

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No.72/2010

**Coram: 1. Shri S.Jayaraman, Member
2. Shri M. Deena Dayalan, Member**

DATE OF HEARING: 9.11.2010

DATE OF ORDER: 1.6.2011

In the matter of

Determination of transmission tariff for (i) LLO of one circuit of Madurai-Trichy 400 kV D/C line along with 1 x 80 MVAR line reactor at Karikudi sub-station and (ii) 2 X 315 MVA Auto Transformers and Down Stream System with associated bays and equipments at Karaikudi sub-station under System Strengthening-VII of Southern Region Grid in Southern Region for tariff block 2009-14 period.

And in the matter of

Power Grid Corporation of India Ltd., Gurgaon

.... **Petitioner**

Vs

1. Karnataka Power Transmission Corporation Ltd., Bangalore
2. Transmission Corporation of Andhra Pradesh Ltd., Hyderabad
3. Kerala State Electricity Board, Thiruvananthapuram
4. Tamil Nadu Electricity Board, Chennai
5. Electricity Department, Government of Goa, Panaji, Goa
6. Electricity Department, Govt. Of Pondicherry, Pondicherry
7. Eastern Power Distribution Company of Andhra Pradesh Limited, Vishakhapatnam
8. Southern Power Distribution Company of Andhra Pradesh Limited, Tirupati
9. Central Power Distribution Company of Andhra Pradesh Limited Hyderabad
10. Northern Distribution Company of Andhra Pradesh Limited, Warangal
11. Bangalore Electricity Supply Company Ltd., Bangalore
12. Gulbarga Electricity Supply Company Ltd., Gulbarga
13. Hubli Electricity Supply Company Ltd., Hubli
14. MESCOM, Mangalore
15. Chamundeswari Electricity Supply Corporation Ltd., Mysore

.....**Respondents**

The following were present:

1. Shri Rajeev Gupta, PGCIL
2. Shri Rakesh Prasad, PGCIL

ORDER

The petition has been filed seeking approval of transmission tariff for
(a) LLO of 400 kV Trichy-Madurai at Karaikudi along with 1x80 MVAR Bus

Reactor and associated bays and equipments at 400/230 kV Karaikudi sub-station and ; (b) 2X315 MVA Auto Transformers and 230 kV Down Stream System along with associated bays and equipments at 400 kV/ 230 kV Karaikudi sub-station (hereinafter collectively referred to as “the transmission assets”) along with associated bays and equipment under System Strengthening – VII of Southern Region Grid (hereinafter referred to as “the transmission system”) in Southern 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”). The petitioner has made the following additional prayers:-

(i) To invoke the provision of Regulations 44 of the 2009 regulations, for relaxation of Regulation 15(3) of the 2009 regulations, so that grossing up the base rate shall be considering the revised rate of MAT @15%+10% surcharge+3% education cess as per the Finance Act, 2009 (the pre-tax rate of ROE based on the above works out to 18.674%) for the year 2009-10 and for the year 2010-11 and subsequent years of the tariff block, grossing up of the base rate shall be, considering the revised rate of MAT @ 18%+10% surcharge+3% education cess as per the Finance Act, 2009 (the pre-tax rate of ROE based on the above works out to 19.471%) and allow consequential impact on tariff for 2009-14 period accordingly;

(ii) Approve reimbursement of petition filing fee and publication of notices in the newspaper as per the 2009 regulations;

(iii) Allow to bill and recover Service Tax on transmission charges separately from the respondents; and

(iv) Allow the petitioner to bill and recover Licensee fee separately from the respondents.

2. The administrative approval and expenditure sanction to the transmission system was accorded by the Board of Directors of the petitioner company vide Memorandum ref. C/CP/S47-00 dated 31.5.2005 at an estimated cost of ₹ 279.30 crore including an IDC of ₹ 17.30 crore based on 4th quarter, 2004 price level.

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

Assets	Name of the asset	Date of commercial operation
Asset-I	LILO of 400 kV Trichy-Madurai at Karaikudi along with 1x 80 MVAR Bus Reactor and associated bays and equipments at 400/230 kV Karaikudi sub-station	1.8.2009
Asset-II	2X315 MVA Auto Transformers and 230 kV Down Stream System along with associated bays and equipments at 400 kV/ 230 kV Karaikudi sub-station	1.8.2009

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

(₹ in lakh)

	Asset-I				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	280.40	443.00	447.42	447.94	447.94
Interest on Loan	386.39	575.84	540.95	499.75	458.02
Return on Equity	318.59	501.96	507.29	507.81	507.81
Interest on Working Capital	26.01	41.62	41.67	41.43	41.19
O & M Expenses	125.13	198.45	209.81	221.80	234.47
Total	1136.52	1760.87	1747.14	1718.73	1689.43

(₹ in lakh)

	Asset-II				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	161.89	257.44	260.08	260.08	260.08
Interest on Loan	194.41	290.16	269.37	245.13	220.94
Return on Equity	160.77	255.66	258.28	258.28	258.28
Interest on Working Capital	20.26	33.92	34.58	35.11	35.71
O & M Expenses	216.59	343.48	363.14	383.88	405.84
Total	753.92	1180.66	1185.45	1182.48	1180.85

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

(₹ in lakh)

	Asset-I				
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	18.77	29.77	31.47	33.27	35.17
O & M expenses	15.64	16.54	17.48	18.48	19.54
Receivables	284.13	293.48	291.19	286.46	281.57
Total	318.54	339.79	340.14	338.21	336.28
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	26.01	41.62	41.67	41.43	41.19

(₹ in lakh)

	Asst-II				
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	32.49	51.52	54.47	57.58	60.88
O & M expenses	27.07	28.62	30.26	31.99	33.82
Receivables	188.48	196.78	197.58	197.08	196.81
Total	248.04	276.92	282.31	286.65	291.51
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	20.26	33.92	34.58	35.11	35.71

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. Reply to the petition has been filed by Tamil Nadu Electricity Board (TNEB). The main issues raised by TNEB pertain to the petitioner's claim of additional capital expenditure, MAT, reimbursement of filing fee, publication expenses, service tax and licence fee. etc. The issues have been addressed in relevant paras of this order.

CAPITAL COST

7. Regulation 7 of the 2009 regulations provides for determination of capital cost as under:

“7. **Capital cost:**(1) Capital cost for a project shall include:

(a) The expenditure incurred or projected to be incurred, including interest during construction and financing charges, 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 fund 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; and

(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”.

8. The scope of transmission system including asset claimed in current petition (at S. Nos. 1 and 3), capital cost as on the date of

commercial operation and projected additional capital expenditure claimed by the petitioner is as under:

(₹ in lakh)

Sl. No	1	2	3	4
Name of Asset	LILO at Karikudi sub-station (Date of commercial operation - 1.8.2009)	LILO at Hassan (Date of commercial operation - 1.6.2010)	2 x 315 MVA Auto Transformers at Karikudi sub-station (Date of commercial operation - 1.8.2009)	2 x 315 MVA Auto Transformer at Hassan sub-station (Date of commercial operation - 1.7.2010)
Apportioned approved cost	8931	3995	48822.14	3493
RCE Approved Cost	9921.67	12846.74	5052.2	4688.67
Expenditure up to the date of commercial operation	8743.61*	12480.70*	4372.56*	4458.95*
Proposed additional capital expenditure from the date of commercial operation to 31.3.2010	734.14	0	453.15	0
Proposed additional capital expenditure from 1.4.2010 to 31.3.2011	183.92	338.74	100	199
Proposed additional capital expenditure from 1.4.2011 to 31.3.2012	19.66	0	0	0
Total estimated completion cost	9681.33	12819.44	4925.71	4657.95

* This includes initial spares.

9. It can be seen that the in the present petition, petitioner has claimed the transmission charges for the assets mentioned at S. Nos. 1 and 3 of above. The transmission charges for the assets mentioned at S.No. 2 and 4 has been claimed by the petitioner in Petition No. 310/2010.

Initial Spares

10. Initial spares for the Asset-I exceeds the ceiling limit specified in Regulations 8 of the 2009 regulations. However, considering all assets falling under System Strengthening-VII of Southern Region Grid in Southern Region, amount of initial spares for transmission line and sub-

station falls within the ceiling limit as specified in Regulations 8 of the 2009 regulations.

Time over-run

11. As per the investment approval, transmission assets were scheduled to be completed within period of 36 months from the date of approval i.e August, 2006. However, the transmission assets were declared under commercial operation on 1.8.2009.

12. The petitioner has submitted that the transmission assets were scheduled to be commissioned within a period of 36 months from the date of first letter of award, i.e. 23.8.2006 and same for the project as a whole is 12.7.2006. Accordingly, the scheduled date of commercial operation of the projects work out to 1.8.2009, against which the asset covered in the petition were declared under commercial operation on 1.8.2009 which implies that there is no time over-run. It has been submitted that during the 9th SRPC meeting held on 6.3.2009 at Kumarakom, PGCIL informed the respondent, TNEB that the system would be ready by June 2009 and 400 kV sub-station along with LILO would be commissioned accordingly.

Cost over-run

13. TNEB has submitted that the estimated completion cost of the transmission assets is ₹ 14607.04 lakh against the approved apportioned cost of ₹12674 lakh which is around 15% more than the apportioned

approved cost. It has been submitted that the cost incurred as on the date of commercial operation itself exceeds the apportioned approved cost by around 3% due to high awarded cost obtained through competitive bidding route. In response, the petitioner vide its rejoinder has submitted that estimated completion cost of the transmission line component is ₹ 14,607.04 lakh against the apportioned approved cost of ₹ 12,674 lakh. The petitioner has further submitted that the contracts for various packages under this project was awarded to the lowest evaluated and responsive bidder, on the basis of Domestic Competitive Bidding, after publication of NITs in leading newspapers. Thus, the award price represent the lowest price available at the time of bidding of various packages. It has been further submitted that the main reasons of cost variation were due to increase in cost of land, transformer, reactor, structures, civil works, increase in taxes and duties etc.

14. We have examined the submission of the petitioner. It is noted that the petitioner has reckoned the period of execution of the project with reference to the issue of letter of award i.e from 23.8.2006. However, in para 31.12.1 of the Statement of Reasons to the 2009 regulations provides that completion time schedule shall be reckoned from the date of investment approval of the project by the Board of Directors. In view of the above, the contention of the petitioner is not

tenable and the completion time schedule has been reckoned from the date of the approval i.e. 31.5.2005.

15. We are of the view that the petitioner is responsible for time over-run of the project by 14 months. Accordingly, we direct that the petitioner shall not be entitled for computation of Interest During Construction (IDC) and Incidental Expenses During Construction (IEDC) for the said period. The petitioner has furnished a certificate from the Chartered Accountant which has indicated the IDC and IEDC in two spells i.e. up to 31.3.2009 and from 1.4.2009 till the date of commercial operation i.e. 31.7.2009. Accordingly, details of IDC and IEDC, which have not been allowed, are as under:

Asset-I

(₹ in lakh)

Detail of IDC and IEDC as per Chartered Accountant Certificate dated 9.12.2009		
	IEDC	IDC
From Date of Investment Approval to 31.3.2009	326.49	432.01
From 1.4.2009 to 31.7.2009	175.09	143.20
Total IDC and IEDC Claimed	501.58	575.21
Detail of IDC and IEDC disallowed from May, 2008 to July 2009		
From May, 2008 to March 2009 (for 10 Months)	70.98	93.92
From April 2009 to July 2009 (for 4 Months)	175.09	143.20
Total Disallowed IDC and IEDC (for 14 Months)	246.07	237.12

Asset-II

(₹ in lakh)

Detail of IDC and IEDC as per Chartered Accountant Certificate dated 9.12.2009		
	IEDC	IDC
From Date of Investment Approval to 31.3.2009	173.07	229.00
From 1.4.2009 to 31.7.2009	108.16	93.51
Total IDC and IEDC Claimed	281.23	322.51
Detail of IDC and IEDC disallowed from May, 2008 to July 2009		
From May 2008 to March 2009 (for 10 Months)	37.62	49.78
From April 2009 to July 2009 (for 4 Months)	108.16	93.51
Total disallowed IDC and IEDC (for 14 Months)	145.78	143.29

16. In view of the above, following capital expenditure has been considered for the purpose of tariff:

(₹ in lakh)

Name of Asset	Capital Cost Claimed by the Petitioner as on the date of commercial operation	Detail of IDC and IEDC Disallowed for 14 months from May, 2008	Capital cost considered for the purpose of tariff as on date of commercial operation
Asset-I	8743.61	(-) 483.19	8260.43
Asset-II	4372.56	(-) 289.07	4083.48

ADDITIONAL CAPITAL EXPENDITURE

17. Regulation 9 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 rregulation 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.

(2) The capital expenditure incurred on the following counts after the cut-off-date, in its discretion, be admitted by the Commission, subject to prudence check:

- (i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;
- (ii) Change in law;
- (iii) *****
- (iv) *****
- (v) In case of transmission system any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC

batteries, replacement of switchyard equipment due to increase of fault level, emergency restoration system, insulators cleaning infrastructure, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of the transmission system.

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

	Years	Nature and details of expenditure	Amount (₹ in lakh)
Asset-I	2009-10	Building -Progressive payment and part final retention payments.	100.00
		Transmission line - Progressive payment and part final retention payments.	182.00
		Sub-station - Progressive payment and part final retention payments.	436.00
		Power Line Carrier Communication - Progressive payment and part final retention payments.	16.14
	2010-11	Building -Final retention payments.	98.18
		Transmission line - Final retention and compensation payments.	22.00
		Sub-station - Final retention payments.	63.74
	2011-12	Sub-station - T and P	13.00
		Transmission line - Compensation payments.	6.66
Asset-II	2009-10	Sub-station - Progressive payment and part final retention payments.	453.15
	2010-11	Sub-station -Final retention payments	100.00

19. The above additional expenditure are in the nature of progressive payment and undischarged liabilities and are projected to be capitalized within the cut-off date of the transmission assets which is

up to 31.3.2012 as computed according to Regulation 3 (11) of the 2009 regulations. Therefore, the projected additional capital expenditure during 2009-10, 2010-11 and 2011-12 are admissible under Regulation 9 (1) of the 2009 regulations and are accordingly allowed.

TOTAL CAPITAL COST

20. 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)

Asset-I	
Particulars	
Capital cost as on the date of commercial operation	8743.61
Less: IDC and IEDC	483.18
Capital cost admissible for tariff determination	8260.43
Projected additional capital expenditure during 2009-10	734.14
Capital cost as on 1.4.2010	8994.57
Projected additional capital expenditure during 2010-11	183.92
Capital cost as on 1.4.2011	9178.49
Projected additional capital expenditure during 2011-12	19.66
Capital cost as on 1.4.2013 and 31.3.2014	9198.15

(₹ in lakh)

Asset-II	
Particulars	Amount
Capital cost as on the date of commercial operation	4372.56
Less: IDC and IEDC	289.08
Capital cost admissible for tariff determination	4083.48
Projected additional capital expenditure during 2009-10	453.15
Capital cost as on 1.4.2010	4536.63
Projected additional capital expenditure during 2010-11	100.00
Capital cost as on 1.4.2011, 1.4.2012, 1.4.2013 and 31.3.2014	4636.63

DEBT- EQUITY RATIO

21. Regulation 12 of the 2009 regulations provides as under:-

"(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.

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

(2) 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 31.3.2009 shall be considered."

22. The petitioner has claimed tariff based on debt-equity ratio of 69.99:30.01 and 70:30 for Asset-I and Asset-II, respectively as on the date of commercial operation. The petitioner has further claimed the amount of additional capital expenditure in the debt-equity ratio of 70:30 for Asset-I and Asset-II. After deducting of IDC and IEDC, debt-equity ratio of 70:30 for Asset-I and Asset-II has been considered for the purpose of tariff. Equity considered for the transmission assets is as under:

(₹ in lakh)

Asset	Equity as on date of commercial operation	Notional equity due to additional capital expenditure during 2009-10	Average equity during 2009-10	Notional equity due to additional capital expenditure during 2010-11	Average equity during 2010-11	Notional equity due to additional capital expenditure during 2011-12	Average equity during 2011-12	Notional equity due to additional capital expenditure during 2012-14	Average equity during 2012-14
Asset-I	2477.85	220.24	2587.97	55.18	2725.68	5.90	2756.22	0.00	2759.17
Asset-II	1224.85	135.95	1292.82	30.00	1375.80	0.00	1390.80	0.00	1390.80

RETURN ON EQUITY

23. 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 tried 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."

24. TNEB has submitted that the 2009 regulations does not make any provision for reimbursement on account of change in the rate of MAT/corporate tax on a yearly basis and the rate prevailing on the date filing of petition be considered in awarding the tariff. In response, the petitioner has submitted the unless the revision of MAT rate is effected in computing the ROE, the cash flow of Power Grid would be adversely affected as tax would have to be paid at revised rate of MAT @15% in accordance with Financed Act, 2009 whereas cash would be generated through ROE based on MAT @ 10%. It is clarified that the Commission vide its order dated 3.8.2010 in Petition Nos. 17/2010 and 38/2010 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 holidays 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 regulations is under way and will address the grievance of the petitioner with regard to the MAT rate.

25. Accordingly, the return on equity has been computed as per the existing provision of Regulation 15 (3) of 2009 regulations as under:

(₹ in lakh)

Particulars	Asset-I				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Equity as on 1.4.2009	2477.85	2698.09	2753.27	2759.17	2759.17
Addition due to Additional Capitalisation	220.24	55.18	5.90	0.00	0.00
Closing Equity	2698.09	2753.27	2759.17	2759.17	2759.17
Average Equity	2587.97	2725.68	2756.22	2759.17	2759.17
Return on Equity (Base Rate)	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%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	301.60	476.48	481.81	482.33	482.33

(₹ in lakh)

Particulars	Asset-II				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Equity as on 1.4.2009	1224.85	1360.80	1390.80	1390.80	1390.80
Addition due to Additional Capitalisation	135.95	30.00	0.00	0.00	0.00
Closing Equity	1360.80	1390.80	1390.80	1390.80	1390.80
Average Equity	1292.82	1375.80	1390.80	1390.80	1390.80
Return on Equity (Base Rate)	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%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	150.67	240.50	243.13	243.13	243.13

INTEREST ON LOAN

26. 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."

27. The interest on loan has been worked out as detailed below:
- (a) Gross amount of loan, repayment of installments, rate of interest and weighted average rate of interest on actual average loan have been considered as per the petition;
 - (b) The repayment for the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that period;
 - (c) Where the moratorium period has been availed by the transmission licensee, the repayment of the loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed;
 - (d) Weighted average rate of interest on actual average loan has been worked out as per (a) above and applied on the notional average loan during the year to arrive at the interest on loan; and
 - (e) The interest on loan has been calculated on the basis of rate prevailing as on 1.4.2009. Any change in rate of interest subsequent to 1.4.2009 will be considered at the time of truing up.
28. The detailed calculations in support of the weighted average rate of interest are contained in **Annexure-I** and **Annexure-II** to this order.

The year-wise details of interest on loan have been worked out as under:

(₹ in lakh)

	Asset-I				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	5782.58	6296.48	6425.22	6438.98	6438.98
Cumulative Repayment up to Previous Year	0.00	263.89	682.13	1104.80	1527.98
Net Loan-Opening	5782.58	6032.58	5743.09	5334.19	4911.00
Addition due to Additional Capitalization	513.90	128.74	13.76	0.00	0.00
Repayment during the year	263.89	418.24	422.66	423.18	423.18
Net Loan-Closing	6032.58	5743.09	5334.19	4911.00	4487.82
Average Loan	5907.58	5887.83	5538.64	5122.59	4699.41
Weighted Average Rate of Interest on Loan	9.2931%	9.2932%	9.2908%	9.2863%	9.2836%
Interest	366.00	547.17	514.59	475.70	436.28

(₹ in lakh)

	Asset-II				
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	2858.63	3175.84	3245.84	3245.84	3245.84
Cumulative Repayment up to Previous Year	0.00	151.71	393.89	638.70	883.52
Net Loan-Opening	2858.63	3024.12	2851.95	2607.14	2362.32
Addition due to Additional Capitalization	317.21	70.00	0.00	0.00	0.00
Repayment during the year	151.71	242.17	244.81	244.81	244.81
Net Loan-Closing	3024.12	2851.95	2607.14	2362.32	2117.51
Average Loan	2941.38	2938.04	2729.54	2484.73	2239.91
Weighted Average Rate of Interest on Loan	9.2911%	9.2923%	9.2923%	9.2897%	9.2882%
Interest	182.19	273.01	253.64	230.82	208.05

DEPRECIATION

29. 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."

30. The transmission assets covered in the petition were declared under commercial operation on 1.8.2009 and accordingly, assets will complete 12 years beyond 2013-14. Therefore, depreciation for the period 2009-14 has been calculated annually based on Straight Line Method and rates specified in **Appendix-III** of the 2009 Regulations. Accordingly, depreciation during the period 2009-14 in respect of the transmission asset has been worked out as under:

(₹ in lakh)						
Details of Depreciation	Asset-I					
	Up to the date of commercial operation	2009-10	2010-11	2011-12	2012-13	2013-14
Gross block as per the date of commercial operation	8260.43	8260.43	8994.57	9178.49	9198.15	9198.15
Addition during 2009-14 due to projected Additional Capital Expenditure		734.14	183.92	19.66	0.00	0.00
Gross block as on 31.3.2009		8994.57	9178.49	9198.15	9198.15	9198.15
Average gross block		8627.50	9086.53	9188.32	9198.15	9198.15
Rate of Depreciation		4.5881%	4.6029%	4.6000%	4.6007%	4.6007%
Depreciable Value (90%)		6958.12	7371.25	7462.86	7471.71	7471.71
Remaining Depreciable Value		6958.12	7107.36	6780.73	6366.91	5943.73
Depreciation		263.89	418.24	422.66	423.18	423.18

(₹ in lakh)

Details of Depreciation	Asset-II					
	Up to the date of commercial operation	2009-10	2010-11	2011-12	2012-13	2013-14
Gross block as per the date of commercial operation	4083.48	4083.48	4536.63	4636.63	4636.63	4636.63
Addition during 2009-14 due to projected Additional Capital Expenditure		453.15	100.00	0.00	0.00	0.00
Gross block as on 31.3.2009		4536.63	4636.63	4636.63	4636.63	4636.63
Average gross block		4310.06	4586.63	4636.63	4636.63	4636.63
Rate of Depreciation		5.2800%	5.2800%	5.2800%	5.2800%	5.2800%
Depreciable Value (90%)		3879.05	4127.97	4172.97	4172.97	4172.97
Remaining Depreciable Value		3879.05	3976.26	3779.08	3534.27	3289.45
Depreciation		151.71	242.17	244.81	244.81	244.81

OPERATION & MAINTENANCE EXPENSES

31. In accordance with clause (g) of Regulation 19 of the 2009 regulations, the following norms have been specified for operation and maintenance expenses:

Transmission line/bays:	Year				
	2009-10	2010-11	2011-12	2012-13	2013-14
400 kV, D/C, twin conductor transmission line (₹ in lakh/per kms.)	0.627	0.663	0.701	0.741	0.783
400 KV bay (₹ lakh/bay)	52.40	55.40	58.57	61.92	65.46
220 KV bay (₹ lakh/bay)	36.68	38.78	41.00	43.34	45.82

32. Accordingly, the petitioner's entitlement to O & M expenses has been worked out as under:

Asset-I

(₹ in lakh)

Element	Year				
	2009-10	2010-11	2011-12	2012-13	2013-14
O & M expenses for 400 KV double Circuit, twin conductor transmission line (48.642 Kms)	20.33	32.25	34.10	36.04	38.09
O & M expenses for 400 KV bays (3 bays)	104.80	166.20	175.71	185.76	196.38
Total	125.13	198.45	209.81	221.80	234.47

Asset-II

(₹ in lakh)

Element	Year				
	2009-10	2010-11	2011-12	2012-13	2013-14
O & M expenses for 400 KV bays (2 bays)	69.87	110.80	117.14	123.84	130.92
O & M expenses for 200 KV bays (6 bays)	146.72	232.68	246.00	260.04	274.92
Total	216.59	343.48	363.14	383.88	405.84

33. The petitioner has submitted 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 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%.

34. TNEB has submitted that O & M expenses for the period 2009-14 have been specified on normative basis and the regulations do not provide for revisiting the normative O & M expenses. In response, the petitioner in its rejoinder has submitted that the wage revision for executive level has been done but for the non-executive level, it is to be completely shortly. The petitioner has reiterated that it would approach the Commission separately for additional man power cost on account of wage revision. 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

35. 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. In the tariff being allowed, receivables have been worked out on the basis 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.

- (ii) **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 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.

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

(₹ in lakh)

	Asset-I				
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	18.77	29.77	31.47	33.27	35.17
O & M expenses	15.64	16.54	17.48	18.48	19.54
Receivables	270.38	280.05	278.16	273.82	269.33
Total	304.79	326.36	327.11	325.57	324.04
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	24.89	39.98	40.07	39.88	39.69

(₹ in lakh)

	Asset-II				
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	32.49	51.52	54.47	57.58	60.88
O & M expenses	27.07	28.62	30.26	31.99	33.82
Receivables	180.19	188.68	189.72	189.47	189.44
Total	239.75	268.83	274.46	279.04	284.13
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	19.58	32.93	33.62	34.18	34.81

TRANSMISSION CHARGES

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

(₹ in lakh)

	Asset-I				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	263.89	418.24	422.66	423.18	423.18
Interest on Loan	366.00	547.17	514.59	475.70	436.28
Return on Equity	301.60	476.48	481.81	482.33	482.33
Interest on Working Capital	24.89	39.98	40.07	39.88	39.69
O & M Expenses	125.13	198.45	209.81	221.80	234.47
Total	1081.52	1680.31	1668.94	1642.89	1615.95

(₹ in lakh)

	Asset-II				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	151.71	242.17	244.81	244.81	244.81
Interest on Loan	182.19	273.01	253.64	230.82	208.05
Return on Equity	150.67	240.50	243.13	243.13	243.13
Interest on Working Capital	19.58	32.93	33.62	34.18	34.81
O & M Expenses	216.59	343.48	363.14	383.88	405.84
Total	720.74	1132.10	1138.34	1136.83	1136.63

Application fee and the publication expenses

38. The petitioner has sought approval for the reimbursement of fee paid by it for filing the petition. TNEB has submitted that the prayer for reimbursement of filing fee may be rejected in view of the decision of the Commission in order dated 11.9.2008 in Petition No. 129.2005. It is clarified that the said decision was applicable to the tariff period 2004-09. However, Regulation 42 of the 2009 regulation provides for reimbursement of filing fees and expenses on publication of notices as may be allowed at the discretion of the Commission. We have decided the following in our order dated 11.1.2010 in Petition No. 109/2009:

"85. The Commission after careful consideration has decided that filing fee will be reimbursed in the following cases:

- (a) Main petitions for determination of tariff;*
- (b) Petitions for revisions of tariff due to additional capital expenditure.;*
- (c) Petitions for truing up of expenditure.*

Filing fees paid for filing the Review Petitions, Interlocutory Applications and other Miscellaneous Applications will not be reimbursed in tariff. The Commission has decided to reimburse the expenses on publication of notices as such expenses are incurred to meet the statutory requirement of transparency in the process of determination of tariff."

39. In accordance with the said decision, 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 of publication expenses from the beneficiaries on **pro-rata** basis.

Service Tax

40. The petitioner has prayed for reimbursement of service tax. The prayer has been opposed by TENEB on the ground that transmission is exempt from service tax by the Government of India vide notification dated 27.2.2010. 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. Therefore, the prayer of the petitioner no more survives and is accordingly is rejected.

Licence fee

41. The petitioner has submitted that licence fee is a new component of cost to the transmission licensee and has become incidental to the petitioner with effect from 2008-09. The normative O & M rates in the 2009 regulations do not capture the cost associated with the licence fee and therefore it should be allowed to be recovered from the respondents. TENB has submitted that licence fee is a levy on the petitioner to be in the business and this should not be passed on to the beneficiaries over and above the O & M charges. In this regard, It is clarified that the matter is under consideration of the Commission and any decision on the issue as and when taken will be applicable to this petition.

42. 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.

43. This order disposes of Petition No. 72/2010.

Sd/-
(M. DEENA DAYALAN)
MEMBER

sd/-
(S.JAYARAMAN)
MEMBER

Annexure-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 XX					
	Gross loan opening	150.00	150.00	150.00	150.00	150.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	12.50	25.00	37.50
	Net Loan-Opening	150.00	150.00	137.50	125.00	112.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	12.50	12.50	12.50	12.50
	Net Loan-Closing	150.00	137.50	125.00	112.50	100.00
	Average Loan	150.00	143.75	131.25	118.75	106.25
	Rate of Interest	8.93%	8.93%	8.93%	8.93%	8.93%
	Interest	13.40	12.84	11.72	10.60	9.49
	Rep Schedule	12 equal installments w.e.f. 7.9.2010				
2	Bond XXI					
	Gross loan opening	100.00	100.00	100.00	100.00	100.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	8.33	16.66	24.99
	Net Loan-Opening	100.00	100.00	91.67	83.34	75.01
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	8.33	8.33	8.33	8.33
	Net Loan-Closing	100.00	91.67	83.34	75.01	66.68
	Average Loan	100.00	95.84	87.51	79.18	70.85
	Rate of Interest	8.73%	8.73%	8.73%	8.73%	8.73%
	Interest	8.73	8.37	7.64	6.91	6.18
	Rep Schedule	12 equal installments w.e.f. 11.10.2010				
3	Bond XXII					
	Gross loan opening	100.00	100.00	100.00	100.00	100.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	8.33	16.66	24.99
	Net Loan-Opening	100.00	100.00	91.67	83.34	75.01
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	8.33	8.33	8.33	8.33
	Net Loan-Closing	100.00	91.67	83.34	75.01	66.68
	Average Loan	100.00	95.84	87.51	79.18	70.85
	Rate of Interest	8.68%	8.68%	8.68%	8.68%	8.68%
	Interest	8.68	8.32	7.60	6.87	6.15
	Rep Schedule	12 equal installments w.e.f. 7.12.2010				
4	Bond XXIV					
	Gross loan opening	250.00	250.00	250.00	250.00	250.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	20.83	41.67	62.50
	Net Loan-Opening	250.00	250.00	229.17	208.33	187.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	20.83	20.83	20.83	20.83
	Net Loan-Closing	250.00	229.17	208.33	187.50	166.67
	Average Loan	250.00	239.58	218.75	197.92	177.08
	Rate of Interest	9.95%	9.95%	9.95%	9.95%	9.95%
	Interest	24.88	23.84	21.77	19.69	17.62
	Rep Schedule	12 equal installments w.e.f. 26.03.2011				

5	Bond XXVII					
	Gross loan opening	2000.00	2000.00	2000.00	2000.00	2000.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	0.00	166.67	333.33
	Net Loan-Opening	2000.00	2000.00	2000.00	1833.33	1666.67
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	166.67	166.67	166.67
	Net Loan-Closing	2000.00	2000.00	1833.33	1666.67	1500.00
	Average Loan	2000.00	2000.00	1916.67	1750.00	1583.33
	Rate of Interest	9.47%	9.47%	9.47%	9.47%	9.47%
	Interest	189.40	189.40	181.51	165.73	149.94
	Rep Schedule	12 equal installments w.e.f. 31.3.2012				
6	Bond XXVIII					
	Gross loan opening	1400.00	1400.00	1400.00	1400.00	1400.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	0.00	0.00	116.67
	Net Loan-Opening	1400.00	1400.00	1400.00	1400.00	1283.33
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	116.67	116.67
	Net Loan-Closing	1400.00	1400.00	1400.00	1283.33	1166.67
	Average Loan	1400.00	1400.00	1400.00	1341.67	1225.00
	Rate of Interest	9.33%	9.33%	9.33%	9.33%	9.33%
	Interest	130.62	130.62	130.62	125.18	114.29
	Rep Schedule	12 equal installments w.e.f. 15.12.2012				
7	Bond XXIX					
	Gross loan opening	1620.00	1620.00	1620.00	1620.00	1620.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	0.00	0.00	135.00
	Net Loan-Opening	1620.00	1620.00	1620.00	1620.00	1485.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	135.00	135.00
	Net Loan-Closing	1620.00	1620.00	1620.00	1485.00	1350.00
	Average Loan	1620.00	1620.00	1620.00	1552.50	1417.50
	Rate of Interest	9.20%	9.20%	9.20%	9.20%	9.20%
	Interest	149.04	149.04	149.04	142.83	130.41
	Rep Schedule	12 equal installments w.e.f. 12.3.2013				
8	Bond XXX					
	Gross loan opening	500.00	500.00	500.00	500.00	500.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	500.00	500.00	500.00	500.00	500.00
	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	41.67
	Net Loan-Closing	500.00	500.00	500.00	500.00	458.33
	Average Loan	500.00	500.00	500.00	500.00	479.17
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	44.00	44.00	44.00	44.00	42.17
	Rep Schedule	12 equal installments w.e.f. 29.09.2013				

	Total Loan					
	Gross loan opening	6120.00	6120.00	6120.00	6120.00	6120.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	49.99	266.65	734.98
	Net Loan-Opening	6120.00	6120.00	6070.01	5853.35	5385.02
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	49.99	216.66	468.33	509.99
	Net Loan-Closing	6120.00	6070.01	5853.35	5385.02	4875.03
	Average Loan	6120.00	6095.00	5961.68	5619.18	5130.02
	Rate of Interest	9.2931%	9.2932%	9.2908%	9.2863%	9.2836%
	Interest	568.74	566.42	553.89	521.81	476.25

Annexure-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 XX					
	Gross loan opening	100.00	100.00	100.00	100.00	100.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	8.33	16.67	25.00
	Net Loan-Opening	100.00	100.00	91.67	83.33	75.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	8.33	8.33	8.33	8.33
	Net Loan-Closing	100.00	91.67	83.33	75.00	66.67
	Average Loan	100.00	95.83	87.50	79.17	70.83
	Rate of Interest	8.93%	8.93%	8.93%	8.93%	8.93%
	Interest	8.93	8.56	7.81	7.07	6.33
	Rep Schedule	12 equal installments w.e.f. 07.09.2010				
2	Bond XXI					
	Gross loan opening	100.00	100.00	100.00	100.00	100.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	8.33	16.66	24.99
	Net Loan-Opening	100.00	100.00	91.67	83.34	75.01
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	8.33	8.33	8.33	8.33
	Net Loan-Closing	100.00	91.67	83.34	75.01	66.68
	Average Loan	100.00	95.84	87.51	79.18	70.85
	Rate of Interest	8.73%	8.73%	8.73%	8.73%	8.73%
	Interest	8.73	8.37	7.64	6.91	6.18
	Rep Schedule	12 equal installments w.e.f. 11.10.2010				
3	Bond XXII					
	Gross loan opening	100.00	100.00	100.00	100.00	100.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	8.33	16.66	24.99
	Net Loan-Opening	100.00	100.00	91.67	83.34	75.01
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	8.33	8.33	8.33	8.33
	Net Loan-Closing	100.00	91.67	83.34	75.01	66.68
	Average Loan	100.00	95.84	87.51	79.18	70.85
	Rate of Interest	8.68%	8.68%	8.68%	8.68%	8.68%
	Interest	8.68	8.32	7.60	6.87	6.15
	Rep Schedule	12 equal installments w.e.f. 07.12.2010				
4	Bond XXIV					
	Gross loan opening	100.00	100.00	100.00	100.00	100.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	8.33	16.67	25.00
	Net Loan-Opening	100.00	100.00	91.67	83.33	75.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	8.33	8.33	8.33	8.33
	Net Loan-Closing	100.00	91.67	83.33	75.00	66.67
	Average Loan	100.00	95.83	87.50	79.17	70.83
	Rate of Interest	9.95%	9.95%	9.95%	9.95%	9.95%
	Interest	9.95	9.54	8.71	7.88	7.05
	Rep Schedule	12 equal installments w.e.f. 26.03.2011				

5	Bond XXVII					
	Gross loan opening	1000.00	1000.00	1000.00	1000.00	1000.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	0.00	83.33	166.67
	Net Loan-Opening	1000.00	1000.00	1000.00	916.67	833.33
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	83.33	83.33	83.33
	Net Loan-Closing	1000.00	1000.00	916.67	833.33	750.00
	Average Loan	1000.00	1000.00	958.33	875.00	791.67
	Rate of Interest	9.47%	9.47%	9.47%	9.47%	9.47%
	Interest	94.70	94.70	90.75	82.86	74.97
	Rep Schedule	12 equal installments w.e.f. 31.03.2012				
6	Bond XXVIII					
	Gross loan opening	1000.00	1000.00	1000.00	1000.00	1000.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	0.00	0.00	83.33
	Net Loan-Opening	1000.00	1000.00	1000.00	1000.00	916.67
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	83.33	83.33
	Net Loan-Closing	1000.00	1000.00	1000.00	916.67	833.33
	Average Loan	1000.00	1000.00	1000.00	958.33	875.00
	Rate of Interest	9.33%	9.33%	9.33%	9.33%	9.33%
	Interest	93.30	93.30	93.30	89.41	81.64
	Rep Schedule	12 equal installments w.e.f. 15.12.2012				
7	Bond XXIX					
	Gross loan opening	486.00	486.00	486.00	486.00	486.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	0.00	0.00	40.50
	Net Loan-Opening	486.00	486.00	486.00	486.00	445.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	40.50	40.50
	Net Loan-Closing	486.00	486.00	486.00	445.50	405.00
	Average Loan	486.00	486.00	486.00	465.75	425.25
	Rate of Interest	9.20%	9.20%	9.20%	9.20%	9.20%
	Interest	44.71	44.71	44.71	42.85	39.12
	Rep Schedule	12 equal installments w.e.f. 12.3.2013				
8	Bond XXX					
	Gross loan opening	175.00	175.00	175.00	175.00	175.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	175.00	175.00	175.00	175.00	175.00
	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	14.58
	Net Loan-Closing	175.00	175.00	175.00	175.00	160.42
	Average Loan	175.00	175.00	175.00	175.00	167.71
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	15.40	15.40	15.40	15.40	14.76
	Rep Schedule	12 equal installments w.e.f. 29.9.2013				
	Total Loan					
	Gross loan opening	3061.00	3061.00	3061.00	3061.00	3061.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	33.33	149.99	390.48

Net Loan-Opening	3061.00	3061.00	3027.67	2911.01	2670.52
Additions during the year	0.00	0.00	0.00	0.00	0.00
Repayment during the year	0.00	33.33	116.66	240.49	255.08
Net Loan-Closing	3061.00	3027.67	2911.01	2670.52	2415.44
Average Loan	3061.00	3044.34	2969.34	2790.77	2542.98
Rate of Interest	9.2911%	9.2923%	9.2923%	9.2897%	9.2882%
Interest	284.40	282.89	275.92	259.26	236.20