

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No.267/2010

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: 29.4.2011

In the matter of

Determination of transmission tariff for Barh-Balia 400 k V D/C (Quad) line under Transmission System associated with Barh Generation Project (3x660 MW) 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. Rajasthan Rajya Vidyut Prasaran Nigam Limited, Jaipur
2. Ajmer Vidyut Vitaran Nigam Ltd., Jaipur
3. Jaipur Vidyut Vitaran Nigam Ltd, Jaipur
4. Jodhpur Vidyut Vitaran Nigam Ltd, Jaipur
5. Himachal Pradesh State Electricity Board, Shimla
6. Punjab State Electricity Board, Patiala
7. Haryana Power Purchase Centre, Panchkula
8. Power Development Department, Govt. of J&K, Jammu
9. Uttar Pradesh Power Corporation Ltd, Lucknow
10. Delhi Transco Ltd, New Delhi
11. BSES Yamuna Power Limited, New Delhi
12. BSES Rajdhani Power Ltd., New Delhi
13. North Delhi Power Ltd., New Delhi
14. Chandigarh Administration, Chandigarh
15. Uttarakhand Power Corporation Ltd, Dehradun
16. North Central Railway, Allahabad
17. New Delhi Municipal Council, New Delhi **.....Respondents**

The following were present:

1. Shri Rajiv Gupta, PGCIL
2. Shri M.M. Mondal, PGCIL
3. Shri R.Prasad, PGCIL
4. Shri T.P.S.Bawa, HPCC



ORDER

The petition has been filed for approval of tariff in respect Barh-Balia 400 kV D/C (Quad) line (hereinafter referred to as 'the transmission asset') under Transmission System (hereinafter referred to as 'the transmission system') associated with Barh Generation Project (3x660 MW) in Eastern 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 incurred during 2009-10 to 2011-12. The petitioner has made the following additional prayers:-

- (a) 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;
- (b) To approve reimbursement of petition filing fee and publication of notices in the newspaper as per the 2009 regulations and other expenditure, if any in relation to the filing of the petition;
- (c) Allow to bill and recover the service tax on transmission charges separately from the respondents, if at any time exemption from service tax is withdrawn and transmission is notified as a taxable service;



(d) 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 the period 2009-14, if any from the respondents; and

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

2. The investment approval of the transmission system was accorded by the Ministry of Power under letter dated 12.12.2005 at an estimated cost ₹3779.45 lakh, including IDC of ₹179.41 lakh based on 2nd quarter 2005 price level. The transmission asset was declared under commercial operation with effect from 1.7.2010.

3. The details of apportioned approved cost, capital cost as on the date of commercial operation and projected additional capital expenditure for the transmission asset as submitted by the petitioner are as under:

(₹ in lakh)

Apportioned approved cost	Actual cost incurred as (1.7.2010) on the date of commercial operation	Projected Additional capital expenditure		Total estimated completion cost
		Date of commercial operation to 31.3.2011	2011-12	
41444.30	69801.16*	605.74	325.24	70732.14

*Capital cost as on the date of commercial operation is inclusive of initial spares of ₹ 407.86 lakh which is within the ceiling limit as specified in Regulation 8 of the 2009 regulations.

4. The petitioner has claimed the transmission charges as under:

(₹ in lakh)

	2010-11	2011-12	2012-13	2013-14
Depreciation	2776.12	3726.07	3734.66	3734.66
Interest on Loan	3376.62	4182.25	3837.38	3481.78
Return on Equity	2757.40	3700.95	3709.47	3709.47
Interest on Working Capital	190.63	249.73	244.20	238.17
O & M Expenses	264.01	372.18	393.44	415.81
Total	9364.78	12231.18	11919.15	11579.89

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

(₹ in lakh)

	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	52.80	55.83	59.02	62.37
O & M expenses	29.33	31.02	32.79	34.65
Receivables	2081.06	2038.53	1986.53	1929.98
Total	2163.19	2125.38	2078.34	2027.00
Rate of Interest	11.75%	11.75%	11.75%	11.75%
Interest on Working Capital	190.63	249.73	244.20	238.17

6. No comments or suggestions have been received from the general public in response to the public notice published by the petitioner on 19/21.9.2010 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. No reply has been filed by the respondents.

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) (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) 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 petitioner has claimed the tariff after accounting for additional capital expenditure as under:

(₹ in lakh)

Actual cost incurred as (1.7.2010) on the date of commercial operation	Projected Additional capital expenditure		Total estimated completion cost
	Date of commercial operation to 31.3.2011	2011-12	
69801.16	605.74	325.24	70732.14

Time over-run

9. As per the investment approval, the transmission asset was to be commissioned by October 2009. However, the transmission asset was declared under commercial operation 1.7.2010 and therefore, there is a time over-run of 9 months. The petitioner has, submitted that the work suffered for about 40 months due to reasons beyond its control, as explained in the petition and the cumulative delay in commissioning of

the project on account of those reasons was reduced to about nine months. The petitioner has elaborated the reasons for time over-run as under:

- (a) Delay occurred in 2 nos multi-ckt towers and stringing of 2 km route length, due to shifting of 33 kV feeders near NTPC. This process was completed within 25 months i.e. from February 2008 to March 2010. After shifting the feeders in the month of March 2010, the line was completed within three months i.e. in the month of June 2010;
- (b) The construction was affected during the month of January to March 2008 due to shifting of CISF Baracks which falls at towers No. MB-2/0;
- (c) Delay also occurred due to not providing power and tariff block by Railway authority as per the schedule. This issue was taken up with Railway authority in the month of March, 2007 and finally block was granted at the end of month of February, 2010 and on this account the construction work was suffered for amount 28 months ;and
- (d) The construction was adversely affected for about five months due to hindrances by house owners.

10. The petitioner vide its affidavit dated 7.1.2011 has further explained the reasons for time over-run as under:

(a) As per the joint agreement by NTPC and Power Grid, 13 multi circuit towers (9 C type towers and 4 D type towers) were used and in order to avoid the construction, the extension up to + 9 mtr was used to maintain sufficient ground clearance inside the Barh NTPC project;

(b) Against Feasibility Report (FR) quantity of 147 nos of angle towers, altogether 189 nos. of angle towers are used in the line out of which 13 nos of multi-circuit towers are due to above corridor constraints;

(c) Due to constraints, against FR provision of 14457 MT of towers parts, 19933.61 MT of towers parts were used in line, out of which 2779.54 MT was on account of multi circuit towers. Also, there has been considerable increase in erection and foundation costs due to multi circuit tower and higher type of classification of foundation of the transmission asset. In addition to this, additional expenditure of ₹ 386.59 lakh for laying Optical Ground Wire (OPGW) in place of 1 earth wire and ₹ 60 lakh for construction of store at Patna was incurred;

(d) The crossing and corridor constraints caused due to construction of Kahalgaon-Patna-Balia, Biharshariff-Kahalgaon line and NTPC Barh project were not known during project conceptualization.

The petitioner however, initiated action well in advance when faced with such constraint to reduce time over-run as far as practicable.

11. On perusal of documents placed on record, it is noted that the corridor constraints were existing till the month of March 2010 and the transmission asset was completed in the month of June 2010 i.e. within 3 months of the clearance. In the light of the reasons submitted by the petitioner, we are satisfied that the delay is on account of reasons beyond the control of the petitioner. The time over-run therefore, deserves to be and is accordingly condoned .

Cost variation

12. It can be seen that the estimated completion cost including the projected additional capital expenditure during 2009-14 is ₹ 70732.14 lakh against the approved apportioned ₹ 41444.30 lakh which implies that there is cost variation of ₹ 29287.84 lakh. The petitioner has attributed the cost variation mainly to construction of multi-circuit towers near NTPC Barh station and use of more number of angle towers due to corridor constraints. In this connection, petitioner has explained the reasons for cost variation as under:

- (a) The Feasibility Report route length of transmission asset is 195 km, whereas in actual, the route length is 243.116 km. i.e the route length of the transmission asset has increased by 48.116 km and same was increased at the time of survey of the Barh-Balia

transmission line. It has been submitted that at the time of construction of transmission asset, Kahalgaon-Patna-Balia as well as Baila Biharshariff-Kahalgaon transmission lines were constructed. Due to above crossing and corridor constraints, route length of transmission line was increased and thereby the cost of the project has gone up;

(b) Though there has been time-over-run in completion of the project, neither any compensation nor price escalation beyond contract schedule has been allowed against the project, as such there is no price increase on this account for the period of time over-run.

(c) Since in the transmission line model for the bench-marking, the indices are available till the Month of June 2010 only and the model does not make any provision for multi-ckt towers and the subject line in question was commissioned in the month of July, 2010, as well as it has multi-ckt towers and as per model exact bench marking could not be carried out for the entire transmission line exactly as per model. However, the capital cost of the transmission asset ₹ lakh/ckt.km excluding multi-ckt portion i.e. only for 400 kV portion is the same as given in data base for bench marking model.

13. It is noted that the petitioner has claimed the capital cost of ₹ 69801.16 lakh as on the date of commercial operation for the purpose

of tariff. However, the capital cost as on the date of commercial operation exceeds the apportioned approved capital cost. The petitioner vide its affidavit dated 14.2.2010 has submitted that the approval of revised cost estimate of the transmission asset is under advance stage. In the absence of revised cost estimate, we have restricted the capital cost to apportioned approved capital cost of ₹ 41444.30 lakh.

14. The petitioner has further submitted that it would approach the Commission for suitable revision of tariff after approval of revised cost estimate. Needless to add that any such application and when, will be dealt with in accordance with law.

ADDITIONAL CAPITAL EXPENDITURE

15. 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.

16. 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.

17. As per the above, the cut-off date of the transmission asset is 31.3.2013. The additional expenditure claimed for the transmission assets have been or are proposed to be incurred within the cut-off date.

18. The petitioner has submitted the following details in support of its claim for projected additional capital expenditure for the transmission assets:

Years	Nature and details of expenditure	Amount (₹ in lakh)
2010-11	Transmission line- Final Retention payments	605.74
2011-12	Transmission line- Final Retention payments	325.24

19. It is seen that capital cost claimed by the petitioner for the purpose of tariff exceeds the apportioned approved cost as on the date of commercial operation. Therefore, the above projected additional capital expenditures is not being considered at this stage. The petitioner is granted to liberty to approach the Commission for approval of additional capital expenditure in accordance with law.

TOTAL CAPITAL COST

20. Based on the above, apportioned approved cost amounting to ₹ 41444.30 lakh has been considered for the purpose of computation of tariff in respect of the transmission asset.

DEBT- EQUITY RATIO

21. 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.”

22. 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 2010-11 to 2011-12. Since the projected additional capital expenditure for retention and balance payments has not been allowed in the absence of the revised cost estimate, application of debt-equity ratio for the additional capital expenditure does not arise. However, debt-equity ratio of 70:30 has been considered for the calculation of tariff as on the date of commercial operation.

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 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."

24. The petitioner has requested 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 with the long-term transmission customers on year to year basis.

25. 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 up of the grossing up of base rate of with applicable tax rate as per the Finance Act for the relevant year and for direct settlement of tax liability of

between the generating company/transmissions 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. For the present, return on equity has been computed as per the existing provisions of Regulation 15 (3) of the 2009 regulations as under:

(₹ in lakh)					
Details of Return on equity	As on 1.7.2010	2010-11	2011-12	2012-13	2013-14
Opening Equity	12433.29	12433.29	12433.29	12433.29	12433.29
Addition due to Additional Capitalisation		0.00	0.00	0.00	0.00
Closing Equity		12433.29	12433.29	12433.29	12433.29
Average Equity		12433.29	12433.29	12433.29	12433.29
Return on Equity (Base Rate)		15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)		11.33%	11.33%	11.33%	11.33%
Rate of Return on Equity (Pre Tax)		17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)		1630.10	2173.46	2173.46	2173.46

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:

(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) The repayment for the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that purpose;

(iii) Weighted average rate of interest on actual average loan has been worked out as per (i) above and applied on the notional average loan during the year to arrive at the interest on loan; and

(iv) The interest on loan has been calculated on the basis of rate prevailing as on the date of commercial operation. Any change in rate of interest subsequent to the date of commercial operation will be considered at the time of truing up.

28. The detailed calculations in support of the weighted revised average rate of interest for transmission asset are contained in Annexure attached to this order. Based on the above, interest on loan has been worked out as under:

(₹ in lakh)

Details of loan	As on 1.7.2010	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	29011.01	29011.01	29011.01	29011.01	29011.01
Cumulative Repayment up to Previous Year		0.00	1641.19	3829.45	6017.71
Net Loan-Opening		29011.01	27369.82	25181.56	22993.30
Addition due to Additional Capitalisation		0.00	0.00	0.00	0.00
Repayment during the year		1641.19	2188.26	2188.26	2188.26
Net Loan-Closing		27369.82	25181.56	22993.30	20805.04
Average Loan		28190.41	26275.69	24087.43	21899.17
Weighted Average Rate of Interest on Loan		9.4416%	9.3439%	9.3270%	9.3076%
Interest		1996.21	2455.18	2246.64	2038.28

DEPRECIATION

29. 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.

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(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 asset was declared under commercial operation on 1.7.2010 and accordingly, it will complete 12 years beyond 2013-14 and thus, depreciation has been calculated annually based on Straight Line

Method and at rates specified in Appendix-III of the 2009 regulations.

Accordingly, depreciation has been worked out as under:

(₹ in lakh)

Details of depreciation	As on 1.7.2010	2010-11	2011-12	2012-13	2013-14
Opening gross block	41444.30	41444.30	41444.30	41444.30	41444.30
Addition during 2009-14 due to projected Additional Capitalisation		0.00	0.00	0.00	0.00
Closing gross block		41444.30	41444.30	41444.30	41444.30
Average Gross Block		41444.30	41444.30	41444.30	41444.30
Rate of Depreciation		5.2800%	5.2800%	5.2800%	5.2800%
Depreciable Value	90%	37299.87	37299.87	37299.87	37299.87
Remaining Depreciable Value		37299.87	35658.68	33470.42	31282.16
Depreciation		1641.19	2188.26	2188.26	2188.26

OPERATION & MAINTENANCE EXPENSES

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

	Year				
	2009-10	2010-11	2011-12	2012-13	2013-14
400 kV D/C, quad conductor transmission line (₹ in lakh/per ckt.km.)	0.924	0.994	1.051	1.111	1.174
400 kV bays (₹ in lakh/per bay)	52.40	55.40	58.57	61.92	65.46

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

(₹ in lakh)

	Year				
	2009-10	2010-11	2011-12	2012-13	2013-14
400 kV D/C, quad conductor transmission line 242.664 ckt.km (238.918+3.746 km)	-	180.91	255.04	269.60	284.89
440 kV bays (2 bays)	-	83.10	117.14	123.84	130.92
Total	-	264.01	372.18	393.44	415.81

33. The petitioner vide its affidavit dated 14.2.2011 has submitted that in this petition, the O & M charges corresponding to transmission asset and

two bays at Balia sub-station has been included but cost of these two nos. 400 kV bays at Balia sub-station was inadvertently not captured. The petitioner has further submitted that the revised cost estimate for the transmission asset is under advanced stage of approval. The petitioner has requested to allow to include cost of two nos 400 kV bays at Balia at the time of revised cost estimate and allow the O & M charges for these bays as claimed in this petition. In this regard, it is clarified that approved cost has been allowed for the purpose of tariff in the absence of revised cost estimate and any such application is made in future in this regard, it will be dealt with in accordance with law.

34. The petitioner has submitted that it would approach 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%. 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

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 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 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 @ 11.75% based on SBI PLR as on 1.4.2010 for both the assets, which is in accordance with the 2009 regulations and has been allowed.

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

(₹ in lakh)				
	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	52.80	55.83	59.02	62.37
O & M expenses	29.33	31.02	32.79	34.65
Receivables	1255.42	1223.85	1192.11	1160.60
Total	1337.56	1310.69	1283.91	1257.62
Rate of Interest	11.75%	11.75%	11.75%	11.75%
Interest	117.87	154.01	150.86	147.77

TRANSMISSION CHARGES

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

(₹ in lakh)				
	2010-11	2011-12	2012-13	2013-14
Depreciation	1641.19	2188.26	2188.26	2188.26
Interest on Loan	1996.21	2455.18	2246.64	2038.28
Return on Equity	1630.10	2173.46	2173.46	2173.46
Interest on Working Capital	117.87	154.01	150.86	147.77
O & M Expenses	264.01	372.18	393.44	415.81
Total	5649.39	7343.09	7152.66	6963.59

Application fee and the publication expenses

38. The petitioner has sought approval for the reimbursement of fee paid by it for filing the petition. In accordance with our decision in order dated 11.1.2010 in Petition No. 109/2009, the petitioner shall be entitled to recover the filing fee from the beneficiaries on *pro rata* basis. The petitioner shall also be entitled for reimbursement of expenses in connection with publication of notices from the beneficiaries on *pro rata* basis.

Licence fee

39. The petitioner has prayed to allow reimbursement of licence fee separately from the respondents. 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.

Service Tax

40. The petitioner has prayed to be allowed to bill and recover the service tax on transmission charges if at any time exemption from service tax is withdrawn and transmission is notified as a taxable service. The prayer of the petitioner is premature at this stage and is accordingly rejected. The petitioner is at liberty to approach the Commission as per the provisions of law as and when such a contingency arises.

41. 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.

42. This order disposes of Petition No. 267/2010.

Sd/-
(M.DEENA DAYALAN)
MEMBER

sd/-
(V.S.VERMA)
MEMBER

sd/-
(S.JAYARAMAN)
MEMBER

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

**ANNXURE
(₹ in lakh)**

	Details of Loan	2010-11	2011-12	2012-13	2013-14
1	Bond XXII				
	Gross loan opening	458.00	458.00	458.00	458.00
	Cumulative Repayment upto DOCO/previous year	0.00	38.17	76.33	114.50
	Net Loan-Opening	458.00	419.83	381.67	343.50
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	38.17	38.17	38.17	38.17
	Net Loan-Closing	419.83	381.67	343.50	305.33
	Average Loan	438.92	400.75	362.58	324.42
	Rate of Interest	8.68%	8.68%	8.68%	8.68%
	Interest	38.10	34.79	31.47	28.16
	Rep Schedule	12 Equal Annual Installments from 7.12.2010			
2	Bond XXVI				
	Gross loan opening	20927.00	20927.00	20927.00	20927.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	1743.92	3487.83
	Net Loan-Opening	20927.00	20927.00	19183.08	17439.17
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	1743.92	1743.92	1743.92
	Net Loan-Closing	20927.00	19183.08	17439.17	15695.25
	Average Loan	20927.00	20055.04	18311.13	16567.21
	Rate of Interest	9.30%	9.30%	9.30%	9.30%
	Interest	1946.21	1865.12	1702.93	1540.75
	Rep Schedule	12 Equal Annual Installments from 7.3.2012			
3	Bond XXXIII				
	Gross loan opening	0.00	10621.00	10621.00	10621.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	10621.00	10621.00	10621.00
	Additions during the year	10621.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	10621.00	10621.00	10621.00	10621.00
	Average Loan	5310.50	10621.00	10621.00	10621.00
	Rate of Interest	8.64%	8.64%	8.64%	8.64%
	Interest	458.83	917.65	917.65	917.65
	Rep Schedule	12 Equal Annual Installments from 19.7.2014			
4	Bond XXI				
	Gross loan opening	153.00	153.00	153.00	153.00
	Cumulative Repayment upto DOCO/previous year	0.00	12.75	25.50	38.25
	Net Loan-Opening	153.00	140.25	127.50	114.75
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	12.75	12.75	12.75	12.75
	Net Loan-Closing	140.25	127.50	114.75	102.00
	Average Loan	146.63	133.88	121.13	108.38



	Rate of Interest	8.73%	8.73%	8.73%	8.73%
	Interest	12.80	11.69	10.57	9.46
	Rep Schedule	12 Equal Annual Installments from 11.10.2010			
5	Bond XXV				
	Gross loan opening	10530.00	10530.00	10530.00	10530.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	877.50	1755.00
	Net Loan-Opening	10530.00	10530.00	9652.50	8775.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	877.50	877.50	877.50
	Net Loan-Closing	10530.00	9652.50	8775.00	7897.50
	Average Loan	10530.00	10091.25	9213.75	8336.25
	Rate of Interest	10.10%	10.10%	10.10%	10.10%
	Interest	1063.53	1019.22	930.59	841.96
	Rep Schedule	12 Equal Annual Installments from 12.6.2011			
6	Bond XIX				
	Gross loan opening	457.00	457.00	457.00	457.00
	Cumulative Repayment upto DOCO/previous year	0.00	38.08	76.17	114.25
	Net Loan-Opening	457.00	418.92	380.83	342.75
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	38.08	38.08	38.08	38.08
	Net Loan-Closing	418.92	380.83	342.75	304.67
	Average Loan	437.96	399.88	361.79	323.71
	Rate of Interest	9.25%	9.25%	9.25%	9.25%
	Interest	40.51	36.99	33.47	29.94
	Rep Schedule	12 Equal Annual Installments from 24.7.2010			
7	Bond XXIV				
	Gross loan opening	5463.00	5463.00	5463.00	5463.00
	Cumulative Repayment upto DOCO/previous year	0.00	455.25	910.50	1365.75
	Net Loan-Opening	5463.00	5007.75	4552.50	4097.25
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	455.25	455.25	455.25	455.25
	Net Loan-Closing	5007.75	4552.50	4097.25	3642.00
	Average Loan	5235.38	4780.13	4324.88	3869.63
	Rate of Interest	9.95%	9.95%	9.95%	9.95%
	Interest	520.92	475.62	430.33	385.03
	Rep Schedule	12 Equal Annual Installments from 26.3.2011			
8	IBRD III				
	Gross loan opening	251.42	251.42	251.42	251.42
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	12.23	25.00
	Net Loan-Opening	251.42	251.42	239.19	226.42
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	12.23	12.77	13.32
	Net Loan-Closing	251.42	239.19	226.42	213.10
	Average Loan	251.42	245.31	232.80	219.76
	Rate of Interest	2.07%	2.07%	2.07%	2.07%
	Interest	5.20	5.08	4.82	4.55
	Rep Schedule	30 half yearly Installments from 15.9.2011			



	Total Loan				
	Gross loan opening	38239.42	48860.42	48860.42	48860.42
	Cumulative Repayment upto DOCO/previous year	0.00	544.25	3722.15	6900.59
	Net Loan-Opening	38239.42	48316.17	45138.27	41959.84
	Additions during the year	10621.00	0.00	0.00	0.00
	Repayment during the year	544.25	3177.90	3178.44	3178.99
	Net Loan-Closing	48316.17	45138.27	41959.84	38780.85
	Average Loan	43277.80	46727.22	43549.05	40370.34
	Rate of Interest	9.4416%	9.3439%	9.3270%	9.3076%
	Interest	4086.10	4366.15	4061.83	3757.51