257.87	258.90
Total	361.42	375.51	384.23	392.23	400.94
Interest	44.27	46.00	47.07	48.05	49.12
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%

6. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under section 64 of the Electricity Act, 2003 (the Act). Reply to the petition has been filed only by MP Power Trading Co. Ltd respondent No. 1 herein as follows:

- (a) Petitioner has already filed a separate petition for asset no. IX (315 MVA ICT II at Rajgarh (DOCO- 01.04.2009)) vide petition no.

69/2010 which is under consideration of the Commission. Consideration of the said asset in this petition will amount to duplication of tariff, hence the said asset should be directed to be removed from the present petition.

(b) The date of commercial operation of the Combined Asset Part-I and Combined Asset Part-II is 01.05.2008 and 01.04.2009 respectively, and hence are to be treated as existing projects in accordance with 2009 Regulations .

(c) Since, the cut off date of assets no.s 6, 7 and 8 comes as 31.3.2010, the additional capital expenditure of ₹ 2715.78 lakhs during 2009-10 is in accordance with the 2009 Regulations and can be considered for capitalisation.

(d) The Petitioner has not supported with firm logic or reasons its contention that since the tariff block of 2004-09 has expired on 31.3.2009 before expiry of cut off date, the cut off date should be considered as per Tariff Regulations 2009 and accordingly provision for additional capitalisation should also be applicable. As per Respondent No. 1, the cut off date is decided with respect to DOCO and in accordance with the tariff regulations prevailing at the time of the DOCO, and hence no change in cut off date is therefore permissible under any of the regulations.

(e) According to Respondent No. 1, the petitioner should bear from its own funds the additional amount of entry tax liability that it has deposited in court pending the decision on higher rate of entry tax being contested by the petitioner and the matter being sub judice. According to Respondent No. 1, this expenditure should form a component of capital cost only after final disposal of the matter by Hon. Supreme Court. Therefore, the amount of ₹ 2109.28 lakhs should not be allowed at this stage.

7. The petitioner has filed its rejoinder to the reply of MP Power Trading Co Ltd. It has been averred therein that Asset No. (viii) 315 MVA 400/220 kV ICT II at Seoni S/S, 315 MVA 400/220 kV ICT I at Rajgarh, and Asset No. (ix) MVA ICT II at Rajgarh have been clubbed in the current petition as directed by the Commission in its letter dated 23.10.2009. The petitioner has stated that as per the said letter, Asset No.s I to VII were clubbed for the purpose of determination of tariff and accordingly notional date of commercial operation shall be considered as 1.5.2008. Similarly, Asset No. VIII and IX were clubbed whose notional date of commercial operation shall be considered as 1.4.2009. Accordingly, cut off date for combined Asset No. I to VII may be taken as 31.3.2011 in accordance with Tariff Regulations 2009 which is 31st March of the year closing after two years after the commercial operation of the project, and in case the project is declared under commercial operation in the last quarter of a year, the cut off date shall be 31st March of the year closing after three years after the commercial operation of the project. Hence, the additional capitalisation claimed in the current petition during FY 2009–10 and

2010–11, which is on account of final / balance retention payment and is within the original scope of work, has been considered within the cut off date which is also consistent with provisions contained in the last para of Regulation 7 of the Tariff Regulations 2009 in respect of the treatment of additional capitalisation for existing projects. Furthermore, notional date of commercial operation being 1.4.2009 for Asset VIII and IX, additional capital expenditure FYs 2009-10 and 2010-11 furnished in the petition are within the cut-off date. As regards entry tax, if it had not been deposited in court, it would have entailed levy of heavy penalty. Hence, this expense should be allowed.

8. We have carefully considered the submissions of the petitioner and MP Power Trading Co Ltd. On the issues raised by MP Power Trading Co Ltd., we are of the view as follows:-

(a) Since, the Petitioner has confirmed that there would be an adjustment in the tariff arising from consideration of asset no. IX (315 MVA ICT II at Rajgarh (DOCO- 01.04.2009)) in Petition No. 69/2010 which is under consideration of the Commission, consideration of the said asset in this petition will not amount to duplication of tariff.

(b) As regards the rival contentions regarding cut-off date and admissibility of the capital expenditure after 31.3.2010, we address the same in the relevant para hereunder.

(c) Depending upon the final decision of the Hon. Supreme Court in the matter of entry tax there would be an appropriate adjustment. Accordingly, we see no merit in disallowing this expense at this stage.

9. The Commission vide its order dated 10.5.2010 in Petition No: 3/2010 has approved capital cost of Asset-I to Asset-V for tariff period 2004-2009. Further, Commission vide order dated 01.06.2010 in petition No. 165/2009 has approved the capital cost of Asset-VI to Asset-VIII under Sipat I TS covered under this petition for the tariff period 2004-2009 upto 31.03.2009.

CAPITAL COST

10. Capital cost admitted by the Commission in respect of the transmission assets comprising combined Assets Part –I is as under:

Combined Assets Part-I		
Assets	Admitted Capital Cost as on 01.04.2009 (₹ in lakh)	
I	636.48	Order dated 15.5.2010 in Petition No. 3/2010
II	52555.54	
III	2340.80	
IV	28805.31	
V	9535.67	
VI	73606.40	Order dated 1.6.2010 in Petition No. 165/2009
VII	45635.59	
VIII	4508.86	

11. Asset-IX i.e. 315 MVA ICT II at Rajgarh Under Sipat I (DOCO 01.04.2009), as per Original investment approval, was scheduled for commissioning by Feb' 2007. However, as per the approved RCE, the schedule was March, 2008 against which the asset was put under commercial operation on 01.04.2009 and there has been a delay of about 25 months from the original scheduled as per the investment approval and delay of 12 months from the RCE scheduled date.

12. The Commission is of the view that there is time over-run in the commissioning of the ICT. The petitioner has submitted that ICT-II at Raigarh sub-station is the last element under Sipat-I transmission system commissioned on 01.04.2009. The petitioner mentioned that as the Sipat-I generation is delayed, the transmission system with Sipat-I was advanced for grid strengthening and to improve system parameters including the despatch of power from Sipat - II. It has been further mentioned that since the work had commenced, it could not continue indefinitely as Sipat-I was further delayed and expected in November, 2010. The Commission had also enquired as to whether the petitioner had signed any indemnification agreement with the generator. The petitioner mentioned that the indemnification agreement has been filed in the Commission for the other assets in the earlier petitions. However, the petitioner could not satisfactorily explain the delay in the commissioning of this ICT.

13. As per the approved Revised Cost Estimates the schedule was March, 2008. Hence, the delay in commissioning of the assets is not justified. Accordingly, during the period March, 2008 to March, 2009, the petitioner shall bear the Interest During Construction (IDC) and Incidental Expenditure During Construction (IEDC).

14. Accordingly, IDC and IEDC of the above mentioned period has been proportionally deducted from the Assets of the System.

Combined Assets Part-2		
Assets		Capital Cost as on 01.04.2009
(viii) A		4508.86
(ix)	Claimed by Petitioner	1361.74
	IDC & IEDC Not allowed	(82.06)
B	Capital Cost considered for Tariff Calculation	1279.68
(A+B)	Total	5788.54

PROJECTED ADDITIONAL CAPITAL EXPENDITURE

15. The petitioner has claimed additional capital expenditure for **combined Asset Part-I** for the year 2009-10 and 2010-11 during the current tariff setting period 2009-14. The assets covered under current petition were declared under commercial operation during 2004-09 block period, wherein the additional capitalization after cut-off dates on account of deferred liabilities was allowed as per clause 53(2) of CERC Tariff Regulations 2004. Due to the contractual exigencies and other reasons beyond the control of the petitioner, the petitioner was required to make provisions for release of balance/retention payment beyond 2009-10. However, clause 9(1) of CERC (Terms and Conditions of Tariff) Regulations 2009 does not provide for such undischarged liabilities as part of additional capitalization after cut-off date. PGCIL had submitted that the additional capitalization incurred/projected to be incurred during the year 2009-11 is on account of balance and retention payment and is within the original scope of work.

16. As per 2004 regulations, "cut-off date means the date of first financial year closing after one year of the date of commercial operation of the transmission system". As per Clause 53(2) (1) Additional Capital expenditure was allowed after cut-off date as "deferred liabilities relating to works/services within the original scope of work". As per the present 2009 regulations, "cut-off

date means 31st march of the year closing after 2 years of the year of commercial operation of the project, and in case if the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31st March of the year closing after 3 years of the year of commercial operation.

17. The date of Commercial operation of the Asset is 01.05.2008 and cut-off date as per 2004-09 Regulation is 31.03.2010. The ACE during 2009-10 comes within the cut-off date.

18. As regards the additional capital expenditure projected in respect of 2010-11, the Commission has already addressed a similar issue in its order dated 8.2.2011 in Petition No. 176/2010 and has held as under:

“17. In case of existing projects, where the undischarged liabilities incurred after the cut-off date were admissible under the 2004 regulations have been rendered inadmissible under the 2009 regulations. The generating company and transmission licensee has a legitimate expectation that the undischarged liabilities incurred after the cut-off date which were allowed under the 2004 regulations would continue to be allowed under the 2009 regulations. By virtue of provision of Regulation 9 (2) of the 2009 regulations and in the absence of any saving provisions in respect of the existing projects, the generating companies and transmission licensees are not entitled to capitalization of undischarged liability incurred after the cut-off date in respect of the existing projects. Therefore, we consider it a fit case for exercise of our power under Regulation 44 of the 2009 regulations. Accordingly, in exercise of power under Regulation 44 of the 2009 regulations, we relax the provision of Regulation 9(2) of the 2009 regulations to allow capitalization of the expenditure incurred /projected to be incurred for undischarged liability on account of balance and retention payments to contractors and any tax liability towards the contractor, etc. after the cut-off date. We direct that this relaxation will be applicable in case of tariff determination of existing projects.”

19. The Commission therefore allows the petitioner Additional Capital Expenditure for 2010-11 on account of undischarged liabilities as the ACE incurred is towards final/retention payment and is within the original scope of work.

20. Notional date of commercial operation of the **Combined Assets Part-II** is 01.04.2009 and as per provisions of the 2009 regulations, cut-off date is 31.03.2012. Projected additional capitalisation claimed by the Petitioner falls within the cut-off date. Therefore, the same has been considered for the purpose of tariff calculation for Combined Assets-II as per Regulation 9(1) of the 2009 regulations.

21. Details of projected additional capitalisation is as follows:

(₹ in lakh)

Name of the Asset	Year	Nature	Amount (₹ In Lakhs)	Details of Expenditure
Combined Assets Part-I				
Asset-II	2009-10	Building & Civil Works	78.89	Balance Payment
		T/L	40.19	
		S/S	306.08	
	2010-11	Building & Civil Works	132.95	Balance Payment
		T/L	409.60	Entry Tax Payable
		S/S	21.96	Final/Retention Payment
Asset-III	2009-10	Building & Civil Works	595.04	Final/Retention Payment
		T/L	3.28	Balance Payment
		S/S	98.11	
Asset-IV	2009-10	Building & Civil Works	4.69	Final/Retention Payment
		T/L	159.88	
		S/S	130.35	
	2010-11	T/L	74.52	Final/Retention Payment
		T/L	131.25	Entry Tax Payable
		S/S	31.90	Final/Retention Payment
Asset-V	2009-10	T/L	25.71	Final/Retention Payment
		S/S	130.35	
	2010-11	T/L	42.15	Entry Tax Payable
Asset-VI	2009-10	Building & Civil Works	199.26	Final/Retention Payment
		T/L	1053.22	
		S/S	394.90	
		PLCC	24.61	
	2010-11	Building & Civil Works	75.79	Final/Retention Payment
		T/L	1299.81	Entry Tax Payable
		T/L	170.16	Final/Retention Payment
Asset-VII	2009-10	S/S	679.16	Final/Retention Payment
		T/L	669.68	Balance Payment
	2010-11	S/S	1.22	
		T/L	226.47	
		S/S	150.53	Final/Retention Payment
		S/S	275.05	Final/Retention Payment

Combined Assets part-II					
Asset-VIII	2009-10	Building & Civil Works	22.85	Final/Retention Payment	
		S/S	348.10		
		T/L	1.94		
	2010-11	S/S	6.30		
Asset-IX	2009-10	S/S	47.33	Final/Retention Payment	
		PLCC	0.13		
	2010-11	S/S	85.32	Final/Retention Payment	

22. The asset wise detail of capital cost and projected additional capitalization given below has been considered in tariff calculations:

(₹ in lakh)

Name of Asset	Apportion Approved Cost as on 31.03.2009	Admitted Cost as on 31.03.2009	Add. Cap Proposed during 2009-14 period.		Total Estimated Capital Cost as 31.03.2014
			2009-10	2010-11	
Combined Assets Part-I					
Asset I	709.17	636.48	0.00	0.00	636.48
Asset II	56770.79	52555.54	425.16	1159.55	54140.25
Asset III	2477.64	2340.80	101.39	0.00	2442.19
Asset IV	30099.48	28805.31	294.92	237.67	29337.90
Asset V	9908.10	9535.67	156.06	42.15	9733.88
Asset VI	78930.26	73606.40	1671.99	2225.56	77503.95
Asset VII	48822.14	45635.59	670.90	652.05	46958.54
Sub Total-I	227717.58	213115.79	3320.42	4316.98	220753.19
Combined Assets Part-II					
Asset (viii)	3995.00	4508.86	372.89	6.30	4888.05
Asset (ix)	1401.66	1279.68	47.46	85.32	1412.46
Sub Total-II	5396.66	5788.54	420.35	91.62	6300.51
Grand Total	233114.24	218904.33	3740.77	4408.60	227053.70

DEBT- EQUITY RATIO

23. Regulation 12 of the CERC (Terms and Conditions of Tariff)

Regulations, 2009 provides that:-

“For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff:

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

(1) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.03.2009 shall be considered.”



24. The Asset wise details of Debt-Equity of asset as on 01.04.2009 are as per following:-

Asset – I	Amount (₹ Lakh)	%
Debt	451.59	70.95%
Equity	184.89	29.05%
Total	636.48	100.00%
Asset – II		
Debt	36788.12	70.00%
Equity	15767.42	30.00%
Total	52555.54	100.00%
Asset - III	Amount (₹ Lakh)	%
Debt	1638.50	70.00%
Equity	702.30	30.00%
Total	2340.80	100.00%
Asset - IV	Amount (₹ Lakh)	%
Debt	20163.95	70.00%
Equity	8641.36	30.00%
Total	28805.31	100.00%
Asset - V	Amount (₹ Lakh)	%
Debt	6674.97	70.00%
Equity	2860.71	30.00%
Total	9535.68	100.00%
Asset - VI	Amount (₹ Lakh)	%
Debt	51524.63	70.00%
Equity	22081.77	30.00%
Total	73606.40	100.00%
Asset - VII	Amount (₹ Lakh)	%
Debt	31946.48	70.00%
Equity	13689.11	30.00%
Total	45635.59	100.00%
Asset - VIII	Amount (₹ Lakh)	%
Debt	3158.77	70.06%
Equity	1350.09	29.94%
Total	4508.86	100.00%
Particulars	As Admitted on DOCO	
Asset - IX	Amount (₹ Lakh)	%
Debt	895.78	70.00%
Equity	383.90	30.00%
Total	1279.68	100.00%

25. Detail of Debt-Equity claimed by the petitioner for Projected Add Cap for Combined Asset is given below:-

Combined Assets Part-I		Normative	
Particulars		As Admitted on 31.3.2009	
2009-10	Amount (₹ in lakh)	%	
Debt	2324.29	70.00%	
Equity	996.13	30.00%	
Total	3320.42	100.00%	
2010-11		As Admitted on 31.3.2009	
	Amount (₹ in lakh)	%	
Debt	3021.89	70.00%	
Equity	1295.09	30.00%	
Total	4316.98	100.00%	
Combined Assets Part-II		Normative	
Particulars		As Admitted on 31.3.2009	
2009-10	Amount (₹ Lakh)	%	
Debt	294.25	70.00%	
Equity	126.11	30.00%	
Total	420.35	100.00%	
2010-11		As Admitted on 31.03.2009	
	Amount (₹ Lakh)	%	
Debt	64.13	70.00%	
Equity	27.49	30.00%	
Total	91.62	100.00%	

RETURN ON EQUITY

26. Regulation 15 of the 2009 regulations provides as under:

“15. (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.

(2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up as per clause (3) of this regulation:

*Provided that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in **Appendix-II**:*

Provided further that the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever.

(3) The rate of return on equity shall be computed by grossing up the base rate with the normal tax rate for the year 2008-09 applicable to the concerned generating company or the transmission licensee, as the case may be:

Provided that return on equity with respect to the actual tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up separately for each year of the tariff period along with the tariff petition filed for the next tariff period.

(4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

*Rate of pre-tax return on equity = Base rate / (1-t)
Where t is the applicable tax rate in accordance with clause (3) of this regulation.”*

27. The Petitioner has computed ROE on pre- tax basis on 11.33% MAT in accordance with the tax rate applicable for 2008-09 and has claimed return on equity @ 17.481%.

28. The ROE for Combined Asset Part I works out to ₹ 11262.24 lakh for year 2009-10, ₹ 11462.51 lakh for year 2010-11 and ₹ 11575.71 lakh for the period 2011-14 and for Combined Asset Part II works out to ₹ 314.14 lakh for year 2009-10, ₹ 327.57 lakh for year 2010-11 and ₹ 329.97 lakh for the period 2011-14.

29. The Commission vide its order dated 3.8.2010 in Petition No. 17/2010 has already taken a decision to amend the 2009 regulations for allowing grossing up of the base rate of return with the applicable tax rate as per the Finance Act for the relevant year and for direct settlement of tax liability between the generating company/transmission licensee and the beneficiaries/long term transmission customers on year to year basis. The process of amendment to the 2009 regulation is under way and will address the concern of the petitioner with regard to the MAT rate.

INTEREST ON LOAN

30. Regulation 16 of the 2009 regulations provides that,-

“16. (1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.

(3) *The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year:*

(4) *Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.*

(5) *The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project:*

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered:

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) *The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.*

(7) *The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.*

(8) *The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.*

(9) *In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute:*

Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan."

31. In our calculations Interest on loan capital has been worked out as per Regulation 16 of the CERC (Terms and Conditions of Tariff) Regulations, 2009 as detailed below:

- (i) Details of net outstanding loan as on 31.3.2009, cumulative repayment up to 31.3.2009, repayment schedule for the loans, rate of interest etc. have been taken from the order dated 10.05.2010 in petition no: 3/2010 for asset (i) to asset(v), and vide order dated 01.06.2010 in petition No.

165/2009 for asset(vi) to asset(viii) for working out weighted average rate of interest. For asset (ix), loan details as per petition have been considered.

(ii) Tariff is worked out considering normative loan and normative repayments. Depreciation allowed has been taken as normative repayment for the tariff period 2009-14.

(iii) For loans with floating interest rates, rates of interest as on 01-04-2009 have been considered.

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

32. Based on the above, Interest on loan has been worked out for the period 2004-09 are given under:

(i) Combined Assets Part-I

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	149188.23	151512.52	154534.41	154534.41	154534.41
Cumulative Repayment up to Previous Year	9168.98	20464.61	31957.20	43561.74	55166.27
Net Loan-Opening	140019.24	131047.91	122577.20	110972.67	99368.14
Addition due to Additional Capitalization	2324.29	3021.89	0.00	0.00	0.00
Repayment during the year	11295.63	11492.59	11604.53	11604.53	11604.53
Net Loan-Closing	131047.91	122577.20	110972.67	99368.14	87763.61
Average Loan	135533.58	126812.55	116774.94	105170.40	93565.87
Weighted Average Rate of Interest on Loan	7.0366%	7.0731%	7.0634%	7.0364%	7.0068%
Interest	9536.90	8969.60	8248.27	7400.16	6556.01

(ii) Combined Assets Part-II

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	4054.54	4348.79	4412.92	4412.92	4412.92
Cumulative Repayment up to Previous Year	206.35	521.20	849.36	1179.93	1510.50
Net Loan-Opening	3848.19	3827.59	3563.57	3232.99	2902.42
Addition due to Additional	294.25	64.13	0.00	0.00	0.00

Capitalization					
Repayment during the year	314.85	328.15	330.57	330.57	330.57
Net Loan-Closing	3827.59	3563.57	3232.99	2902.42	2571.85
Average Loan	3837.89	3695.58	3398.28	3067.71	2737.13
Weighted Average Rate of Interest on Loan	8.1433%	8.1708%	8.1793%	8.1717%	8.1560%
Interest	312.53	301.96	277.95	250.68	223.24

33. The detailed calculations in support of the weighted average rates of interest on loan in respect of Combined Asset I & II have been computed as per the **Annexure-1 and Annexure-2** to this order.

DEPRECIATION

34. Regulation 17 of the 2009 regulations provides for computation of depreciation in the following manner, namely:

“17. (1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.

(2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.

Provided that in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site:

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciable value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff.

(3) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III to these regulations for the assets of the generating station and transmission system:

Provided that, the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets.

(5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2009 from the gross depreciable value of the assets.

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

35. In our calculations too, depreciation has been worked out on the basis of capital expenditure as on 01-04-2009/DOCO and projected additional capitalisation thereafter.

36. Depreciation allowed has been worked out as below:

(i) Combined Assets Part-I

(₹ in lakh)

Details of Depreciation	Up to 31.3.2004	2009-10	2010-11	2011-12	2012-13	2013-14
Gross block as per last order	213115.79	213115.79	216436.21	220753.19	220753.19	220753.19
Addition during 2009-14 due to Projected Additional Capital Expenditure		3320.42	4316.98	0.00	0.00	0.00
Gross block		216436.21	220753.19	220753.19	220753.19	220753.19
Average gross block		214776.00	218594.70	220753.19	220753.19	220753.19
Rate of Depreciation		5.2593%	5.2575%	5.2568%	5.2568%	5.2568%
Depreciable Value of Combined Assets (90%)		193111.09	196547.92	198490.56	198490.56	198490.56
Remaining Depreciable Value		186600.30	178741.50	169191.55	157587.02	145982.48
Depreciation		11295.63	11492.59	11604.53	11604.53	11604.53

(ii) Combined Assets Part-II

(₹ in lakh)

Details of Depreciation	Up to 31.3.2004	2009-10	2010-11	2011-12	2012-13	2013-14
Gross block as per last order	5788.54	5788.54	6208.89	6300.51	6300.51	6300.51
Addition during 2009-14 due to Projected Additional Capital Expenditure		420.35	91.62	0.00	0.00	0.00
Gross block		6208.89	6300.51	6300.51	6300.51	6300.51
Average gross block		5998.71	6254.70	6300.51	6300.51	6300.51
Rate of Depreciation		5.2486%	5.2465%	5.2468%	5.2468%	5.2468%
Depreciable Value of Combined Assets (90%)		5394.72	5625.11	5666.34	5666.34	5666.34
Remaining Depreciable Value		5237.17	5152.71	4865.78	4535.21	4204.63
Depreciation		314.85	328.15	330.57	330.57	330.57

OPERATION & MAINTENANCE EXPENSES

37. Regulation 19 (g) of the CERC (Terms and Conditions of Tariff) Regulations, 2009 prescribe the methodology for arriving at the normative O&M expenses.

38. As per the Regulations-2009, applicable for 2009-14, norms for O&M expenditure for assets covered have been specified under Regulation 19(g).

The norms for the assets covered in this petition are as follows:

Element	2009-10	2010-11	2011-12	2012-13	2013-14
400 kV D/C, Quad conductor, transmission line (₹ Lakh per km.)	0.940	0.994	1.051	1.111	1.174
400 kV D/C, twin conductor, transmission line (₹ Lakh per km.)	0.627	0.663	0.701	0.741	0.783
765 kV S/C, Quad conductor, transmission line (₹ Lakh per km.)	0.537	0.568	0.600	0.635	0.671
765 kV, bays (₹ Lakh per Bay)	73.36	77.56	81.99	86.68	91.64
400 kV, bays (₹ Lakh per Bay)	52.40	55.40	58.57	61.92	65.46
220 kV, bays (₹ Lakh per Bay)	36.68	38.78	41.00	43.34	45.82

39. As per the norms of Tariff Regulations, 2009, allowable O&M expenses for the asset covered in the petition are as under:

(₹ Lakh)

Combined Assets Part-I					
Elements	2009-10	2010-11	2011-12	2012-13	2013-14
351.729 km., 400 kV D/C, Quad conductor transmission line.	330.63	349.62	369.67	390.77	412.93
345.98 (8.13+4.905+1.503+33 1.442) km., 400 kV D/C, twin conductor transmission line.	216.93	229.38	242.53	256.37	270.90
703.274 (350.629+352.645) Kms 765 kV Quad conductor T/line	377.66	399.46	421.96	446.58	471.90
5 Nos. 765 kV bay	366.80	387.80	409.95	433.40	458.20
17 Nos., 400 kV Bay	890.80	941.80	995.69	1052.64	1112.82

3 Nos. 220 kV bay	110.04	116.34	123.00	130.02	137.46
Total O&M for the Assets-I	2292.85	2424.40	2562.80	2709.78	2864.21

Combined Assets Part-II					
3 Nos.,400 kV Bay	157.20	166.20	175.71	185.76	196.38
9 Nos. 220 kV bay	330.12	349.02	369.00	390.06	412.38
Total O&M for the Asset-II	487.32	515.22	544.71	575.82	608.76

40. The Petitioner has stated that O&M expenditure for 2009-14 tariff block had been arrived at on the basis of normalized actual O&M expenses of the petitioner during the year 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking was also considered while calculating the O&M charges for tariff period 2009-14. The petitioner has submitted that it reserves the right to approach Commission for suitable revision in the norms for O&M expenditure in case the impact of wage hike w.e.f 1.1.2007 is more than 50%. It is clarified that any application filed by the petitioner for revision of O&M norms on account of pay revision will be dealt with in accordance with law.

INTEREST ON WORKING CAPITAL

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

- (i) **Receivables:** As per Regulation 18(1)(c)(i) of the 2009 regulations, receivables will be equivalent to two months average billing calculated on target availability level. The petitioner has claimed the receivables on the basis of two months transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis of two months' transmission charges.

(ii) Maintenance spares: Regulation 18(1)(C)(ii) of the 2009 regulations provides for maintenance spares @ 15% per annum of the O & M expenses from 1.4.2009.

(iii) O & M expenses: Regulation 18(1)(c)(iii) of the 2009 regulations provides for operation and maintenance expenses for one month as a component of working capital. The petitioner has claimed O&M expenses for one month of O&M expenses of the respective year which has been considered in the working capital.

(iv) Rate of interest on working capital: As per Regulation 18(3) of the 2009 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 1.4.2009 or on 1st April of the year in which the project or part thereof (as the case may be) is declared under commercial operation, whichever is later. The interest on working capital is payable on normative basis notwithstanding that the transmission licensee has not taken working capital loan from any outside agency. The petitioner has claimed interest on working capital @ 12.25% based on SBI PLR as on 1.4.2009, which is in accordance with the 2009 regulations and has been allowed.

42. The necessary computations in support of interest on working capital are as under:

(i) Combined Assets Part-I



(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	343.93	363.66	384.42	406.47	429.63
O & M expenses	191.07	202.03	213.57	225.82	238.68
Receivables	5861.87	5855.96	5795.76	5677.18	5560.58
Total	6396.87	6421.65	6393.74	6309.46	6228.90
Interest	783.62	786.65	783.23	772.91	763.04
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%

(ii) Combined Assets Part-II

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	73.10	77.28	81.71	86.37	91.31
O & M expenses	40.61	42.94	45.39	47.99	50.73
Receivables	245.47	253.11	255.00	255.81	256.90
Total	359.18	373.32	382.10	390.16	398.95
Interest	44.00	45.73	46.81	47.80	48.87
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%

TRANSMISSION CHARGES

43. The transmission charges being allowed for the transmission asset are summarised below:

(i) Combined Assets Part-I

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	11295.63	11492.59	11604.53	11604.53	11604.53
Interest on Loan	9536.90	8969.60	8248.27	7400.16	6556.01
Return on Equity	11262.24	11462.51	11575.71	11575.71	11575.71
Interest on Working Capital	783.62	786.65	783.23	772.91	763.04
O & M Expenses	2292.85	2424.40	2562.80	2709.78	2864.21
Total	35171.24	35135.76	34774.54	34063.09	33363.50

(ii) Combined Assets Part-II

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	314.85	328.15	330.57	330.57	330.57
Interest on Loan	312.53	301.96	277.95	250.68	223.24
Return on Equity	314.14	327.57	329.97	329.97	329.97
Interest on Working Capital	44.00	45.73	46.81	47.80	48.87
O & M Expenses	487.32	515.22	544.71	575.82	608.76
Total	1472.84	1518.63	1530.01	1534.84	1541.41

APPLICATION FEE AND THE PUBLICATION EXPENSES

44. The petitioner has sought approval for the reimbursement of filing fee paid for determination of transmission tariff of the transmission assets and

expenses for issuing public notices in connection with the present petition under section 64 of the Act.

Regulation 42 of the 2009 regulations provides as under:

“The application filing fee and the expenses incurred on publication of notices in the application for approval of tariff, may in the discretion of the Commission, be allowed to be recovered by the generating company or the transmission licensee, as the case may be, directly from the beneficiaries or the transmission customers, as the case may be.”

In accordance with our decision in order dated 11.1.2010 in Petition No. 109/2009, the petitioner shall be entitled to recover the filing fee from the beneficiaries on pro-rata basis. The petitioner shall also be entitled for reimbursement from the beneficiaries on pro-rata basis the publication expenses for issuing public notices in connection with the present petition under section 64 of the Act.

SERVICE TAX

45. The petitioner has prayed for reimbursement of service tax if it is subjected such tax in future. We have already decided in our order dated 23.9.2010 in Petition No. 62/2009 that the petitioner is exempted from service tax as per the extant policy of the Government of India. As regards the reimbursement of service tax if it is imposed on the petitioner in future, the prayer is premature at this stage and if any application is made by the petitioner in connection with service tax, the same will be dealt with in accordance with law.

LICENCE FEE

46. The petitioner has claimed reimbursement of licence fee. The petitioner has raised this issue in a number of petitions. The matter is under

consideration and any decision on the issue as and when taken will be applicable to this petition.

47. The transmission charges allowed shall be recovered on monthly basis in accordance with Regulation 23 and shall be shared by the respondents in accordance with Regulation 33 of the 2009 regulations.

48. This order disposes of Petition No. 270/2010.

Sd/-
(M.DEENA DAYALAN)
MEMBER

sd/-
(V.S.VERMA)
MEMBER

sd/-
(S.JAYARAMAN)
MEMBER

sd/-
(Dr. PRAMOD DEO)
CHAIRPERSON

Combined Assets Part-I

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN						
						(₹ in Lakh)
	Details of Loan	2009-10	2010-11	2011-12	2012-13	2013-14
1	Bond- XXI					
	Gross loan opening	14666.00	14666.00	14666.00	14666.00	14666.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	1222.17	2444.33	3666.50
	Net Loan-Opening	14666.00	14666.00	13443.83	12221.67	10999.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	1222.17	1222.17	1222.17	1222.17
	Net Loan-Closing	14666.00	13443.83	12221.67	10999.50	9777.33
	Average Loan	14666.00	14054.92	12832.75	11610.58	10388.42
	Rate of Interest	8.73%	8.73%	8.73%	8.73%	8.73%
	Interest	1280.34	1226.99	1120.30	1013.60	906.91
	Rep Schedule	12 annual instalments from 11.10.2010				
2	Bond- XXII					
	Gross loan opening	5343.00	5343.00	5343.00	5343.00	5343.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	445.25	890.50	1335.75
	Net Loan-Opening	5343.00	5343.00	4897.75	4452.50	4007.25
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	445.25	445.25	445.25	445.25
	Net Loan-Closing	5343.00	4897.75	4452.50	4007.25	3562.00
	Average Loan	5343.00	5120.38	4675.13	4229.88	3784.63
	Rate of Interest	8.68%	8.68%	8.68%	8.68%	8.68%
	Interest	463.77	444.45	405.80	367.15	328.51
	Rep Schedule	12 annual instalments from 07.12.2010				
3	Bond- XXIV					
	Gross loan opening	2697.00	2697.00	2697.00	2697.00	2697.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	224.75	449.50	674.25
	Net Loan-Opening	2697.00	2697.00	2472.25	2247.50	2022.75
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	224.75	224.75	224.75	224.75
	Net Loan-Closing	2697.00	2472.25	2247.50	2022.75	1798.00
	Average Loan	2697.00	2584.63	2359.88	2135.13	1910.38
	Rate of Interest	9.95%	9.95%	9.95%	9.95%	9.95%
	Interest	268.35	257.17	234.81	212.44	190.08
	Rep Schedule	12 Annual Instalments from 26.03.2011				

4	Bond XXVIII					
	Gross loan opening	6735.19	6735.19	6735.19	6735.19	6735.19
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	561.27
	Net Loan-Opening	6735.19	6735.19	6735.19	6735.19	6173.92
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	561.27	561.27
	Net Loan-Closing	6735.19	6735.19	6735.19	6173.92	5612.66
	Average Loan	6735.19	6735.19	6735.19	6454.56	5893.29
	Rate of Interest	9.33%	9.33%	9.33%	9.33%	9.33%
	Interest	628.39	628.39	628.39	602.21	549.84
	Rep Schedule	12 Annual instalments from 15.12.2012				
5	Bond XIII Option -I					
	Gross loan opening	200.00	200.00	200.00	200.00	200.00
	Cumulative Repayment upto DOCO/previous year	50.00	66.67	83.33	100.00	116.67
	Net Loan-Opening	150.00	133.33	116.67	100.00	83.33
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	16.67	16.67	16.67	16.67	16.67
	Net Loan-Closing	133.33	116.67	100.00	83.33	66.67
	Average Loan	141.67	125.00	108.33	91.67	75.00
	Rate of Interest	8.63%	8.63%	8.63%	8.63%	8.63%
	Interest	12.23	10.79	9.35	7.91	6.47
	Rep Schedule	12 Annual instalments from 31.07.2006				
6	Bond XXIII					
	Gross loan opening	9078.00	9078.00	9078.00	9078.00	9078.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	756.50	1513.00	2269.50
	Net Loan-Opening	9078.00	9078.00	8321.50	7565.00	6808.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	756.50	756.50	756.50	756.50
	Net Loan-Closing	9078.00	8321.50	7565.00	6808.50	6052.00
	Average Loan	9078.00	8699.75	7943.25	7186.75	6430.25
	Rate of Interest	9.25%	9.25%	9.25%	9.25%	9.25%
	Interest	839.72	804.73	734.75	664.77	594.80
	Rep Schedule	12 Annual instalments from 09.02.2011				
7	Bond XXV					
	Gross loan opening	16859.00	16859.00	16859.00	16859.00	16859.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	1404.92	2809.83
	Net Loan-Opening	16859.00	16859.00	16859.00	15454.08	14049.17
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	1404.92	1404.92	1404.92
	Net Loan-Closing	16859.00	16859.00	15454.08	14049.17	12644.25
	Average Loan	16859.00	16859.00	16156.54	14751.63	13346.71
	Rate of Interest	10.10%	10.10%	10.10%	10.10%	10.10%
	Interest	1702.76	1702.76	1631.81	1489.91	1348.02
	Rep Schedule	12 Annual installments from 12.06.2011				

8	BOND XII					
	Gross loan opening	31.00	31.00	31.00	31.00	31.00
	Cumulative Repayment upto DOCO/previous year	10.33	12.92	15.50	18.08	20.67
	Net Loan-Opening	20.67	18.08	15.50	12.92	10.33
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	2.58	2.58	2.58	2.58	2.58
	Net Loan-Closing	18.08	15.50	12.92	10.33	7.75
	Average Loan	19.38	16.79	14.21	11.63	9.04
	Rate of Interest	9.70%	9.70%	9.70%	9.70%	9.70%
	Interest	1.88	1.63	1.38	1.13	0.88
	Rep Schedule	12 annual instalments from 28.03.2006				
9	Bond XVII					
	Gross loan opening	12810.00	12810.00	12810.00	12810.00	12810.00
	Cumulative Repayment upto DOCO/previous year	0.00	1281.00	2562.00	3843.00	5124.00
	Net Loan-Opening	12810.00	11529.00	10248.00	8967.00	7686.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	1281.00	1281.00	1281.00	1281.00	1281.00
	Net Loan-Closing	11529.00	10248.00	8967.00	7686.00	6405.00
	Average Loan	12169.50	10888.50	9607.50	8326.50	7045.50
	Rate of Interest	7.39%	7.39%	7.39%	7.39%	7.39%
	Interest	899.33	804.66	709.99	615.33	520.66
	Rep Schedule	10 Annual instalments from 22.09.2009				
10	Bond XVIII					
	Gross loan opening	5901.00	5901.00	5901.00	5901.00	5901.00
	Cumulative Repayment upto DOCO/previous year	0.00	491.75	983.50	1475.25	1967.00
	Net Loan-Opening	5901.00	5409.25	4917.50	4425.75	3934.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	491.75	491.75	491.75	491.75	491.75
	Net Loan-Closing	5409.25	4917.50	4425.75	3934.00	3442.25
	Average Loan	5655.13	5163.38	4671.63	4179.88	3688.13
	Rate of Interest	8.15%	8.15%	8.15%	8.15%	8.15%
	Interest	460.89	420.82	380.74	340.66	300.58
	Rep Schedule	12 Annual instalments from 09.03.2010				
11	Bond XIX					
	Gross loan opening	9593.00	9593.00	9593.00	9593.00	9593.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	799.42	1598.83	2398.25
	Net Loan-Opening	9593.00	9593.00	8793.58	7994.17	7194.75
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	799.42	799.42	799.42	799.42
	Net Loan-Closing	9593.00	8793.58	7994.17	7194.75	6395.33
	Average Loan	9593.00	9193.29	8393.88	7594.46	6795.04
	Rate of Interest	9.25%	9.25%	9.25%	9.25%	9.25%
	Interest	887.35	850.38	776.43	702.49	628.54
	Rep Schedule	12 Annual instalments from 24.07.2010				

12	Bond XX					
	Gross loan opening	5584.00	5584.00	5584.00	5584.00	5584.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	465.33	930.67	1396.00
	Net Loan-Opening	5584.00	5584.00	5118.67	4653.33	4188.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	465.33	465.33	465.33	465.33
	Net Loan-Closing	5584.00	5118.67	4653.33	4188.00	3722.67
	Average Loan	5584.00	5351.33	4886.00	4420.67	3955.33
	Rate of Interest	8.93%	8.93%	8.93%	8.93%	8.93%
	Interest	498.65	477.87	436.32	394.77	353.21
	Rep Schedule	12 Annual instalments from 07.09.2010				
13	Bond XXX (AddCap 2009-10)					
	Gross loan opening	0.00	1436.00	1436.00	1436.00	1436.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	1436.00	1436.00	1436.00	1436.00
	Additions during the year	1436.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	119.67
	Net Loan-Closing	1436.00	1436.00	1436.00	1436.00	1316.33
	Average Loan	718.00	1436.00	1436.00	1436.00	1376.17
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	63.18	126.37	126.37	126.37	121.10
	Rep Schedule	12 Annual instalments from 29.09.13				
14	ADB-II LB D1 (USD 765.11 Lakh @ ₹ 39.68/ USD)					
	Gross loan opening	30359.56	30359.56	30359.56	30359.56	30359.56
	Cumulative Repayment upto DOCO/previous year	2810.46	4081.11	5477.59	7018.33	8718.66
	Net Loan-Opening	27549.10	26278.46	24881.97	23341.24	21640.90
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	1270.65	1396.48	1540.74	1700.33	1875.28
	Net Loan-Closing	26278.46	24881.97	23341.24	21640.90	19765.62
	Average Loan	26913.78	25580.22	24111.61	22491.07	20703.26
	Rate of Interest	3.59%	3.59%	3.59%	3.59%	3.59%
	Interest	966.88	918.97	866.21	807.99	743.76
	Rep Schedule	Repaid Semi annually from 15-06-2006				
15	ADB-II LB D2 (USD 352.99 LAKHS @ ₹ 40.19/USD)					
	Gross loan opening	14186.67	14186.67	14186.67	14186.67	14186.67
	Cumulative Repayment upto DOCO/previous year	1313.41	1907.17	2559.73	3279.70	4074.25
	Net Loan-Opening	12873.25	12279.50	11626.94	10906.97	10112.42
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	593.76	652.56	719.97	794.55	876.30
	Net Loan-Closing	12279.50	11626.94	10906.97	10112.42	9236.13
	Average Loan	12576.38	11953.22	11266.95	10509.69	9674.27
	Rate of Interest	3.59%	3.59%	3.59%	3.59%	3.59%
	Interest	451.81	429.42	404.77	377.56	347.55
	Rep Schedule	Repaid Semi annually from 15-06-				



		2006				
16	ADB II LB D3 (ER 40.87)					
	Gross loan opening	11988.58	11988.58	11988.58	11988.58	11988.58
	Cumulative Repayment upto DOCO/previous year	1109.80	1611.55	2163.00	2771.40	3442.83
	Net Loan-Opening	10878.78	10377.02	9825.58	9217.17	8545.74
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	501.75	551.44	608.41	671.43	740.51
	Net Loan-Closing	10377.02	9825.58	9217.17	8545.74	7805.23
	Average Loan	10627.90	10101.30	9521.38	8881.46	8175.49
	Rate of Interest	3.59%	3.59%	3.59%	3.59%	3.59%
	Interest	381.81	362.89	342.06	319.07	293.70
	Rep Schedule	Repaid Semi annually from 15-06-2006				
	Total Loan					
	Gross loan opening	146032.00	147468.00	147468.00	147468.00	147468.00
	Cumulative Repayment upto DOCO/previous year	5294.01	9452.17	17758.07	27737.52	38575.42
	Net Loan-Opening	140737.99	137997.75	129694.43	119717.57	108882.24
	Additions during the year	1436.00	0.00	0.00	0.00	0.00
	Repayment during the year	4158.16	8303.32	9976.86	10835.33	11280.77
	Net Loan-Closing	138015.83	129694.43	119717.57	108882.24	97601.47
	Average Loan	139376.91	133862.88	124720.21	114311.53	103250.90
	Weighted Average Rate of Interest	7.0366%	7.0731%	7.0634%	7.0364%	7.0068%
	Interest	9807.34	9468.28	8809.47	8043.37	7234.62

Combined Assets Part-II

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN						
(₹. in Lakh)						
	Details of Loan	2009-10	2010-11	2011-12	2012-13	2013-14
1	Bond-XVII					
	Gross loan opening	6.00	6.00	6.00	6.00	6.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.60	1.20	1.80	2.40
	Net Loan-Opening	6.00	5.40	4.80	4.20	3.60
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.60	0.60	0.60	0.60	0.60
	Net Loan-Closing	5.40	4.80	4.20	3.60	3.00
	Average Loan	5.70	5.10	4.50	3.90	3.30
	Rate of Interest	7.39%	7.39%	7.39%	7.39%	7.39%
	Interest	0.42	0.38	0.33	0.29	0.24
	Rep Schedule	10 Annual instalments from 22.09.2009				
2	Bond-XVIII					
	Gross loan opening	6.00	6.00	6.00	6.00	6.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.50	1.00	1.50	2.00
	Net Loan-Opening	6.00	5.50	5.00	4.50	4.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.50	0.50	0.50	0.50	0.50
	Net Loan-Closing	5.50	5.00	4.50	4.00	3.50
	Average Loan	5.75	5.25	4.75	4.25	3.75
	Rate of Interest	8.15%	8.15%	8.15%	8.15%	8.15%
	Interest	0.47	0.43	0.39	0.35	0.31
	Rep Schedule	12 Annual instalments from 09-03-2010				
3	Bond-XIX					
	Gross loan opening	114.00	114.00	114.00	114.00	114.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	9.50	19.00	28.50
	Net Loan-Opening	114.00	114.00	104.50	95.00	85.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	9.50	9.50	9.50	9.50
	Net Loan-Closing	114.00	104.50	95.00	85.50	76.00
	Average Loan	114.00	109.25	99.75	90.25	80.75
	Rate of Interest	9.25%	9.25%	9.25%	9.25%	9.25%
	Interest	10.55	10.11	9.23	8.35	7.47
	Rep Schedule	12 Annual instalments from 24-07-2010				

4	Bond-XX					
	Gross loan opening	177.00	177.00	177.00	177.00	177.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	14.75	29.50	44.25
	Net Loan-Opening	177.00	177.00	162.25	147.50	132.75
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	14.75	14.75	14.75	14.75
	Net Loan-Closing	177.00	162.25	147.50	132.75	118.00
	Average Loan	177.00	169.63	154.88	140.13	125.38
	Rate of Interest	8.93%	8.93%	8.93%	8.93%	8.93%
	Interest	15.81	15.15	13.83	12.51	11.20
	Rep Schedule	12 Annual instalments from 07-09-2010				
5	Bond-XXIV					
	Gross loan opening	6.00	6.00	6.00	6.00	6.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.50	1.00	1.50
	Net Loan-Opening	6.00	6.00	5.50	5.00	4.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.50	0.50	0.50	0.50
	Net Loan-Closing	6.00	5.50	5.00	4.50	4.00
	Average Loan	6.00	5.75	5.25	4.75	4.25
	Rate of Interest	9.95%	9.95%	9.95%	9.95%	9.95%
	Interest	0.60	0.57	0.52	0.47	0.42
	Rep Schedule	12 Annual instalments from 26-03-2011				
6	Bond-XXI					
	Gross loan opening	849.00	849.00	849.00	849.00	849.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	70.75	141.50	212.25
	Net Loan-Opening	849.00	849.00	778.25	707.50	636.75
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	70.75	70.75	70.75	70.75
	Net Loan-Closing	849.00	778.25	707.50	636.75	566.00
	Average Loan	849.00	813.63	742.88	672.13	601.38
	Rate of Interest	8.73%	8.73%	8.73%	8.73%	8.73%
	Interest	74.12	71.03	64.85	58.68	52.50
	Rep Schedule	12 Annual instalments from 11.10.2010				
7	Bond-XXII					
	Gross loan opening	291.00	291.00	291.00	291.00	291.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	24.25	48.50	72.75
	Net Loan-Opening	291.00	291.00	266.75	242.50	218.25
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	24.25	24.25	24.25	24.25
	Net Loan-Closing	291.00	266.75	242.50	218.25	194.00
	Average Loan	291.00	278.88	254.63	230.38	206.13

	Rate of Interest	8.68%	8.68%	8.68%	8.68%	8.68%
	Interest	25.26	24.21	22.10	20.00	17.89
	Rep Schedule	12 Annual instalments from 07.12.2010				
8	Bond-XXIII					
	Gross loan opening	521.00	521.00	521.00	521.00	521.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	43.42	86.83	130.25
	Net Loan-Opening	521.00	521.00	477.58	434.17	390.75
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	43.42	43.42	43.42	43.42
	Net Loan-Closing	521.00	477.58	434.17	390.75	347.33
	Average Loan	521.00	499.29	455.88	412.46	369.04
	Rate of Interest	9.25%	9.25%	9.25%	9.25%	9.25%
	Interest	48.19	46.18	42.17	38.15	34.14
	Rep Schedule	12 Annual instalments from 09.02.2011				
9	Bond- XXV					
	Gross loan opening	464.00	464.00	464.00	464.00	464.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	38.67	77.33
	Net Loan-Opening	464.00	464.00	464.00	425.33	386.67
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	38.67	38.67	38.67
	Net Loan-Closing	464.00	464.00	425.33	386.67	348.00
	Average Loan	464.00	464.00	444.67	406.00	367.33
	Rate of Interest	10.10%	10.10%	10.10%	10.10%	10.10%
	Interest	46.86	46.86	44.91	41.01	37.10
	Rep Schedule	12 Annual instalments from 12-06-2011				
10	Bond XXVIII					
	Gross loan opening	878.81	878.81	878.81	878.81	878.81
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	73.23
	Net Loan-Opening	878.81	878.81	878.81	878.81	805.58
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	73.23	73.23
	Net Loan-Closing	878.81	878.81	878.81	805.58	732.34
	Average Loan	878.81	878.81	878.81	842.19	768.96
	Rate of Interest	9.33%	9.33%	9.33%	9.33%	9.33%
	Interest	81.99	81.99	81.99	78.58	71.74
	Rep Schedule	12 Annual instalments from 15.12.2012				
11	ADB-II LB (USD 21.30 LAKHS @ ₹ 40.19/USD)					
	Gross loan opening	856.05	856.05	856.05	856.05	856.05
	Cumulative Repayment upto DOCO/previous year	79.17	115.00	154.38	197.82	245.77
	Net Loan-Opening	776.87	741.04	701.67	658.22	610.28
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	35.83	39.38	43.44	47.94	52.88
	Net Loan-Closing	741.04	701.67	658.22	610.28	557.40
	Average Loan	758.96	721.36	679.95	634.25	583.84

Rate of Interest	3.59%	3.59%	3.59%	3.59%	3.59%
Interest	27.27	25.91	24.43	22.79	20.97
Rep Schedule	Repaid Semi annually from 15-06-2006				
Total Loan					
Gross loan opening	4168.86	4168.86	4168.86	4168.86	4168.86
Cumulative Repayment upto DOCO/previous year	79.17	116.10	319.75	566.12	890.24
Net Loan-Opening	4089.68	4052.75	3849.11	3602.73	3278.62
Additions during the year	0.00	0.00	0.00	0.00	0.00
Repayment during the year	36.93	203.64	246.38	324.11	329.04
Net Loan-Closing	4052.75	3849.11	3602.73	3278.62	2949.58
Average Loan	4071.22	3950.93	3725.92	3440.68	3114.10
Weighted Average Rate of Interest	8.1433%	8.1708%	8.1793%	8.1717%	8.1560%
Interest	331.53	322.82	304.75	281.16	253.98