

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No.284/2010

Coram:

1. Dr. Pramod Deo, Chairperson
2. Shri V.S.Verma, Member
3. Shri M.Deena Dayalan, Member

DATE OF HEARING: 22.2.2011

DATE OF ORDER: 8.6.2011

In the matter of

Determination of transmission tariff for 400 kV D/C Raigarh-Raipur transmission line along with associated bays with East West transmission corridor in Western 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. Madhya Pradesh Power Trading Company Ltd., Jabalpur
2. Maharashtra State Electricity Distribution Co. Ltd., Mumbai
3. Gujarat Urja Vikas Nigam Ltd., Vadodara
4. Electricity Deptt., Govt. of Goa, Panaji
5. Electricity Department, Administration of Daman and Diu, Daman
6. Electricity Department, Administration of Dadra Nagar Haveli, Silvassa
7. Chhattisgarh State Electricity Board, Raipur
8. Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Ltd. Indore

Respondents

The following were present:

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

ORDER

The petition has been filed for approval of transmission tariff in respect of 400 kV D/C Raigarh-Raipur transmission line (hereinafter referred to as "the transmission asset") along with associated bays with East West transmission corridor in Western Region for the period 1.4.2009 to 31.3.2014, based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff)



Regulations, 2009 (hereinafter referred to as "the 2009 regulations") after accounting for additional capital expenditure on account of undischarged liabilities during 2010-11 and 2011-12. The petitioner has made the following additional prayers:-

- (a) Allow grossing up of base rate of return with the applicable tax as per the relevant Finance Acts and allow direct settlement of tax liability between the generating company/transmission licensee and the beneficiaries/long-term transmission customers on year to year basis;
- (b) Approve the reimbursement of petition filing fee and publication of notices in the newspaper as per the 2009 regulations;
- (c) Allow the petitioner 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the service tax on transmission charges separately from the respondents, if at any time exemption from Service tax is withdrawn and transmission of power is notified as a taxable service;
- (d) Allow the petitioner to bill and adjust impact on interest on loan due to change in interest rate on account of floating rate of interest applicable during 2009-14, if any from the respondents; and
- (e) Allow reimbursement of licence fee separately from the respondents.

2. The investment approval for the transmission asset was accorded by Government of India, Ministry of Power vide its letter No. 23.6.2006 at an estimated cost of ₹ 803.70 crore, which included IDC of ₹ 36.95 crore, based



on 4th quarter 2005 price level. East-West transmission corridor strengthening scheme has been agreed by all the constituents of Western Region during the 124th Western Regional Electricity Board meeting held on 9.7.2004 for inclusion in the existing BPTA dated 31.3.1999 of Western Region. The anticipated date of commercial operation of the transmission asset is 1.10.2010.

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

(₹ in lakh)

Apportioned approved Cost	Capital expenditure as on the anticipated date of the commercial operation	Projected additional capital expenditure during 2010-11	Projected additional capital expenditure during 2011-12	Total expenditure
24855.51	22387.85*	561.61	305.00	23254.46

*Capital cost as on the date of commercial operation is inclusive of initial spares of ₹ 178.85 lakh pertaining to sub-station.

4. The petitioner has claimed the transmission charges in respect of the transmission asset as under:

(₹ in lakh)

	2010-11 (Pro rata)	2011-12	2012-13	2013-14
Depreciation	597.04	1216.94	1224.99	1224.99
Interest on Loan	416.88	829.76	759.60	678.72
Return on Equity	594.38	1211.49	1219.49	1219.49
Interest on Working Capital	40.95	83.74	83.72	83.23
O & M Expenses	184.02	389.12	411.36	434.79
Total	1833.27	3731.05	3699.16	3641.22

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

(₹ in lakh)				
	2010-11 (Pro rata)	2011-12	2012-13	2013-14
Maintenance Spares	55.21	58.37	61.70	65.22
O & M expenses	30.67	32.43	34.28	36.23
Receivables	611.09	621.84	616.53	606.87
Total	696.97	712.64	712.51	708.32
Rate of Interest	11.75%	11.75%	11.75%	11.75%
Interest	40.95	83.74	83.72	83.23

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. No reply has been filed by the respondents.

CAPITAL COST

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

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

- (a) the expenditure incurred or projected to be incurred, including interest during the construction and financing 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 funds deployed, up to the date of commercial operation of the project, as admitted by the Commission, after prudence check;
- (b) capitalized initial spares subject to the ceiling rates specified in regulation 8;
- (c) additional capital expenditure determined under regulation 9:

Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost.”

8. The petitioner has claimed the tariff after accounting for projected additional capital expenditure incurred/to be incurred during the period 2010-11 and 2011-12 as under:

(₹ in lakh)

Apportioned approved Cost	Actual expenditure as on the date of the commercial operation	Projected additional capital expenditure during 2010-11	Projected additional capital expenditure during 2011-12	Total expenditure
24855.51	22387.85	561.61	305.00	23254.46

ADDITIONAL CAPITAL EXPENDITURE

9. 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.

10. Under the 2009 regulation, Regulation 3 (11) which deals with 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.

11. The details submitted by the petitioner in support of its claim for projected additional capital expenditure for the transmission asset is given hereunder:

Years	Nature and details of expenditure	Amount (₹ in lakh)
2010-11	Building and civil works- Final Retention payments (works has been completed but billed after the date of commercial operation)	0.70
	Transmission line- Final Retention payments (works has been completed but bills to be received)	450.23
	Sub-station- Final Retention payments (works has been completed but bills to be received)	110.68
2011-12	Transmission line- Final Retention payments	155.00
	Sub-station- Final Retention payments	150.00
	Total	866.61

12. The above additional capital expenditures are in the nature of undischarged liabilities and are projected to be capitalised within the cut-off date of the transmission asset which is up to 31.3.2013 as computed in terms of Regulation 3 (11) of the 2009 regulations. Therefore, the projected additional capital expenditure of ₹ 866.61 lakh incurred/proposed to be incurred during 2010-11 to 2011-12 are admissible under Regulation 9 (1) of the 2009 regulations and are accordingly allowed.

Time over-run

13. As per the investment approval, the transmission asset was to be commissioned by June 2009. However, the transmission asset was declared under commercial operation w.e.f 1.10.2010 (anticipated), and therefore, there is a time over-run of 15 months.

14. With regard to delay, the petitioner has submitted that some of the packages have been covered under the PSDP-IV loan of the World Bank and that the process of the obtaining the above loan was started with the proposal of loan assistance to Ministry of Power in the month of June, 2006. The proposal was forwarded to Ministry of Finance by Ministry of Power in the month of August, 2006. After lot of persuasion with Ministry of Power and Ministry of Finance, Ministry of Finance extended the guarantee for the loan and forwarded the proposal to the World Bank in the month of December 2007. Finally, the loan was signed in the month of March 2008. The petitioner has also submitted that tower package for the current asset was awarded on 22.8.2007 and in the absence of funding tie up, Power Grid was not able to issue Excise Duty Exemption Certificate (EDEC) to the contractor. The delay of issuance of EDEC has affected the supply of Stubs/Towers/Hardware and Line accessories which considerably affected the physical progress of the project and due to this reason there was delay of around eight months. The petitioner has further submitted that there was delay in getting approval from M/s CSPTCL and Railways for power line crossings. It has also been submitted that after award of transmission line to the respective contractors, preliminary route surveys are carried out and most optimal routes are selected considering the involvement of ROW, forest land and avoiding inhabited areas. Thereafter, detailed surveys are carried out to finalize the exact tower location and path of the transmission line.



15. The Commission, during the course of hearing on 22.2.2011 directed the petitioner to file detailed reason/justification for the delay.

16. The petitioner in its reply affidavit dated 19.3.2011 has submitted that there was a delay of approximately 8 months due to issues related to funding tie up with the World Bank and consequent issuance of Excise Duty Exemption Certificate. The petitioner has further submitted that since the funding tie up was being resorted to with World Bank loan, there would be saving in cost of the current asset due to deemed export benefits associated with the World Bank funding. It has been further submitted that on account of funding through World Bank loan, duty exemption of approximately ₹7.57 crore for the asset was available to the transmission asset on account of deemed export benefit which would have otherwise increased the cost of the transmission asset. The petitioner has submitted that further delay of 4 month occurred due to collapse of three towers including theft of one railway crossing tower. The petitioner has requested to treat the incident of theft as force majeure as it is a rare incident and round the clock patrolling of all the locations is not practicable. The petitioner has sought condonation of delay for the aforesaid reasons.

17. We have examined the submission of the petitioner. On perusal of documents submitted by the petitioner, we are of the view that safety of the material is the responsibility of the petitioner and the delay due to theft cannot be treated as a force majeure event. The petitioner was well aware



of the route of the transmission line and should have made adequate arrangement to ensure the safety of the locations during constructions. The delay in approximately 4 months, as stated in their affidavit dated 19.3.2011, on account of theft of towers cannot be condoned. Accordingly, out of 15 month delay in commissioning the transmission asset, delay of 8 months due to issues related to funding is condoned and remaining 7 months delay is not condoned. The petitioner has not given any justification for the remaining 3 months delay. Accordingly, IEDC and IDC have not been allowed from the month of March 2010 to September 2010 which amount to ₹ 68.88 lakh and ₹685.41 lakh respectively. The details of IEDC and IDC, which have not been allowed, are as under:

(₹ in lakh)		
	IEDC	IDC
For the month of March 2010 (1 month)	6.96	19.73
From April 2010 to September 2010 (6 months)	61.92	665.68
Total	68.88	685.41

Initial spares

18. Regulation 8 of the 2009 regulations *inter-alia* provides as under:

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

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

19. The petitioner has claimed initial spares of ₹178.85 lakh as per Chartered Accountant certificate dated 11.9.2010. It is noted that the capital cost as on date of commercial operation is inclusive of initial spares

amounting to ₹ 178.85 lakh which is in excess of ₹ 114.72 lakh in terms of Regulation 8 of the 2009 regulations. The details of the initial spares are as under:

(₹ in lakh)

Description	Project Cost pertaining to sub-station as on cut-off date (Excluding disallowed IDC and IEDC)	Apportioned Initial Spares Claimed	Ceiling limits as per clause 8 of the 2009 regulations	Initial Spares worked out	Excess Initial Spares Claimed
	(a)	(b)	(c)	$(d) = \frac{(a-b) \times c}{(100-c)\%}$	$(e) = (b) - (d)$
Sub-station	2680.00	178.85	2.50%	64.13	114.72

20. Accordingly, capital cost has been considered for the purpose of tariff calculation after deducting excess initial spares. However, more assets are yet to be commissioned under transmission system associated with East West Transmission corridor in Western Region. Therefore, the ceiling limit of initial spares will be recalculated as per Regulation 8 of the 2009 regulations at the time of the commissioning of last asset of this project. The capital cost considered for the purpose of tariff is as under:

(₹ in lakh)

Capital cost claimed as on anticipated date of commercial operation	Detail of IDC and IEDC disallowed for 7 months*	Initial Spares disallowed	Capital cost considered for the purpose of tariff calculation as on anticipated date of commercial operation
22387.85	(-)754.28	(-) 114.72	21518.85

*Disallowed IDC and IEDC have been proportionately reduced from assets (except land) as on anticipated date of commercial operation.

TOTAL CAPITAL COST

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

(₹ in lakh)	
Particulars	Amount
Capital cost as on the date of commercial operation	22387.85
Less: IDC and IEDC	754.28
Less: Excess initial spares	114.72
Capital cost admissible for tariff determination	21518.85
Projected additional capital expenditure during 2010-11	561.61
Capital cost as on 1.4.2011	22080.46
Projected additional capital expenditure during 2011-12	305.00
Capital cost as on 1.4.2012, 1.4.2013 and 1.4.2014	22385.46

DEBT- EQUITY RATIO

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

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

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

23. The petitioner has claimed tariff based on debt-equity ratio of 70:30 for the transmission asset as on anticipated date of commercial operation. The petitioner has further claimed the amount of additional capital expenditure in the debt-equity ratio of 70:30 for the year 2010-11 and 2011-12. The same

debt-equity ratio has been considered for the purpose of tariff during the period 2009-14.

24. Details of debt-equity claimed by the petitioner as on anticipated date of commercial operation are as under:

Particulars	Approved		Capital Cost as on anticipated date of commercial operation	
	Amount (₹ in lakh)	%	Amount (₹ in lakh)	%
Debt	17398.86	70.00	15671.77	70.00
Equity	7456.65	30.00	6716.08	30.00
Total	24855.51	100.00	22387.85	100.00

25. For the purpose of tariff, equity considered after deducting excess initial spares, IDC and IEDC for the transmission asset is as under:

Particulars	Approved		Capital cost as on anticipated date of commercial operation	
	Amount (₹ in lakh)	%	Amount (₹ in lakh)	%
Debt	17398.86	70.00	15063.46	70.00
Equity	7456.65	30.00	6455.39	30.00
Total	24855.51	100.00%	21518.85	100.00%

RETURN ON EQUITY

26. 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 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."

27. The petitioner has requested to allow grossing up of base rate of return with the applicable tax as per the relevant Finance Acts and allow direct settlement of tax liability between the generating company/transmission licensee and the beneficiaries/long-term transmission customers on year to year basis. It is clarified that the Commission is in the process of amending the regulation to allow grossing up of the ROE as per the applicable MAT rate in accordance with the relevant Finance Act which would take care of the interest of the petitioner. Accordingly, the return on equity has been computed in terms of the existing provision of Regulation 15 (3) of 2009 regulation as under:

(₹ in lakh)

Details of return on equity	Up to anticipated date of commercial operation	2010-11 (Pro rata)	2011-12	2012-13	2013-14
Opening Equity	6455.39	6455.39	6623.87	6715.37	6715.37
Addition due to Additional Capitalisation		168.48	91.50	0.00	0.00
Closing Equity		6623.87	6715.37	6715.37	6715.37
Average Equity		6539.63	6669.62	6715.37	6715.37
Return on Equity (Base Rate)		15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)		11.330%	11.330%	11.330%	11.330%
Rate of Return on Equity (Pre Tax)		17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)		571.60	1165.92	1173.91	1173.91

INTEREST ON LOAN

28. 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.”

29. 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 period;
 - (iii) Where moratorium period has been availed by the transmission licensee, the repayment of the loan has been considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed;
 - (iv) Weighted average rate of interest on actual loan has been worked out and applied on the average loan during the year to arrive at the interest on loan; and
 - (v) The interest on loan has been calculated on the basis of rate prevailing as on 1.4.2009/date of commercial operation. Any change in rate of interest subsequent to 1.4.2009/date of commercial operation will be considered at the time of truing up.

30. The detailed calculations in support of the weighted revised average rate of interest are contained in **Annexure** attached to this order. Interest on loan has been worked out as under:

(₹ in lakh)

Details of Interest on loan	Up to anticipated date of commercial operation	2010-11 (Pro rata)	2011-12	2012-13	2013-14
Gross Normative Loan	15063.46	15063.46	15456.58	15670.08	15670.08
Cumulative repayment up to previous year		0.00	574.14	1745.30	2924.50
Net Loan-Opening		15063.46	14882.44	13924.79	12745.58
Addition due to additional capitalisation		393.13	213.50	0.00	0.00
Repayment during the year		574.14	1171.15	1179.21	1179.21
Net loan-closing		14882.44	13924.79	12745.58	11566.38
Average Loan		14972.95	14403.62	13335.19	12155.98
Weighted Average rate of interest on loan		5.3550%	5.5443%	5.4837%	5.3752%
Interest		400.90	798.57	731.26	653.41

DEPRECIATION

31. 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.”

32. The anticipated date of commercial operation of transmission asset is 1.10.2010 and accordingly, 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 calculated as under:

(₹ in lakh)

Details of Depreciation		Up to anticipated date of commercial operation	2010-11 (Pro rata)	2011-12	2012-13	2013-14
Gross block		21518.85	21518.85	22080.46	22385.46	22385.46
Addition during 2009-14 due to projected Additional capital expenditure			561.61	305.00	0.00	0.00
Closing average gross block			22080.46	22385.46	22385.46	22385.46
Average Gross Block			21799.65	22232.96	22385.46	22385.46
Gross block as on 31.3.2009			21799.65	22232.96	22385.46	22385.46
Rate of depreciation			5.2674%	5.2677%	5.2677%	5.2677%
Depreciable Value	90%		19619.69	20009.66	20146.91	20146.91
Remaining depreciable Value			19619.69	19435.52	18401.62	17222.41
Depreciation			574.14	1171.15	1179.21	1179.21

OPERATION & MAINTENANCE EXPENSES

33. In accordance with clause (g) of Regulation 19 the 2009 regulations, the following norms for 400 kV D/C, twin conductor transmission line and 400 kV bays have been specified for O & M expenses:

	Year				
	2009-10	2010-11	2011-12	2012-13	2013-14
765 kV S/C, Quad conductor, Bina-Gwalior-II (charged at 400 kV) (₹ in lakh per ckt/km)	0.627	0.663	0.701	0.741	0.783
400 kV bay (₹ in lakh per bay)	52.40	55.40	58.57	61.92	65.46

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

(₹ in lakh)

	Year				
	2009-10	2010-11 (Pro rata six months)	2011-12	2012-13	2013-14
O & M for 400 kV D/C, twin conductor transmission line (220.884 ckt/km)	--	73.22	154.84	163.68	172.95
O & M for 400 kV bays (4 bays)	--	110.80	234.28	247.68	261.84
Total	--	184.02	389.12	411.36	434.79

35. The petitioner has submitted that O & M expenditure for 2009-14 tariff block had been arrived on the basis of normalized actual O & M expenses of the petitioner during the year 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking was also considered while calculating the O & M charges for 2009-14 periods. The petitioner has submitted that it would approach the Commission for suitable revision in the norms of O & M expenses in case the impact of wage hike w.e.f. 1.1.2007 is more than 50%. With reference to the submission of the petitioner, it is clarified that if any such application is made, it will be dealt with in accordance with law.

INTEREST ON WORKING CAPITAL

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

- (i) **Receivables:** As per Regulation 18(1)(c)(i) of the 2009 regulations, receivables will be equivalent to two months of annual transmission charges. The petitioner has claimed the receivables on the basis of 2 months' transmission charges claimed in the petition. In the tariff being

allowed, receivables have been worked out on the basis 2 months' transmission charges.

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

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

(iv) Rate of interest on working capital: As per Regulation 18(3) of the 2009 regulations, rate of interest on working capital shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on 1.4.2009 or on 1st April of the year in which the project or part thereof (as the case may be) is declared under commercial operation, whichever is later. The petitioner has claimed interest on working capital @ 12.25% based on SBI PLR as on 1.4.2009, which is in accordance with the 2009 regulations and has been allowed.

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

(₹ in lakh)				
	2010-11 (Pro rata)	2011-12	2012-13	2013-14
Maintenance Spares	55.21	58.37	61.70	65.22
O & M expenses	30.67	32.43	34.28	36.23
Receivables	590.12	601.01	596.18	587.04
Total	676.00	691.80	692.16	688.49
Rate of Interest	11.75%	11.75%	11.75%	11.75%
Interest	39.72	81.29	81.33	80.90

TRANSMISSION CHARGES

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

(₹ in lakh)				
	2010-11 (Pro rata)	2011-12	2012-13	2013-14
Depreciation	574.14	1171.15	1179.21	1179.21
Interest on Loan	400.90	798.57	731.26	653.41
Return on Equity	571.60	1165.92	1173.91	1173.91
Interest on Working Capital	39.72	81.29	81.33	80.90
O & M Expenses	184.02	389.12	411.36	434.79
Total	1770.37	3606.05	3577.07	3522.22

Application fee and the publication expenses

39. The petitioner has sought approval for the reimbursement of fee paid by it for filing the petition. 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."

40. 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

41. The petitioner has prayed to 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. The prayer of the petitioner has been opposed by UPPCL. As the petitioner has no liability for service tax at present, the prayer is infructuous and is accordingly rejected.

Licence fee

42. The petitioner has sought reimbursement of licence fee on the ground that is in an extra burden on the petitioner which has been introduced since 27.10.2008 as its impact has not been captured in the O&M expenses in the 2009 regulations. It is clarified that the matter is presently under consideration and any decision in the matter will be applicable to the present petition.

43. 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.

44. The petitioner has filed this petition based on anticipated date of commercial operation i.e 1.10.2010. Through this petition, transmission charges for the transmission asset has been approved on anticipated date of commercial operation. However, the petitioner shall raise the bill as on actual date of commercial operation on pro rata basis.

45. This order disposes of Petition No. 284/2010.

Sd/-

**(M. Deena Dayalan)
Member**

Sd/-

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

Sd/-

**(Dr. Pramod Deo)
Chairperson**



CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

(₹ in lakh)

	Details of Loan	2010-11	2011-12	2012-13	2013-14
1	IBRD IV (Exchange Rate@Rs.45.29)				
	Gross loan opening	7521.76	7521.76	7521.76	7521.76
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	7521.76	7521.76	7521.76	7521.76
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	166.48
	Net Loan-Closing	7521.76	7521.76	7521.76	7355.28
	Average Loan	7521.76	7521.76	7521.76	7438.52
	Rate of Interest	1.86%	1.86%	1.86%	1.86%
	Interest	139.90	139.90	139.90	138.36
	Rep Schedule	30 half yealy instalments from 15.11.2013			
2	IBRD IV ADDL (Exchange Rate@Rs.45.29)				
	Gross loan opening	274.00	274.00	274.00	274.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	0.00	4.63
	Net Loan-Opening	274.00	274.00	274.00	269.37
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	4.63	9.34
	Net Loan-Closing	274.00	274.00	269.37	260.03
	Average Loan	274.00	274.00	271.69	264.70
	Rate of Interest	1.96%	1.96%	1.96%	1.96%
	Interest	5.37	5.37	5.33	5.19
	Rep Schedule	52 half yealy instalments from 01.02.2013			
3	Bond XXIX				
	Gross loan opening	1615.00	1615.00	1615.00	1615.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	0.00	134.58
	Net Loan-Opening	1615.00	1615.00	1615.00	1480.42
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	134.58	134.58
	Net Loan-Closing	1615.00	1615.00	1480.42	1345.84
	Average Loan	1615.00	1615.00	1547.71	1413.13
	Rate of Interest	9.20%	9.20%	9.20%	9.20%
	Interest	148.58	148.58	142.39	130.01
	Rep Schedule	12 equal Annual Installment from 12.03.2013			
4	Bond XXVIII				
	Gross loan opening	4411.00	4411.00	4411.00	4411.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	0.00	367.58
	Net Loan-Opening	4411.00	4411.00	4411.00	4043.42
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	367.58	367.58
	Net Loan-Closing	4411.00	4411.00	4043.42	3675.84
	Average Loan	4411.00	4411.00	4227.21	3859.63
	Rate of Interest	9.33%	9.33%	9.33%	9.33%
	Interest	411.55	411.55	394.40	360.10
	Rep Schedule	12 equal Annual Installment from 15.12.2012			

5	Bond XXXIV				
	Gross loan opening	0.00	1702.00	1702.00	1702.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	0.00	1702.00	1702.00	1702.00
	Additions during the year	1702.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00
	Net Loan-Closing	1702.00	1702.00	1702.00	1702.00
	Average Loan	851.00	1702.00	1702.00	1702.00
	Rate of Interest	8.84%	8.84%	8.84%	8.84%
	Interest	75.23	150.46	150.46	150.46
	Rep Schedule	12 Annual Instalments from 31.10.2014			
6	Bond XXX				
	Gross loan opening	148.00	148.00	148.00	148.00
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	0.00	0.00
	Net Loan-Opening	148.00	148.00	148.00	148.00
	Additions during the year	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	12.33
	Net Loan-Closing	148.00	148.00	148.00	135.67
	Average Loan	148.00	148.00	148.00	141.84
	Rate of Interest	8.80%	8.80%	8.80%	8.80%
	Interest	13.02	13.02	13.02	12.48
	Rep Schedule	12 Annual Instalments from 29.9.2013			
	Total Loan				
	Gross loan opening	13969.77	15671.77	15671.77	15671.77
	Cumulative Repayment up to DOCO/previous year	0.00	0.00	0.00	506.79
	Net Loan-Opening	13969.77	15671.77	15671.77	15164.98
	Additions during the year	1702.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	506.79	690.32
	Net Loan-Closing	15671.77	15671.77	15164.98	14474.66
	Average Loan	14820.77	15671.77	15418.37	14819.82
	Rate of Interest	5.3550%	5.5443%	5.4837%	5.3752%
	Interest	793.65	868.88	845.50	796.59