CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No.264/2010

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

Date of Hearing: 25.11.2010 Date of Order: 23.3.2011

In the matter of

Determination of transmission tariff for LILO of one circuit of 132 kV D/C Siliguri-Ranjit line at Gangtok in Eastern Region for the period from 1.4.2009 to 31.3.2014.

And In the matter of

Power Grid Corporation of India Limited, Gurgaon ...

..Petitioner

Vs

- 1. Bihar State Electricity Board, Patna
- 2. West Bengal State Electricity Board, Kolkata
- 3. Grid Corporation of Orissa Ltd., Bhubaneswar
- 4. Damodar Valley Corporation, Kolkata
- 5. Power Department, Govt. of Sikkim, Gangtok
- 6. Jharkhand State Electricity Board, Ranchi Respondents

The following were present:

- 1. Shri M.M. Mondal, PGCIL
- 2. Shri Rajiv Gupta, PGCIL
- 3. Shri Rakesh Prasad, PGCIL
- 4. Shri R.B.Sharma, Advocate, BSEB

<u>ORDER</u>

The petition has been filed for approval of tariff for LILO of one circuit of 132 kV D/C Siliguri-Ranjit line at Gangtok (hereinafter referred to as "the

transmission asset") in Eastern Region for the period from 1.4.2009 to 31.3.2014, in accordance with 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:-

- (a) To invoke the provision of Regulation 44 of the 2009 regulations so that the additional capital expenditure incurred/to be incurred on account of undischarged liabilities after the cut off date is allowed and considered for the fixation of tariff for the period 2009-14;
- (b) To allow grossing up the base rate of return with the applicable tax rate as per the relevant Finance Acts and direct settlement of tax liability between the generating company/transmission licensee and the beneficiaries/long-term transmission customers on year to year basis;
- (c) To approve reimbursement of petition filing fee and publication of notices in the newspaper as per the 2009 regulations;
- (d) Allow to bill and adjust impact on interest on loan due to floating rate of interest applicable during 2009-14, if any from the respondents;

- (e) Allow reimbursement of licence fee separately from the respondents.
- 2. The revised cost estimate of the transmission asset was approved by the Board of Directors of the petitioner company vide Memorandum dated 17.1.2006 at an estimated cost of ₹4646 lakh, which included IDC of ₹197 lakh.
- 3. The transmission asset was declared under commercial operation w.e.f 1.10.2005. The annual transmission charges for the transmission asset up to 31.3.2009 were approved vide orders dated 15/10/2007 and 2.4.2009 in Petition Nos. 12/2007 and 144/2008, respectively and same were subsequently revised vide order dated 2.7.2010 in Petition No. 318/2009 on account of additional capital expenditure incurred during 2008-09 based on admitted capital cost of ₹4250.93 lakh.
- 4. The petitioner has claimed the transmission charges as under:

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	212.94	214.38	214.71	214.71	214.71
Interest on Loan	183.59	170.12	155.23	139.47	123.69
Return on Equity	222.15	223.77	224.29	224.29	224.29
Interest on Working Capital	29.33	30.05	30.75	31.47	32.25
O & M Expenses	328.47	347.25	367.10	388.15	410.33
Total	976.48	985.57	992.08	998.09	1005.27

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

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	49.27	52.09	55.06	58.22	61.55
O & M expenses	27.37	28.94	30.59	32.35	34.19
Receivables	162.75	164.26	165.35	166.35	167.55
Total	239.39	245.29	251.01	256.92	263.29
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	29.33	30.05	30.75	31.47	32.25

- 6. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under section 64 of the Electricity Act, 2003.
- 7. Reply to the petition has been filed by Bihar State electricity Board (BSEB). BSEB has raised the issues of tax holiday, State Bank of India Advance Rate, reimbursement of filing fee, publication expenses and licence fee and impact on wage revision on O & M norms. The issues have been addressed in relevant paras of this order.

CAPITAL COST

8. Last proviso to clause (2) of Regulation 7 of the 2009 regulations provides as under:

"In case of the existing projects, capital cost admitted by the Commission prior to 1.4.2009 and the additional capital expenditure projected to be incurred for the respective year of the tariff period 2009-14 as may be admitted by the Commission, shall form the basis for determination of tariff".

- The capital cost of ₹ 4250.93 lakh admitted vide order dated 2.7.2010 in
 Petition No. 318/2009 has been considered for the purpose of tariff.
- 10. The petitioner has claimed the tariff after accounting for projected additional capital expenditure as under:

				(X III Iakii)
Approved	Admitted	Capital	Capital	Total
cost	capital cost	expenditure	expenditure extimated estimated	
	as on	projected to be	projected to be	capital
	31.3.2009	incurred during	incurred during	expenditure
		2009-10	2010-11	
4646.00	4250.93	41.73	20.00	4312.66

ADDITIONAL CAPITAL EXPEDNTURE

- 11. 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 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.

- (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."
- 12. The details submitted by the petitioner in support of its claim for projected additional capital expenditure for the transmission asset is given as under:

Years	Nature and details of expenditure	Amount (₹ in lakh)
2009-10	Transmission line - Balance and retention	41.73
	payments	
2010-11	Building - Balance and retention payments	20.00
	Total	61.73

- 13. Respondent No. 1, BSEB in its reply has objected to the claim of additional capital expenditure incurred during 2009-10 and 2010-11 towards balance and retention payments on the ground that such an expenditure is not covered under Regulation 9 (2) of the 2009 regulations. The petitioner in its rejoinder has submitted that the projected additional capital expenditure may be dealt in accordance with the Regulation 9 (2) (v) of the 2009 regulations.
- 14. In regard to admissibility of undischarged liabilities, it is observed that the expenditure pertains to balance and retention payments and has been incurred after the cut-off date. We have decided in our order dated 8.2.2010 in Petition No. 176/2010 to relax Regulation 9 (2) to admit the expenditure

incurred after the cut-off date, particularly, relating to balance and retention payments. Accordingly, an amount of ₹ 41.73 lakh and ₹ 20.00 lakh has been allowed to be capitalized during 2009-10 and 2010-11.

TOTAL CAPITAL COST

15. 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 on works as claimed by the petitioner:

(₹ in lakh)

Approved	Admitted	Projected	Projected	Total estimated
cost	capital cost	capital	capital	capital
	as on	expenditure	expenditure to	expenditure
	31.3.2009	incurred during	be incurred	
		2009-10	during 2010-11	
4646.00	4250.93	41.73	20.00	4312.66

DEBT- EQUITY RATIO

- 16. Clause (2) of Regulation 12 of the 2009 regulations *inter alia* provides that,-
 - "(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."
- 17. The petitioner has claimed tariff based on debt-equity ratio of 70.25:29.75 as admitted on 31.3.2009 vide order dated 2.7.2010 in Petition 318/2009. The petitioner has further claimed the amount of additional capital expenditure in the debt-equity ratio of 70:30 for the year 2009-10 and 2010-11.

For the purpose of tariff, equity considered for the transmission asset is as under:

(₹ in lakh)

Equity	Notional equity due	Average	Notional equity due	Average	Equity for	Average
as on	to additional capital	equity	to additional capital	equity for	the	equity for
1.4.2009	expenditure for the	for 2009-	expenditure for the	2010-11	period	2011-14
	period 2009-10	10	period 2010-11		2011-14	
1264.54	12.52	1270.80	6.00	1280.06	1283.06	1283.06

RETURN ON EQUITY

- 18. 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."

- 19. BSEB has submitted that the date of commercial operation of the asset in question is 1.10.2005 and is within the period to claim tax holiday under Section 80 IA of the Income Tax Act, 1961. The petitioner may be asked to submit the entire information regarding tax holiday period to the respondents and the Commission to arrive at an actual tax rate applicable. In response, the petitioner has submitted that the benefit of tax holiday under Section 80 IA of the Income Tax Act, 1961 would be eligible to be passed on to the beneficiaries only when actual reimbursement of income tax under post-tax system of ROE as was applicable for the period 2004-09, is allowed by the Commission. It is clarified that that the issue in regard to tax holiday is under consideration and the decision as and when taken will be applicable to this transmission asset also.
- 20. The Commission vide its order dated 3.8.2010 in Petition No. 17/2010 has already taken a decision to amend the 2009 regulations for allowing grossing up of the base rate of return with the applicable tax rate as per the Finance Act for the relevant year and for direct settlement of tax holidays of 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. Accordingly, the return on equity has

been computed as per the existing provision of Regulation 15 (3) of 2009 regulation as under:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Equity as on 1.4.2009	1264.54	1277.06	1283.06	1283.06	1283.06
Addition due to Additional	12.52	6.00	0.00	0.00	0.00
Capitalisation					
Closing Equity	1277.06	1283.06	1283.06	1283.06	1283.06
Average Equity	1270.80	1280.06	1283.06	1283.06	1283.06
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)	222.15	223.77	224.29	224.29	224.29

INTEREST ON LOAN

- 21. Regulation 16 of the 2009 regulations provides that,-
 - "16. (1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.
 - (2) The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.
 - (3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year:
 - (4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed,.
 - (5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project:

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

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

- (6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.
- (7) The generating company or the transmission licensee, as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings shall be shared between the beneficiaries and the generating company or the transmission licensee, as the case may be, in the ratio of 2:1.
- (8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.
- (9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute:

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

- 22. BSEB has questioned the interest rate adopted by the petitioner for the computation of tariff as the same has been described as the State Bank of India Advance Rate (SBAR) whereas Regulation 18(3) of the 2009 regulations mandates that the short term price landing rate of SBI shall be the interest rate for computations of interest on working capital. In response, the petitioner has submitted that the SBAR of 12.25% per annum indicated in the petition is short term price lending rate of SBI as on 1.4.2009.
- 23. The interest on loan has been worked out as detailed below:
 - (i) Details of net outstanding loan as on 31.3.2009, cumulative repayment up to 31.3.2009, repayment schedule for the loans,

rate of interest etc. have been taken from the order dated 2.7.2010 in Petition No. 318/2009 for working out weighted average rate of interest;

- (ii) Tariff has been worked out considering normative loan and normative repayments. Depreciation allowed have been taken as normative repayment for the tariff period 2009-14; and
- (iii) Weighted average rate of interest on actual loan has been worked out as per above and applied on the average loan during the year to arrive at the interest on loan.
- 24. The detailed calculations in support of the weighted revised average rate of interest are contained in <u>Annexure</u> attached to this order. Based on the above, the year-wise details of interest worked out are given hereunder:

Details of loan	Up to 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	2986.39	2986.39	3015.61	3029.61	3029.61	3029.61
Cumulative Repayment up to		447.42	660.37	874.75	1089.46	1304.17
Previous Year						
Net Loan-Opening		2538.97	2355.24	2154.86	1940.14	1725.43
Addition due to Additional		29.21	14.00	0.00	0.00	0.00
Capitalisation						
Repayment during the year		212.94	214.38	214.71	214.71	214.71
Net Loan-Closing		2355.24	2154.86	1940.14	1725.43	1510.72
Average Loan		2447.11	2255.05	2047.50	1832.79	1618.07
Weighted Average Rate of Interest		7.5022%	7.5440%	7.5812%	7.6098%	7.6444%
on Loan						
Interest		183.59	170.12	155.22	139.47	123.69

DEPRECIATION

- 25. 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."

26. The depreciation has been worked out on the admitted capital cost of ₹4250.93 lakh as on 31.3.2009. Accordingly depreciation works out as under:

(₹in lakh)

Details of Depreciation		Up to 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Gross block as per last order		4250.93	4250.93	4292.66	4312.66	4312.66	4312.66
Addition during 2009-14 due to projected Additional Capitalisation			41.73	20.00	0.00	0.00	0.00
Gross block as on 31.3.2009			4292.66	4312.66	4312.66	4312.66	4312.66
Average gross block			4271.80	4302.66	4312.66	4312.66	4312.66
Rate of Depreciation			4.9849%	4.9825%	4.9787%	4.9787%	4.9787%
Depreciable Value	90%		3766.76	3794.54	3803.54	3803.54	3803.54
Remaining Depreciable Value			3319.33	3134.17	2928.79	2714.07	2499.36
Depreciation			212.94	214.38	214.71	214.71	214.71

OPERATION & MAINTENANCE EXPENSES

27. In accordance with clause (g) of Regulation 19 the 2009 regulations, the following norms for 132 kV D/C Single conductor transmission line and 132 kV and below bays are prescribed for O & M expenses:

	Year				
	2009-10	2010-11	2011-12	2012-13	2013-14
132 kV D/C, single conductor, transmission line (₹ lakh per km.)	0.629	0.284	0.301	0.318	0.336
132 kV and below (₹ in lakh/bay)	26.20	27.70	29.28	30.96	32.73

28. The petitioner has claimed O & M expenses for 52.3 ckt/km. and 12 bays. Accordingly, the petitioner's entitlement to O & M expenses has been worked out as given hereunder:

	Year					
	2009-10	2010-11	2011-12	2012-13	2013-14	
O&M expenses for 132 kV S/C, single conductor, transmission line (52.3 ckt km.)	14.07	14.85	15.74	16.63	17.57	
O&M expenses for 132 kV and below (12 bays)	314.40	332.40	351.36	371.52	392.76	
Total	328.47	347.25	367.10	388.15	410.33	

29. BSEB has submitted that further increase in the employee cost, if any wage revision must be taken care by improvement in their due to productivity level by the petitioner company so that the beneficiaries are not unduly burdened over and above the provisions of the 2009 regulations. In response the petitioner has submitted that after arriving at 2009-10 price level, the Commission has considered 50% in the wage hike so as to stipulate the norms for 2009-10. The petitioner has submitted that the total impact of pay revision would be more as compared to the compensation provided in the rates. The petitioner has further submitted that it would approach O & M the Commission for suitable revision in the norms of O & M expense 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

- 30. 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 of the 2009 regulations. 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 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.

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

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	49.27	52.09	55.07	58.22	61.55
O & M expenses	27.37	28.94	30.59	32.35	34.19
Receivables	162.75	164.26	165.35	166.35	167.55
Total	239.39	245.29	251.00	256.92	263.29
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	29.33	30.05	30.75	31.47	32.25

TRANSMISSION CHARGES

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

(₹ in lakh)

	(**************************************				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	212.94	214.38	214.71	214.71	214.71
Interest on Loan	183.59	170.12	155.22	139.47	123.69
Return on Equity	222.15	223.77	224.29	224.29	224.29
Interest on Working Capital	29.33	30.05	30.75	31.47	32.25
O & M Expenses	328.47	347.25	367.10	388.15	410.33
Total	976.47	985.57	992.08	998.10	1005.28

Application fee and the publication expenses

33. The petitioner has sought approval for the reimbursement of fee paid by it for filing the petition. BSEB has submitted that the filing fee should be allowed in view of the Hon`ble Commission`s 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 may be

allowed in the discretion of the Commission. In accordance with our decision regarding reimbursement of filing fee during 2009-14 in order dated 11.9.2008 in Petition No. 109/2009, the petitioner shall be entitled to recover the filing fee from the beneficiaries on *pro rata* basis. The petitioner shall also entitled to recover the expenses on publication of notices from the beneficiaries on *pro rata* basis.

Service Tax

34. The petitioner has prayed to be allowed to bill and recover the service tax on transmission charges if the petitioner is subjected to service tax. The prayer of the petitioner is premature and is accordingly rejected.

Licence fee

35. BSEB has submitted that the licence fee is part of the O & M expenses. Since no separate provisions are contained in the 2009 regulations, the request of the petitioner for allowing the licence fee to be recovered separately from the respondents should be rejected. In response, the petitioner has submitted that the licence fee which was introduced since 27.10.2008 only has not been captured in O & M norms. Licence fee being an extra burden on the petitioner and needs to be reimbursed. In this regard it is clarified that matter is under consideration of the Commission and the decision as and when taken will be applicable in case of the present petition.

- 36. 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.
- 37. This order disposes of Petition No. 264/2010.

Sd/- Sd/- Sd/
(M.Deena Dayalan) (V.S.Verma) (Dr. Pramod Deo)

Member Member Chairperson

Annexure

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-XII					
	Gross loan opening	9.00	9.00	9.00	9.00	9.00
	Cumulative Repayment up to	3.00	3.75	4.50	5.25	6.00
	the date of commercial					
	operation /previous year					
	Net Loan-Opening	6.00	5.25	4.50	3.75	3.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.75	0.75	0.75	0.75	0.75
	Net Loan-Closing	5.25	4.50	3.75	3.00	2.25
	Average Loan	5.63	4.88	4.13	3.38	2.63
	Rate of Interest	9.70%	9.70%	9.70%	9.70%	9.70%
	Interest	0.55	0.47	0.40	0.33	0.25
	Rep Schedule		12 Annual ir	nstalments fro	m 28.3.2006	
2	Bond-XIII Option-I					
	Gross loan opening	15.00	15.00	15.00	15.00	15.00
	Cumulative Repayment up to	3.75	5.00	6.25	7.50	8.75
	the date of commercial					
	operation /previous year					
	Net Loan-Opening	11.25	10.00	8.75	7.50	6.25
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	1.25	1.25	1.25	1.25	1.25
	Net Loan-Closing	10.00	8.75	7.50	6.25	5.00
	Average Loan	10.63	9.38	8.13	6.88	5.63
	Rate of Interest	8.63%	8.63%	8.63%	8.63%	8.63%
	Interest	0.92	0.81	0.70	0.59	0.49
	Rep Schedule	12 Annual instalments from 31.7.2006				
3	Bond-XV					
	Gross loan opening	920.00	920.00	920.00	920.00	920.00
	Cumulative Repayment up to	153.33	230.00	306.67	383.33	460.00
	the date of commercial					
	operation /previous year					
	Net Loan-Opening	766.67	690.00	613.33	536.67	460.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	76.67	76.67	76.67	76.67	76.67
	Net Loan-Closing	690.00	613.33	536.67	460.00	383.33
	Average Loan	728.33	651.67	575.00	498.33	421.67
	Rate of Interest	6.68%	6.68%	6.68%	6.68%	6.68%
	Interest	48.65	43.53	38.41	33.29	28.17
	Rep Schedule	12 Annual instalments from 23-2-2008				
4	Bond- XVI					
	Gross loan opening	1053.00	1053.00	1053.00	1053.00	1053.00
	Cumulative Repayment up to	105.30	210.60	315.90	421.20	526.50
	the date of commercial					
	operation /previous year					
	Net Loan-Opening	947.70	842.40	737.10	631.80	526.50

ĺ	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	105.30	105.30	105.30	105.30	105.30
	Net Loan-Closing	842.40	737.10	631.80	526.50	421.20
	Average Loan	895.05	789.75	684.45	579.15	473.85
	Rate of Interest	7.10%	7.10%	7.10%	7.10%	7.10%
	Interest	63.55	56.07	48.60	41.12	33.64
	Rep Schedule 10 Annual instalments from 18-2-2009					
5	Bond- XVII					
	Gross loan opening	350.00	350.00	350.00	350.00	350.00
	Cumulative Repayment up to	0.00	35.00	70.00	105.00	140.00
	the date of commercial					
	operation /previous year					
	Net Loan-Opening	350.00	315.00	280.00	245.00	210.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	35.00	35.00	35.00	35.00	35.00
	Net Loan-Closing	315.00	280.00	245.00	210.00	175.00
	Average Loan	332.50	297.50	262.50	227.50	192.50
	Rate of Interest	7.39%	7.39%	7.39%	7.39%	7.39%
	Interest	24.57	21.99	19.40	16.81	14.23
	Rep Schedule		10 Annual In	stalments fro	m 22.9.2009	
6	Bond- XVIII					
	Gross loan opening	150.00	150.00	150.00	150.00	150.00
	Cumulative Repayment up to	0.00	12.50	25.00	37.50	50.00
	the date of commercial					
	operation /previous year	150.00	107.50	105.00	110 50	100.00
	Net Loan-Opening	150.00	137.50	125.00	112.50	100.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	12.50	12.50	12.50	12.50	12.50
	Net Loan-Closing	137.50 143.75	125.00	112.50 118.75	100.00 106.25	87.50
	Average Loan Rate of Interest	8.15%	131.25 8.15%	8.15%	8.15%	93.75
	Interest					7.64
		11.72 10.70 9.68 8.66				7.04
7	Rep Schedule Bond-XIX	12 annual matalments nom 9.3.2010				
	Gross loan opening	6.00	6.00	6.00	6.00	6.00
	Cumulative Repayment up to	0.00	0.00	0.50	1.00	1.50
	the date of commercial	0.00	0.00	0.50	1.00	1.50
	operation /previous year					
	Net Loan-Opening	6.00	6.00	5.50	5.00	4.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.50	0.50	0.50	0.50
	Net Loan-Closing	6.00	5.50	5.00	4.50	4.00
	Average Loan	6.00	5.75	5.25	4.75	4.25
	Rate of Interest	9.25%	9.25%	9.25%	9.25%	9.25%
	Interest	0.56	0.53	0.49	0.44	0.39
	Rep Schedule		12 annual ina			
8	Bond-XXVII					
-	Gross loan opening	359.75	359.75	359.75	359.75	359.75
	Cumulative Repayment up to	0.00	0.00	0.00	29.98	59.96
	the date of commercial					
	operation /previous year	1				

ĺ	Net Loan-Opening	359.75	359.75	359.75	329.77	299.79
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	29.98	29.98	29.98
	Net Loan-Closing	359.75	359.75	329.77	299.79	269.81
	Average Loan	359.75	359.75	344.76	314.78	284.80
	Rate of Interest	9.47%	9.47%	9.47%	9.47%	9.47%
	Interest	34.07	34.07	32.65	29.81	26.97
	Rep Schedule	34.07		atalments fro		20.77
9	Bond-XXVIII					
	Gross loan opening	81.00	81.00	81.00	81.00	81.00
	Cumulative Repayment up to	0.00	0.00	0.00	0.00	6.75
	the date of commercial	0.00	0.00	0.00	0.00	0.70
	operation /previous year					
	Net Loan-Opening	81.00	81.00	81.00	81.00	74.25
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	6.75	6.75
	Net Loan-Closing	81.00	81.00	81.00	74.25	67.50
	Average Loan	81.00	81.00	81.00	77.63	70.88
	Rate of Interest	9.33%	9.33%	9.33%	9.33%	9.33%
	Interest	7.56	7.56	7.56	7.24	6.61
	Rep Schedule	12 Annual Instalments from 15.12.2012				
10	Bond-XXVII					
	Gross loan opening	6.25	6.25	6.25	6.25	6.25
	Cumulative Repayment up to	0.00	0.00	0.00	0.52	1.04
	the date of commercial					
	operation /previous year					
	Net Loan-Opening	6.25	6.25	6.25	5.73	5.21
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.52	0.52	0.52
	Net Loan-Closing	6.25	6.25	5.73	5.21	4.69
	Average Loan	6.25	6.25	5.99	5.47	4.95
	Rate of Interest	9.47%	9.47%	9.47%	9.47%	9.47%
	Interest	0.59	0.59	0.57	0.52	0.47
	Rep Schedule	12 Annual Instalments from 31.03.2012				
	Total Loan					
	Gross loan opening	2950.00	2950.00	2950.00	2950.00	2950.00
	Cumulative Repayment up to	265.38	496.85	728.82	991.28	1260.50
	the date of commercial					
	operation /previous year					
	Net Loan-Opening	2684.62	2453.15	2221.18	1958.72	1689.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	231.47	231.97	262.47	269.22	269.22
	Net Loan-Closing	2453.15	2221.18	1958.72	1689.50	1420.28
	Average Loan	2568.88	2337.17	2089.95	1824.11	1554.89
	Rate of Interest	7.5022%	7.5440%	7.5812%	7.6098%	7.6444%
	Interest	192.72	176.32	158.44	138.81	118.86