

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No.182/2010

Coram:

1. **Shri S.Jayaraman, Member**
2. **Shri V.S.Verma, Member**
3. **Shri M.Deena Dayalan, Member**

DATE OF HEARING: 25.1.2011

DATE OF ORDER: 15.3.2011

In the matter of

Determination of tariff for (i) 765 kV S/C Seoni-Wardha transmission line with associated bays and 400 kV D/C Wardha-Akola transmission line with associated bays; (ii) Combined assets of 765 kV S/C Seoni-Wardha transmission line with associated bays and 400 kV D/ C Wardha Akola transmission line with associated bays and 400 kV D/C Akola-Aurangabad transmission line and associated bays at Akola and Aurangabad and 400 kV D/C bus reactor at Wardha sub-station; and (iii) 400/220 kV ICT-I at Wardha sub-station with associated bays under SIPAT-II supplementary transmission system in Western Region for tariff period 2009-14.

And

In the matter of

Power Grid Corporation of India Limited, Gurgaon
Vs

..Petitioner

1. Madhya Pradesh Power Trading Company Ltd., Jabalpur
2. Maharashtra State Electricity Distribution Co. Ltd., Mumbai
3. Gujarat Urja Vikas Nigam Ltd., Vadodara
4. Electricity Deptt., Govt. of Goa, Panaji
5. Electricity Department, Administration of Daman and Diu, Daman
6. Electricity Department, Administration of Dadra Nagar Haveli, Silvassa
7. Chhattisgarh State Electricity Board, Raipur
8. Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Ltd. Indore

...Respondents

The following were present:

1. Shri M.M. Mondal, PGCIL
2. Shri Rakesh Prasad, PGCIL
3. Shri Rajiv Gupta, PGCIL



ORDER

The petition has been filed for determination of transmission tariff in respect of for (i) 765 kV S/C Seoni-Wardha transmission line with associated bays and 400 kV D/C Wardha-Akola transmission line with associated bays; (ii) Combined assets of 765 kV S/C Seoni-Wardha transmission line with associated bays and 400 kV D/ C Wardha Akola transmission line with associated bays and 400 kV D/C Akola-Aurangabad transmission line and associated bays at Akola and Aurangabad and 400 kV D/C bus reactor at Wardha sub-station; and (iii) 400/220 kV ICT-I at Wardha sub-station with associated bays (hereinafter collectively referred to as "the transmission asset") under SIPAT-II supplementary transmission system (hereinafter referred to as "the transmission system") in Western Region for the period 1.4.2009 to 31.3.2014, 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 on account of undischarged liabilities during 2009-10 to 2010-11. The petitioner has made the following additional prayers:-

- (a) To invoke the provision of Regulations 44 of 2009 regulations for relaxation of Regulation 15 (3) of the 2009 regulations so that grossing up of base rate of return on equity be allowed considering the tax rate, viz MAT, surcharge, any other cess, charges, levies etc. as per the relevant Finance Acts and accordingly, consequential impact on account of truing up may be allowed to be billed and settled directly with the beneficiaries every year in the tariff block;



(b) In case of the assets being combined to calculate the transmission charges, allow to recover full depreciation (90% of the gross block) of the asset during its useful life (25 years for sub-station and 35 years for transmission lines) reckoning from its actual date of the commercial operation and also permit to treat the recovery in accordance with para 6.1 of the petition;

(c) To approve reimbursement of petition filing fee and publication of notices in the newspaper in terms of Regulation 42 of the 2009 regulations;

(d) Allow to bill and recover the service tax on transmission charges separately from the respondents, if the petitioner is subjected to such service tax;

(e) Allow 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, if any from the beneficiaries; and

(f) Allow reimbursement of licence fee separately from the respondents.

2. The investment approval for the transmission system was accorded by Ministry of Power vide its letter No. 12/24/2003-PG, dated 24.6.2005 at an estimated cost of ₹813.67 crore, which included IDC of ₹35.04 crore, based on 4th quarter 2004 price level. Subsequently, the Board of Directors vide its Memorandum dated 3.9.2010 accorded approved for revised cost estimate of ₹98224 lakh, including IDC of ₹7357 lakh.



3. The details of transmission assets and their date of commercial operation are as under:

S.No.	Name of transmission assets	Date of commercial operation
1.	765 kV S/C Seoni-Wardha transmission line with associated bays and 400 kV D/C Wardha-Akola transmission line with associated bays	1.4.2009
2.	400 kV D/C Wardha Akola transmission line with associated bays and 400 kV D/C Akola-Aurangabad transmission line and associated bays at Akola and Aurangabad and 400 kV D/C bus reactor at Wardha sub-station	1.12.2009
3.	400/220 kV ICT-I at Wardha sub-station with associated bays	1.4.2009

4. In accordance with the decision of the Commission in the letter No. C-7/189(204)/2009-CERC, 765 kV S/C Seoni-Wardha transmission line with associated bays and 400 kV D/C Wardha-Akola transmission line with associated bays (DOCO 1.4.2009) and 400 kV D/C Akola-Aurangabad transmission line and associated bays at Akola and Aurangabad and 400 kV D/C bus reactor at Wardha sub-station (DOCO 1.12.2009) have been clubbed for the purpose of determination of transmission charges with notional DOCO as 1.12.2009. Accordingly, the following combined assets have been considered for determination of tariff in this petition:

Assets	Name of transmission assets	Period for which tariff has been determined
Asset-I	765 kV S/C Seoni-Wardha transmission line with associated bays and 400 kV D/C Wardha-Akola transmission line with associated bays	1.4.2009 to 30.11.2009
Asset-II	Combined assets of 765 kV S/C Seoni Wardha transmission line with associated bays and 400 kV D/C Wardha Akola transmission line with	1.12.2009 to 31.3.2014



	associated bays and 400 kV D/C Akola-Aurangabad transmission line and associated bays at Akola and Aurangabad and 400 kV D/C bus reactor at Wardha sub-station	
Asset-III	400/220 kV ICT-I at Wardha sub-station with associated bays	1.4.2009 to 31.3.2014

5. The petitioner has claimed the transmission charges in respect of the transmission assets as under:

(₹ in lakh)

	Asset-I		Asset-II			
	2009-10	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	2190.31	1525.16	4759.08	4794.89	4794.89	4794.89
Interest on Loan	1166.31	637.40	1922.07	1784.78	1625.14	1458.25
Return on Equity	2203.73	1530.89	4790.03	4832.54	4832.54	4832.54
Interest on Working Capital	134.55	93.20	290.55	292.26	292.05	291.85
O & M Expenses	373.17	324.33	1028.82	1087.58	1149.93	1215.44
Total	6068.07	4110.98	12790.55	12792.05	12694.55	12592.97

(₹ in lakh)

	Asset-III				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	124.78	156.22	178.39	178.39	178.39
Interest on Loan	65.16	75.79	80.79	73.25	65.59
Return on Equity	123.77	154.97	176.99	176.99	176.99
Interest on Working Capital	14.66	16.66	18.17	18.54	18.93
O & M Expenses	162.44	171.74	181.57	191.94	202.92
Total	490.81	575.38	635.91	639.11	642.82

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

(₹ in lakh)

	Asset-I		Asset-II			
	2009-10	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	83.96	145.95	154.32	163.14	172.49	182.32
O & M expenses	46.65	81.08	85.74	90.63	95.83	101.29
Receivables	1517.02	2055.49	2131.76	2132.01	2115.76	2098.83
Total	1647.63	2282.52	2371.82	2385.78	2384.08	2382.44
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	201.83	93.20	290.55	292.26	292.05	291.85

(₹ in lakh)

Asset-III					
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	24.37	25.76	27.24	28.79	30.44
O & M expenses	13.54	14.31	15.13	16.00	16.91
Receivables	81.80	95.90	105.99	106.52	107.14
Total	119.71	135.97	148.36	151.31	154.49
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	14.66	16.66	18.17	18.54	18.93

7. The petitioner has published the notices in the Hindustan Times, Deshbandhu, Financial Express, Sakal, DNA, Sonaparant, Nav Hind Times, Daman Ganga Times, Sandesh, Swadesh and Central chronical, Raipur on 25.6.2010 as required under Section 64 of the Electricity Act, 2003 (the Act) read with Regulation 3 (6) of the Central Electricity Regulatory Commission (Procedure for making of application for determination of tariff, publication of the application and other related matters) Regulations, 2004 as amended from time to time. No comments or suggestions have been received from the public in response to the public notice.

8. Reply to the petition has been filed by Maharashtra State Electricity Distribution Co. Ltd. (MSEDCL). The petitioner has also filed its rejoinder to the reply of MSEDCL. The comments of MSEDCL pertain to delay in commissioning of transmission assets which have been dealt with under "time over-run" in this order.

CAPITAL COST

9. Regulation 7 (1) of the 2009 regulations provides as under:

- "(1) Capital cost for a project shall include:
- (a) the expenditure incurred or projected to be incurred, including interest during the construction and financing chargers, any gain or loss on



account of foreign exchange risk variation during construction on the loan-(i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed, -up to the date of commercial operation of the project, as admitted by the Commission, after prudence check;

- (b) capitalized initial spares subject to the ceiling rates specified in regulation 8;
- (c) additional capital expenditure determined under regulation 9:
Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost."

10. The petitioner vide its affidavit dated 11.1.2011 has submitted the revised capital cost of the project based on revised cost estimate approved by the Board of Director of the petitioner company in its 238th meeting held on 6.8.2010 at the 2nd quarter 2010 price level. The revised cost estimate for the transmission system is state to be ₹ 982224. 47 lakh. The petitioner has claimed the tariff after accounting for projected additional capital expenditure incurred/to be incurred during the period 2009-10 and 2010-11 as under:

(₹ in lakh)

S.No.		Apportioned approved Cost (As per revised cost estimate)	Expenditure up to 31.3.2009/ date of commercial operation	Projected additional capital expenditure from 1.4.2009 to 31.3.2010	Projected additional capital expenditure during 2010-11	Total expenditure
1	765 kV S/C Seoni-Wardha transmission line	67072.08	60280.43	5517.90	1150.77	66949.10
2	400 kV D/C Akola-Aurangabad transmission line	25320.41	21727.56	3001.55	470.73	25199.84
3	400/220 kV ICT-I at Wardha sub-station with associated bays	3375.23	2185.35	307.94	881.93	3375.22
	Total	95767.72	84193.34	8827.39	2503.43	95524.16

11. In regard to 765 kV S/C Seoni-Wardha transmission line (Serial No. 1 above) and 400 kV D/C Akola-Aurangabad transmission line (Serial No. 2 above), expenditure up to the date of commercial operation and the expenditure incurred/to be uncured on account of additional capital



expenditure during 2009-10 and 2010-11 based on auditor's certificate dated 19.1.2010 have been considered. In regard to 400/220 kV ICT-I at Wardha sub-station with associated bays (Serial No. 3 above), the expenditure based on Auditor's certificate dated 11.10.2010 in respect of audited accounts up to 31.3.2010 has been considered for the purpose of tariff.

ADDITIONAL CAPITAL EXPENDITURE

12. Regulation 9 (1) of the 2009 regulations provides as under:

(1) The capital expenditure incurred or projected to be incurred, on the following counts with in original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:

- (i) Undischarged liabilities;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, subject to the provisions of regulating 8 ;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
- (v) Change in law;

Provided that the details of works included in the original scope of work along with estimates of expenditure, undischarged liabilities and the works deferred for execution shall be submitted along with the application for determination of the tariff.

13. Under the 2009 regulation, Regulation 3 (11) which pertain to cut-off date provides as under:

"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 of 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.

14. As per the above, the cut-off date of the transmission assets is 31.3.2012. The additional expenditure claimed for the transmission assets have been incurred with in the cut-off date.



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

	Years	Nature and details of expenditure	Amount (₹ in lakh)
Asset-I	2009-10	Building and other civil works- Final Retention payments	1295.53
		Transmission line- Final Retention payments	2824.43
		Sub-station- Final Retention payments	1345.31
		PLCC- Final Retention payments	52.63
Asset-II (Combined Asset)	2009-10	Building and other civil works- Final Retention payments	888.28
		Transmission line- Final Retention payments	3057.94
		Sub-station- Final Retention payments	1861.85
		PLCC- Final Retention payments	97.14
	2010-11	Building and other civil works- Final Retention payments	725.94
		Transmission line- Final Retention payments	97.12
Asset-III	2009-10	Sub-station- Final Retention payments	303.03
		PLCC- Final Retention payments	4.91
	2010-11	Sub-station- Final Retention payments	881.93

16. The above additional capital expenditures are in the nature of undischarged liabilities and are projected to be capitalised within the cut-off date of the transmission assets. Therefore, the projected additional capital expenditure of ₹11330.82 lakh incurred/projected in to be incurred during 2009-10 to 2010-11 being within the cut-off date have been allowed to be capitalized under Regulation 9 (1) of the 2009 regulations for the purpose of tariff.

Time over-run

17. As per the investment approval, the transmission assets were to be commissioned by June 2008. However, the date of commercial operation of Asset-I and Asset-II was 1.4.2009, Asset-III was declared under commercial



operation on 1.12.2009. Therefore, there is a time over-run of 9 months in respect of Asset-I and Asset-II and 17 months for Asset-III.

18. MSEDCL has submitted that due to delay in commissioning of the assets, the evacuation of power from Sipat transmission system in WRSS-II should not be effected. It has been further submitted that the delay also affects the capital cost of the project and increases the burden on the beneficiaries. The petitioner should solve the problem of delay as per MoU. MSEDCL has requested the Commission to pass such order or orders in such circumstances as it thinks just and proper to avoid unnecessary burden on beneficiaries and ultimately on end consumers.

19. The petitioner vide its affidavit dated 15.10.2010 has submitted following reasons for time over-run as under:

- (a) Time taken by World Bank for conveying "No objection" to bidding documents;
- (b) Delay in commissioning of 400/220 kV ICT at Akola of MSEB;
- (c) Non-commissioning of four nos of 220 kV lines by MSEB at Wardha sub-station caused due to delay in commissioning of Seoni-Wardha transmission line;
- (d) Non availability of common infrastructure which was to be provided by MSEB.

20. The petitioner has placed on record requisite documents regarding delay in conveying no objection by World Bank. On perusal of the



documents, it is noted that since 13.4.2005, the petitioner was continuously following up with the World Bank for PSDP-III loans for funding of the project. In case of 400/220 kV Wardha (New) sub-station and extension of 400 kV Seoni, 400 kV Akola (MSEDCL) and 400 kV Aurangabad (MSEDCL) sub-stations associated with Sipat-II supplementary transmission system, the World Bank granted no objection to the bidding documents on 18.7.2006 i.e. after 14 months of making the application. It is also noted that the petitioner was continuously following up with the respondent MSEDCL for commissioning of the downstream assets associated with the Sipat-II Supplementary Transmission System. Further, some common facilities had to be provided by MSEDCL which took considerable time resulting in delay in commissioning of the assets.

21. In our view, the delay in commissioning of the transmission assets cannot be attributed to the petitioner and is accordingly condoned for the purpose of determination of tariff.

Treatment of Initial Spares

22. Regulation 8 of 2009 regulations provides as under:

“Initial spares shall be capitalised as a percentage of the original project, subject to following ceiling norms:

- (i) to (iii)
- (iv) *Transmission system*
 - (a) *Transmission line* 0.75%
 - (b) *Transmission Sub-station* 2.5%
 - (c) *Series compensation devices and HVDC station* 3.5%



23. The details of initial spares for the transmission assets are as under:

(₹ in lakh)

	Ceiling Limit	Expenditure on cut-Off Date	Spares calculated as per ceiling norms of the 2009 regulations	Claimed by petitioner	Initial spares claimed in excess of the ceiling norms
(1)	(2)	(3)	(4)=[(3)-(5)]x(2)/[(100%)-(2)]	(5)	(6)
Asset-I	0.75%	56757.18	424.91	527.11	102.20
	2.50%	6322.67	155.33	264.72	109.39
Asset-II	0.75%	21364.47	161.44	0.00	-161.44
	2.50%	3482.44	8.83	230.79	147.41
Asset-III	0.75%	0.00	0.00	0.00	0.00
	2.50%	3358.45	83.83	89.14	5.31
Initial spares claimed in excess of the ceiling norms (All assets combined)					
Transmission line			-59.25		
Sub-station			262.11		

24. In respect of transmission line, the expenditure on initial spares claimed for all the three assets taken together is within the ceiling limit specified in the 2009 regulations. In case of sub-stations for all transmission assets, the initial spares claimed exceeds the ceiling limit of 2.5% as on cut-off date as specified in the 2009 regulations. In order to verify the value of initial spares as per the ceiling norms, the initial spares corresponding to sub-station for all the assets included in the transmission system taken together have been considered. It is seen that in case of sub-station, the value of initial spares is exceeding by ₹262.11 lakh vis-à-vis the ceiling limit. As the data of initial spares of individual assets are also available, the excess spare's amount of the individual assets beyond the ceiling limit of spares has been reduced from the sub-station expenditure as on the date of the commercial operation of the respective transmission asset. In case of transmission line, the initial spares claimed for all the three assets taken together does not cross the ceiling limit. Thus, no adjustment of initial spares is required in the present case. Therefore,

the following expenditure, as on the date of the commercial operation, has been considered for working out the tariff:

(₹ in lakh)

S.No.	Name of Asset	Expenditure as on the date of commercial operation on considered for tariff
1.	Asset-I	60171.04
2.	Asset-II	84372.22
3.	Asset-III	2180.04

TOTAL CAPITAL COST

25. Based on the above, gross block as given below has been considered for the purpose of tariff for the transmission asset, after allowing projected additional capital expenditure as claimed by the petitioner:

(₹ in lakh)

	Expenditure up to 31.3.2009/ date of commercial operation	Projected additional capital expenditure from 2009-10	Projected additional capital expenditure during 2010-11	Total expenditure
Asset-I	60171.04	5517.90	-	65688.94
Asset-II	84372.22	5905.21	1621.50	91898.93
Asset-III	2180.04	307.94	881.93	3369.91

DEBT- EQUITY RATIO

26. Clause (1) of Regulation 12 of the 2009 regulations *inter- alia* provides that,-

"(1) 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"

27. The petitioner has claimed tariff based on debt-equity ratio of 70:30 for the transmission asset. The petitioner has further claimed the amount of additional capital expenditure in the debt-equity ratio of 70:30 for the years 2009-10 to 2010-13, same has been considered for the calculation of tariff as on the date of commercial operation.

RETURN ON EQUITY

28. Regulation 15 of the 2009 regulations provides that,-

"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."

29. Return on equity has been calculated as Base rate/(1+t), where Base Rate is 15.5% and 't' is normal tax rate for the period 2008-09, applicable to petitioner which is under MAT i.e. 10%+surcharge@10%+3% Education cess. Return on equity has been calculated as Base rate/(1+t), where Base Rate is 15.5% and 't' is normal tax rate for the period 2008-09, applicable to petitioner which is under MAT i.e. 10%+surcharge @10%+3% Education cess. The petitioner has requested to allow grossing up of base rate of return with the applicable tax as per the Finance Act for the relevant year and direct



settlement of tax liability with the beneficiaries. It is clarified that the Commission is in the process of amending the regulation to allow grossing up of the ROE as per the applicable MAT rate in accordance with the relevant Finance Act which would take care of the interest of the petitioner. Accordingly, the return on equity has been computed in terms of the existing provision of Regulation 15 (3) of 2009 regulation as under:

(₹ in lakh)

	Asset-I		Asset-II			
	2009-10	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Equity as on 1.4.2009	18049.18	25311.54	27083.10	27569.55	27569.55	27569.55
Addition due to Additional Capitalisation	1655.37	1771.56	486.45	0.00	0.00	0.00
Closing Equity	19704.55	27083.10	27569.55	27569.55	27569.55	27569.55
Average Equity	18876.86	26197.32	27326.32	27569.55	27569.55	27569.55
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09	11.330%	11.330%	11.330%	11.330%	11.330%	11.330%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	3299.86	1526.52	4776.91	4819.43	4819.43	4819.43

(₹ in lakh)

	Asset-III				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Equity as on 1.4.2009	653.95	746.33	1010.91	1010.91	1010.91
Addition due to Additional Capitalisation	92.38	264.58	0.00	0.00	0.00
Closing Equity	746.33	1010.91	1010.91	1010.91	1010.91
Average Equity	700.14	878.62	1010.91	1010.91	1010.91
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09	11.33%	11.33%	11.33%	11.33%	11.33%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	122.39	153.59	176.72	176.72	176.72

INTEREST ON LOAN

30. Regulation 16 of the 2009 regulations provides as under:

"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. The interest on loan has been worked out as detailed below:

- (i) The gross amount of loan, repayment of instalments and rate of interest and weighted average rate of interest on actual average loan have been considered as per the petition;

- (ii) Tariff has been worked out considering normative loan and normative repayments. Depreciation allowed has been taken as normative repayment for the tariff period 2009-14;
- (iii) Rates of interest as on 1.4.2009 has been considered for loans with floating rate of interest;
- (iv) The repayment of IBRD-III loans have been calculated as per the documents attached with the petition;
- (v) Weighted average rate of interest on actual loan has been worked out and applied on the average loan during the year to arrive at the interest on loan; and

32. The detailed calculations in support of the weighted revised average rate of interest are contained in **Annexure-I, Annexure-II and Annexure-III** for Assets-I, II and III, respectively attached to this order. Interest on loan worked out are given hereunder:

(₹ in lakh)

Details of loan	Asset-I		Asset-II					
		2009-10		2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	42121.86	42121.86	59060.68	59060.68	63194.33	64329.38	64329.38	64329.38
Cumulative Repayment up to Previous Year		0.00		0.00	1520.76	6266.63	11048.32	15830.02
Net Loan-Opening		42121.86		59060.68	61673.57	58062.75	53281.05	48499.36
Addition due to Additional Capitalisation		3862.53		4133.65	1135.05	0.00	0.00	0.00
Repayment during the year		3279.70		1520.76	4745.88	4781.69	4781.69	4781.69
Net Loan-Closing		42704.70		61673.57	58062.75	53281.05	48499.36	43717.67
Average Loan		42413.28		60367.13	59868.16	55671.90	50890.21	46108.51
Weighted Average Rate of Interest on Loan		4.1177%		3.1586%	3.2017%	3.1972%	3.1848%	3.1541%
Interest		1746.43		635.58	1916.82	1779.96	1620.76	1454.32



(₹ in lakh)

Details of loan	Asset-III					
	As on 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	1526.09	1526.09	1741.65	2359.00	2359.00	2359.00
Cumulative repayment up to previous year		0.00	123.39	278.21	456.32	634.42
Net Loan-Opening		1526.09	1618.26	2080.79	1902.68	1724.58
Addition due to additional capitalisation		215.56	617.35	0.00	0.00	0.00
Repayment during the year		123.39	154.82	178.11	178.11	178.11
Net loan-closing		1618.26	2080.79	1902.68	1724.58	1546.47
Average Loan		1572.18	1849.53	1991.74	1813.63	1635.52
Weighted Average rate of interest on loan		4.0982%	4.0617%	4.0547%	4.0378%	4.0100%
Interest		64.43	75.12	80.76	73.23	65.58

DEPRECIATION

33. Regulation 17 of the 2009 regulations provides for computation of depreciation in the following manner:

"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.

xxxx

(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."



34. The depreciation has been worked out on the basis of capital expenditure as on the date of commercial operation. Accordingly, depreciation works out is as under:

(₹ in lakh)

Details of loan	Asset-I		Asset-II					
	Up to 31.3.2009	2009-10	Up to 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
As per last order	60171.04	60171.04	84372.22	84372.22	90277.43	91898.93	91898.93	91898.93
Addition during 2009-14 due to projected Additional Capitalisation		5517.90		5905.21	1621.50	0.00	0.00	0.00
Gross block as on 31.3.2009		65688.94		90277.43	91898.93	91898.93	91898.93	91898.93
Average gross block		62929.99		87324.82	91088.18	91898.93	91898.93	91898.93
Rate of Depreciation		5.2117%		5.2245%	5.2102%	5.2032%	5.2032%	5.2032%
Depreciable Value	90%	56533.79		78592.34	81979.36	82709.03	82709.03	82709.03
Remaining Depreciable Value		56533.79		78592.34	80458.60	76442.40	71660.71	66879.02
Depreciation		3279.70		1520.76	4745.88	4781.69	4781.69	4781.69

(₹ in lakh)

Details of loan	Asset-III					
	Up to 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Gross block as on 31.3.2009	2180.04	2180.04	2487.98	3369.91	3369.91	3369.91
Addition during 2009-14 due to projected Additional Capitalisation		307.94	881.93	0.00	0.00	0.00
Average Gross Block		2487.98	3369.91	3369.91	3369.91	3369.91
Gross block as on 31.3.2009		2334.01	2928.94	3369.91	3369.91	3369.91
Rate of depreciation		5.2864%	5.2860%	5.2852%	5.2852%	5.2852%
Depreciable Value	90%	2100.61	2636.05	3032.92	3032.92	3032.92
Remaining depreciable Value		2100.61	2512.66	2754.71	2576.60	2398.49
Depreciation		123.39	154.82	178.11	178.11	178.11



OPERATION & MAINTENANCE EXPENSES

35. In accordance with clause (g) of Regulation 19 the 2009 regulations, the following norms for transmission asset covered in this petition have been specified for O & M expenses:

	Year				
	2009-10	2010-11	2011-12	2012-13	2013-14
765 kV S/C, Quad conductor, Seoni-Wardha (charged at 400 kV) (₹ in lakh per ckt/km)	0.537	0.568	0.600	0.635	0.671
400 kV D/C, Twin conductor, Wardha-Akola (₹ in lakh per ckt/km)	0.627	0.663	0.701	0.741	0.783
400 kV bay (₹ in lakh per bay)	52.40	55.40	58.57	61.92	65.46
220 kV bay (₹ in lakh per bay)	36.68	38.78	41.00	43.34	45.82

36. The petitioner's entitlement to O & M expenses has been worked out as given hereunder:

Asset-I

(₹ in lakh)

Year	2009-10	2010-11(Pro rata)
O & M expenses for 765 kV S/C, Quad conductor, Seoni-Wardha (charged at 400 kV) (267.894 ckt/km)	143.84	95.91
O & M expenses for 400 kV D/C, Twin conductor, Wardha-Akola (161.865 ckt/km)	101.49	67.66
O & M expenses for 400 kV bays (6 bays)	314.40	209.60
Total	559.75	373.17

Asset-II

(₹ in lakh)

Year	2009-10	2010-11	2011-12	2012-13	2013-14
O & M expenses for 765 kV S/C, Quad conductor, Seoni-Wardha (charged at 400 kV) (267.894 ckt/km)	47.95	152.16	160.74	170.11	179.76
O & M expenses for 400 kV D/C, Twin conductor, Wardha-Akola (403.095 ckt/km)	84.25	267.25	282.57	298.69	315.62
O & M expenses for 400 kV bays (11 bays)	192.13	609.40	644.27	681.12	720.06
Total	324.33	1028.82	1087.58	1149.93	1215.44

Asset-III

(₹ in lakh)

	Year				
	2009-10	2010-11	2011-12	2012-13	2013-14
O & M expenses for 400 kV bays (1 bay)	52.40	55.40	58.57	61.92	65.46
O & M expenses for 220 kV bays (3 bays)	110.04	116.34	123.00	130.02	137.46
Total	162.44	171.74	181.57	191.94	202.92

37. The petitioner has submitted that O & M expenditure for 2009-14 tariff block had been arrived 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 2009-14 periods. The petitioner has submitted that it would approach the Commission for suitable revision in the norms of O & M expenses in case the impact of wage hike w.e.f. 1.1.2007 is more than 50%. With reference to the submission of the petitioner, it is clarified that if any such application is made, it will be dealt with in accordance with law.

INTEREST ON WORKING CAPITAL

38. 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 of annual transmission charges. The petitioner has claimed the receivables on the basis of 2 months' transmission charges claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis 2 months' transmission charges.

(ii) **Maintenance spares:** Regulation 18(1)(c)(ii) of the 2009 regulations provides for maintenance spares @ 15% per annum of the O & M expenses specified in Regulation 19. The value of maintenance spares has been accordingly worked out.

(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 1 month of O&M expenses of the respective year which has been considered for computing 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 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.

39. The computations in support of interest on working capital are given as under:

(₹ in lakh)

	Asset-I (Pro rata)	Asset-II				
	2009-10	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	55.98	145.95	154.32	163.14	172.49	182.32
O & M expenses	31.10	81.08	85.74	90.63	95.83	101.29
Receivables	1009.70	2050.08	2126.39	2126.71	2110.54	2093.68
Total	1096.77	2,277.11	2,366.44	2,380.48	2,378.85	2,377.29
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	134.35	92.98	289.89	291.61	291.41	291.22

(₹ in lakh)

	Asset-III				
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	24.37	25.76	27.24	28.79	30.44
O & M expenses	13.54	14.31	15.13	16.00	16.91
Receivables	81.21	95.31	105.89	106.42	107.04
Total	119.11	135.38	148.25	151.21	154.39
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	14.59	16.58	18.16	18.52	18.91

TRANSMISSION CHARGES

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

(₹ in lakh)

	Asset-I (Pro rata)	Asset-II				
	2009-10	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	2186.46	1520.76	4745.88	4781.69	4781.69	4781.69
Interest on Loan	1164.29	635.58	1916.82	1779.96	1620.76	1454.32
Return on Equity	2199.91	1526.52	4776.91	4819.43	4819.43	4819.43
Interest on Working Capital	134.35	92.98	289.89	291.61	291.41	291.22
O & M Expenses	374.17	324.33	1028.82	1087.58	1149.93	1215.44
Total	6058.18	4100.16	12758.32	12760.27	12663.22	12562.11

(₹ in lakh)

	Asset-III				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	123.39	154.82	178.11	178.11	178.11
Interest on Loan	64.43	75.12	80.76	73.23	65.58
Return on Equity	122.39	153.59	176.72	176.72	176.72
Interest on Working Capital	14.59	16.58	18.16	18.52	18.91
O & M Expenses	162.44	171.74	181.57	191.94	202.92
Total	487.24	571.86	635.31	638.52	642.24

Application fee and the publication expenses

41. The petitioner has sought approval for the reimbursement of fee paid by it for filing the petition for determination of transmission tariff. In accordance with our decision in order dated 11.9.2008 in Petition No. 129/2005 (Suo motu), the petitioner shall be entitled to recover the filing fee from the respondents on *pro rata* basis.

42. The petitioner shall also be entitled for reimbursement of expenses on publication of notices in connection with the present petition from the beneficiaries on *pro rata* basis.

Service Tax

43. The petitioner has made a specific prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if it is subjected to such tax in future. In the absence of any actual demand for service tax, the prayer of the petitioner is premature and is accordingly rejected.

Licence fee

44. The petitioner prayed for reimbursement of license fee. A view in this regard is yet to be taken. The same as and when evolved will apply to this petition as well.

45. 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.

46. This order disposes of Petition No. 182/2010.

Sd/-

**(M.Deena Dayalan)
Member**

Sd/-

**(V.S.Verma)
Member**

Sd/-

**(S.Jayaraman)
Member**



CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

Asset-I

		(₹ in lakh)				
	Details of Loan	2009-10	2010-11	2011-12	2012-13	2013-14
1	IBRD III Drawal 1					
	Gross loan opening	36332.44	36332.44	36332.44	36332.44	36332.44
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	0.00	1768.03	3613.26
	Net Loan-Opening	36332.44	36332.44	36332.44	34564.41	32719.18
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	1768.03	1845.23	1925.17
	Net Loan-Closing	36332.44	36332.44	34564.41	32719.18	30794.01
	Average Loan	36332.44	36332.44	35448.43	33641.80	31756.60
	Rate of Interest	3.24%	3.24%	3.24%	3.24%	3.24%
	Interest	1177.17	1177.17	1148.53	1089.99	1028.91
	Rep Schedule	30 half yearly installment from 15.9.2011				
2	Bond XXVI					
	Gross loan opening	382.00	382.00	382.00	382.00	382.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	31.83	63.67
	Net Loan-Opening	382.00	382.00	382.00	350.17	318.33
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	31.83	31.83	31.83
	Net Loan-Closing	382.00	382.00	350.17	318.33	286.50
	Average Loan	382.00	382.00	366.08	334.25	302.42
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	35.53	35.53	34.05	31.09	28.12
	Rep Schedule	12 annual installments from 7.3.2012				
3	Bond XX					
	Gross loan opening	351.00	351.00	351.00	351.00	351.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	29.25	58.50	87.75
	Net Loan-Opening	351.00	351.00	321.75	292.50	263.25
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	29.25	29.25	29.25	29.25
	Net Loan-Closing	351.00	321.75	292.50	263.25	234.00
	Average Loan	351.00	336.38	307.13	277.88	248.63
	Rate of Interest	8.93%	8.93%	8.93%	8.93%	8.93%
	Interest	31.34	30.04	27.43	24.81	22.20
	Rep Schedule	12 annual installments from 7.9.2010				
4	Bond XXI					
	Gross loan opening	404.00	404.00	404.00	404.00	404.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	33.67	67.33	101.00
	Net Loan-Opening	404.00	404.00	370.33	336.67	303.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	33.67	33.67	33.67	33.67
	Net Loan-Closing	404.00	370.33	336.67	303.00	269.33
	Average Loan	404.00	387.17	353.50	319.83	286.17
	Rate of Interest	8.73%	8.73%	8.73%	8.73%	8.73%
	Interest	35.27	33.80	30.86	27.92	24.98
	Rep Schedule	12 annual installments from 11.10.2010				

5	Bond XXV					
	Gross loan opening	2841.00	2841.00	2841.00	2841.00	2841.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	236.75	473.50
	Net Loan-Opening	2841.00	2841.00	2841.00	2604.25	2367.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	236.75	236.75	236.75
	Net Loan-Closing	2841.00	2841.00	2604.25	2367.50	2130.75
	Average Loan	2841.00	2841.00	2722.63	2485.88	2249.13
	Rate of Interest	10.10%	10.10%	10.10%	10.10%	10.10%
	Interest	286.94	286.94	274.99	251.07	227.16
	Rep Schedule	12 annual installments from 12.6.2011				
6	Bond XXVIII					
	Gross loan opening	1888.00	1888.00	1888.00	1888.00	1888.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	157.33
	Net Loan-Opening	1888.00	1888.00	1888.00	1888.00	1730.67
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	157.33	157.33
	Net Loan-Closing	1888.00	1888.00	1888.00	1730.67	1573.33
	Average Loan	1888.00	1888.00	1888.00	1809.33	1652.00
	Rate of Interest	9.33%	9.33%	9.33%	9.33%	9.33%
	Interest	176.15	176.15	176.15	168.81	154.13
	Rep Schedule	12 annual installments from 15.12.2012				
6	IBRD III (Add Cap for 2009-10) Drawal 2					
	Gross loan opening	0.00	1097.61	1097.61	1097.61	1097.61
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	53.41	109.16
	Net Loan-Opening	0.00	1097.61	1097.61	1044.19	988.45
	Additions during the year	1097.61	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	53.41	55.74	58.16
	Net Loan-Closing	1097.61	1097.61	1044.19	988.45	930.29
	Average Loan	548.80	1097.61	1070.90	1016.32	959.37
	Rate of Interest	3.24%	3.24%	3.24%	3.24%	3.24%
	Interest	17.78	35.56	34.70	32.93	31.08
	Rep Schedule	30 half yearly installment from 15.9.2011				
	Total Loan					
	Gross loan opening	42198.44	43296.05	43296.05	43296.05	43296.05
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	62.92	2215.86	4605.67
	Net Loan-Opening	42198.44	43296.05	43233.13	41080.19	38690.38
	Additions during the year	1097.61	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	62.92	2152.94	2389.81	2472.16
	Net Loan-Closing	43296.05	43233.13	41080.19	38690.38	36218.22
	Average Loan	42747.24	43264.59	42156.66	39885.28	37454.30
	Rate of Interest	4.1177%	4.1031%	4.0959%	4.0783%	4.0492%
	Interest	1760.18	1775.19	1726.69	1626.63	1516.60

Asset-II

		(₹ in lakh)				
	Details of Loan	2009-10	2010-11	2011-12	2012-13	2013-14
1	IBRD III					
	Gross loan opening	50015.69	50015.69	50015.69	50015.69	50015.69
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	2433.89	4974.06
	Net Loan-Opening	50015.69	50015.69	50015.69	47581.80	45041.63
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	2433.89	2540.17	2650.21
	Net Loan-Closing	50015.69	50015.69	47581.80	45041.63	42391.42
	Average Loan	50015.69	50015.69	48798.74	46311.71	43716.52
	Rate of Interest	2.04%	2.04%	2.04%	2.04%	2.04%
	Interest	1020.32	1020.32	995.49	944.76	891.82
	Rep Schedule	30 half yearly installment from 15.9.2011				
2	Bond XXVI					
	Gross loan opening	482.00	482.00	482.00	482.00	482.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	40.17	80.33
	Net Loan-Opening	482.00	482.00	482.00	441.83	401.67
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	40.17	40.17	40.17
	Net Loan-Closing	482.00	482.00	441.83	401.67	361.50
	Average Loan	482.00	482.00	461.92	421.75	381.58
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	44.83	44.83	42.96	39.22	35.49
	Rep Schedule	12 annual installments from 7.3.2012				
3	Bond XX					
	Gross loan opening	451.00	451.00	451.00	451.00	451.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	37.58	75.17	112.75
	Net Loan-Opening	451.00	451.00	413.42	375.83	338.25
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	37.58	37.58	37.58	37.58
	Net Loan-Closing	451.00	413.42	375.83	338.25	300.67
	Average Loan	451.00	432.21	394.63	357.04	319.46
	Rate of Interest	8.93%	8.93%	8.93%	8.93%	8.93%
	Interest	40.27	38.60	35.24	31.88	28.53
	Rep Schedule	12 annual installments from 7.9.2010				
4	Bond XXI					
	Gross loan opening	504.00	504.00	504.00	504.00	504.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	42.00	84.00	126.00
	Net Loan-Opening	504.00	504.00	462.00	420.00	378.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	42.00	42.00	42.00	42.00
	Net Loan-Closing	504.00	462.00	420.00	378.00	336.00
	Average Loan	504.00	483.00	441.00	399.00	357.00
	Rate of Interest	8.73%	8.73%	8.73%	8.73%	8.73%
	Interest	44.00	42.17	38.50	34.83	31.17
	Rep Schedule	12 annual installments from 11.10.2010				
5	Bond XXV					

	Gross loan opening	3841.00	3841.00	3841.00	3841.00	3841.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	320.08	640.17
	Net Loan-Opening	3841.00	3841.00	3841.00	3520.92	3200.83
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	320.08	320.08	320.08
	Net Loan-Closing	3841.00	3841.00	3520.92	3200.83	2880.75
	Average Loan	3841.00	3841.00	3680.96	3360.88	3040.79
	Rate of Interest	10.10%	10.10%	10.10%	10.10%	10.10%
	Interest	387.94	387.94	371.78	339.45	307.12
	Rep Schedule	12 annual installments from 12.06.2011				
6	Bond XXVIII					
	Gross loan opening	2563.00	2563.00	2563.00	2563.00	2563.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	213.58
	Net Loan-Opening	2563.00	2563.00	2563.00	2563.00	2349.42
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	213.58	213.58
	Net Loan-Closing	2563.00	2563.00	2563.00	2349.42	2135.83
	Average Loan	2563.00	2563.00	2563.00	2456.21	2242.63
	Rate of Interest	9.33%	9.33%	9.33%	9.33%	9.33%
	Interest	239.13	239.13	239.13	229.16	209.24
	Rep Schedule	12 annual installments from 15.12.2012				
6	Bond XXX					
	Gross loan opening	410.00	410.00	410.00	410.00	410.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	410.00	410.00	410.00	410.00	410.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	34.17
	Net Loan-Closing	410.00	410.00	410.00	410.00	375.83
	Average Loan	410.00	410.00	410.00	410.00	392.92
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	36.08	36.08	36.08	36.08	34.58
	Rep Schedule	12 annual installments from 29.09.2013				
6	Bond XXXI Drawal date 25.02.2010					
	Gross loan opening	0.00	969.00	969.00	969.00	969.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	969.00	969.00	969.00	969.00
	Additions during the year	969.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	80.75
	Net Loan-Closing	969.00	969.00	969.00	969.00	888.25
	Average Loan	484.50	969.00	969.00	969.00	928.63
	Rate of Interest	8.90%	8.90%	8.90%	8.90%	8.90%
	Interest	43.12	86.24	86.24	86.24	82.65
	Rep Schedule	12 annual installments from 25.2.2014				
	Total Loan					
	Gross loan opening	58266.69	59235.69	59235.69	59235.69	59235.69
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	79.58	2953.31	6146.89
	Net Loan-Opening	58266.69	59235.69	59156.10	56282.38	53088.79
	Additions during the year	969.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	79.58	2873.72	3193.59	3418.54



Net Loan-Closing	59235.69	59156.10	56282.38	53088.79	49670.25
Average Loan	58751.19	59195.90	57719.24	54685.59	51379.52
Rate of Interest	3.1586%	3.2017%	3.1972%	3.1848%	3.1541%
Interest	1855.69	1895.30	1845.42	1741.63	1620.58



Asset-III

						(₹. in lakh)
	Details of Loan	2009-10	2010-11	2011-12	2012-13	2013-14
1	IBRD III					
	Gross loan opening	1315.81	1315.81	1315.81	1315.81	1315.81
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	64.03	130.86
	Net Loan-Opening	1315.81	1315.81	1315.81	1251.78	1184.95
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	64.03	66.83	69.72
	Net Loan-Closing	1315.81	1315.81	1251.78	1184.95	1115.23
	Average Loan	1315.81	1315.81	1283.79	1218.37	1150.09
	Rate of Interest	3.24%	3.24%	3.24%	3.24%	3.24%
	Interest	42.63	42.63	41.59	39.48	37.26
	Rep Schedule	30 half yearly installment from 15.09.2011				
2	Bond XXVI					
	Gross loan opening	14.00	14.00	14.00	14.00	14.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	1.17	2.33
	Net Loan-Opening	14.00	14.00	14.00	12.83	11.67
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	1.17	1.17	1.17
	Net Loan-Closing	14.00	14.00	12.83	11.67	10.50
	Average Loan	14.00	14.00	13.42	12.25	11.08
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	1.30	1.30	1.25	1.14	1.03
	Rep Schedule	12 annual installments from 07.03.2012				
3	Bond XX					
	Gross loan opening	13.00	13.00	13.00	13.00	13.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	1.08	2.17	3.25
	Net Loan-Opening	13.00	13.00	11.92	10.83	9.75
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	1.08	1.08	1.08	1.08
	Net Loan-Closing	13.00	11.92	10.83	9.75	8.67
	Average Loan	13.00	12.46	11.38	10.29	9.21
	Rate of Interest	8.93%	8.93%	8.93%	8.93%	8.93%
	Interest	1.16	1.11	1.02	0.92	0.82
	Rep Schedule	12 annual installments from 7.9.2010				
4	Bond XXI					
	Gross loan opening	15.00	15.00	15.00	15.00	15.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	1.25	2.50	3.75
	Net Loan-Opening	15.00	15.00	13.75	12.50	11.25
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	1.25	1.25	1.25	1.25
	Net Loan-Closing	15.00	13.75	12.50	11.25	10.00
	Average Loan	15.00	14.38	13.13	11.88	10.63
	Rate of Interest	8.73%	8.73%	8.73%	8.73%	8.73%
	Interest	1.31	1.25	1.15	1.04	0.93
	Rep Schedule	12 annual installments from 11.10.2010				



5	Bond XXV					
	Gross loan opening	103.00	103.00	103.00	103.00	103.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	8.58	17.17
	Net Loan-Opening	103.00	103.00	103.00	94.42	85.83
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	8.58	8.58	8.58
	Net Loan-Closing	103.00	103.00	94.42	85.83	77.25
	Average Loan	103.00	103.00	98.71	90.13	81.54
	Rate of Interest	10.10%	10.10%	10.10%	10.10%	10.10%
	Interest	10.40	10.40	9.97	9.10	8.24
	Rep Schedule	12 annual installments from 12.6.2011				
6	Bond XXVIII					
	Gross loan opening	69.00	69.00	69.00	69.00	69.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	5.75
	Net Loan-Opening	69.00	69.00	69.00	69.00	63.25
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	5.75	5.75
	Net Loan-Closing	69.00	69.00	69.00	63.25	57.50
	Average Loan	69.00	69.00	69.00	66.13	60.38
	Rate of Interest	9.33%	9.33%	9.33%	9.33%	9.33%
	Interest	6.44	6.44	6.44	6.17	5.63
	Rep Schedule	12 annual installments from 15.12.2012				
6	IBRD III (Add Cap for 2009-10)					
	Gross loan opening	0.00	128.27	128.27	128.27	128.27
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	6.24	12.76
	Net Loan-Opening	0.00	128.27	128.27	122.03	115.51
	Additions during the year	128.27	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	6.24	6.51	6.80
	Net Loan-Closing	128.27	128.27	122.03	115.51	108.72
	Average Loan	64.14	128.27	125.15	118.77	112.12
	Rate of Interest	3.24%	3.24%	3.24%	3.24%	3.24%
	Interest	2.08	4.16	4.05	3.85	3.63
	Rep Schedule	30 half yearly installment from 15.9.2011				
	Total Loan					
	Gross loan opening	1529.81	1658.08	1658.08	1658.08	1658.08
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	2.33	84.69	175.86
	Net Loan-Opening	1529.81	1658.08	1655.75	1573.39	1482.22
	Additions during the year	128.27	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	2.33	82.36	91.17	94.35
	Net Loan-Closing	1658.08	1655.75	1573.39	1482.22	1387.86
	Average Loan	1593.95	1656.91	1614.57	1527.80	1435.04
	Rate of Interest	4.0982%	4.0617%	4.0547%	4.0378%	4.0100%
	Interest	65.32	67.30	65.47	61.69	57.54