

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 288/2009

Coram:

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

DATE OF HEARING: 24.6.2010

DATE OF ORDER: 17.3.2011

In the matter of

Approval of transmission tariff for 400 kV D/C Siliguri-Purnea transmission line, 400 kV D/C Purnea-Muzaffarpur transmission line and 220 kV D/C Muzaffarpur (PGCIL)-Muzaffarpur (BSEB) transmission line in Eastern Region associated with Tala Hydro Electric Project, East-North Inter-connector and Northern Region transmission system for the period from 2009-14.

And in the matter of

Powerlinks Transmission Limited, New Delhi

..Petitioner

Vs

1. Power Grid Corporation of India Limited, Gurgaon
2. West Bengal State Electricity Board, Kolkata
3. Damodar Valley Corporation, Kolkata
4. Bihar State Electricity Board, Patna
5. Grid Corporation of Orissa Ltd., Bhubaneshwar
6. Power Department, Govt. of Sikkim, Gangtok
7. Jharkhand State Electricity Board, Ranchi **Respondents**

The following were present:

1. Shri Suresh Schedev, PTL
2. Shri B.A.Chaduhari, PTL
3. Shri Ajay Bagri, PTL
4. Ms. Nita Jha, PTL
5. Shri U.K.Tyagi, PGCIL
6. Shri R.B.Sharma, Advocate, BSEB

ORDER

The petitioner, Powerlinks Transmission Ltd., a public limited company jointly promoted by Tata Power Company Ltd. and Powergrid Corporation of



India Ltd. was granted a licence by the Commission under Section 14 of the Electricity Act, 2003 (the Act) to transmit electricity as a transmission license and to construct, maintain and operate the inter-State transmission system associated with Tata Hydro Electric Project, East-North Interconnector and Northern Region Transmission System. The petitioner has filed the present petition for approval of transmission charges for the period from 1.4.2009 to 31.3.2014 in respect of the under mentioned transmission lines in accordance with the provision of Central Electricity Regulatory Commission (Terms and conditions of tariff) Regulations, 2009 (hereinafter "2009 regulations"):

- (a) 400 kV Double Circuit Siliguri-Purnea Transmission line
- (b) 400 kV Double Circuit Purnea-Muzaffarpur Transmission line
- (c) 220 kV Double Circuit Muzaffarpur (PGCIL)-Muzaffarpur (BSEB) Transmission line.

2. The transmission lines were declared under commercial operation with effect from 1.9.2006. The annual transmission charges for the period from 1.9.2006 to 31.3.2009 were determined by the Commission in its order dated 30.4.2008 in Petition No. 148/2007 which were further revised vide order dated 30.7.2009 in Petition No. 65/2009 at a gross block of ₹ 70719.00 lakh as on 31.3.2009 after accounting for the additional capital expenditure from 1.4.2007 to 31.3.2009.



3. The petitioner has claimed the following transmission charges on the basis of the capital cost of ₹ 71018.44 lakh including ₹ 298.83 lakh on account of projected additional capital expenditure during 2009-14:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	3719.47	3727.36	3727.36	3727.36	3727.36
Interest on Loan	3670.85	3125.95	2731.49	2357.46	1983.43
Return on Equity	3716.49	3724.32	3724.32	3724.32	3724.32
Interest on Working Capital	250.57	240.64	233.58	227.00	220.48
O & M Expenses	381.52	403.42	426.57	450.92	476.49
Total	11738.90	11221.69	10843.32	10487.06	10132.08

4. 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	57.23	60.51	63.99	67.64	71.47
O & M expenses	31.79	33.62	35.55	37.58	39.71
Receivables	1956.48	1870.28	1807.22	1747.84	1688.68
Total	2045.50	1964.41	1906.76	1853.06	1799.86
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	250.57	240.64	233.58	227.00	280.48

5. The petitioner has made the following prayers:

- (a) Approve the transmission tariff under new regulation for the assets covered under this petition, as per para-7 above.
- (b) Allow the petitioner for Additional Capitalization for tower shifting with Pile foundation in Silliguri-Purnea Line under Clause 10 of CERC (Terms and conditions) Regulations, 2009.
- (c) Permit the petitioner for billing and recovery of Transmission Service Charge and publication expenses & other charges from the Respondent No. 1 in accordance with regulation 23 of CERC (Terms and conditions) Regulations, 2009, for the said assets (400 kV Double Circuit Silliguri-Purnea Transmission line, 400 kV Double Circuit Purnea-Muzaffarpur Transmission line and 220 kV Double Circuit Muzaffarpur (PGCIL)-Muzaffarpur (BSEB) Transmission line) Transmission line covered under the Petition.
- (d) Allow the Petitioner to pass on the benefit or loss to the respondents in case of any decrease or increase in the interest rate directly by the Petitioner on Powergrid on account of the Respondents.
- (e) Pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice."

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. Bihar State Electricity Board (BSEB), Respondent No. 4 in the petition, in its reply affidavit dated 21.6.2010 has made the following submissions:

(i) The amount of ₹ 298.93 lakh have been included as the additional capital expenditure projected to be incurred during the period 2009-14 for shifting of tower with pile foundation due to change in river course. The petitioner proposes this work to be covered under Regulation 10 of the 2009 regulations pertaining to Renovation and Modernization (R & M) whereas the works in question is purely in the nature of Operation and Maintenance works and should be undertaken under the O & M expenses provided to the petitioner;

(ii) The petitioner is engaged in the development of the infrastructure facility in the transmission of power and is accordingly entitled to the benefit of tax holiday under Section 80-IA of the Income Tax Act, 1961 (hereinafter referred to as "the IT Act") which permits deductions in respect of profits and gains from industrial undertakings or enterprises engaged in infrastructure development etc. allowing a tax deduction of an amount equal to hundred percent of profits and gains derived from such



business for ten consecutive years out of fifteen years beginning from the year in which the undertaking or enterprise develops and begins to operate any infrastructural facility. Under Section 80 IA of the IT Act, 1961 infrastructure facility also includes generation, transmission or distribution of power;

- (iii) Return on Equity (ROE) has been calculated @18.67% based on the rate notified by the Commission under Regulation 15(4) of the 2009 regulations. This refers to the present MAT rate of 16.995% applicable for financial year 2009-10. The provisions of Regulation 15(3) of the 2009 regulations in respect of ROE are very clear and unambiguous and accordingly be applied in its perspective by grossing up the base rate with the normal tax rate for 2008-09. The return on equity with respect to the actual tax rate in line with the provisions of the relevant Finance Act of the respective year during the tariff period shall be trued up separately along with the tariff petition for the next tariff period in accordance with the proviso to Regulation 15(3) of 2009 regulations. The request of the petitioner seeking the relaxation under Regulation 44 of the 2009 regulations is solely guided by the commercial consideration with the aim to get the expenses on this account early than actually due in accordance with the 2009 regulations;



- (iv) The profit and loss account before tax as noted from the profit and loss account furnished by the petitioner for 2007-08 and 2008-09 and the ROE allowed by the Commission in the orders in Petition Nos. 64, 65 and 66 of 2009 show that the petitioner has been getting more profit than what is permitted to recover under the regulatory regime;
- (v) In accordance with Regulation 18 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, the Commission recognises the need and permits any association/forum or other bodies corporate or any group of consumers to participate in any proceedings before the Commission. As the present petition is an important petition which would have impact on the electricity consumers in the Eastern Region of the country, one of the agencies may be asked to represent the interests of the consumers.
- (vi) The claim of the petitioner for reimbursement of application filing fees and expenses incurred on publication of notices should be disallowed as the petitioner in furtherance of its business interest, is statutorily required to approach the Commission for determination of tariff.



8. The petitioner in its rejoinder dated 7.7.2010 has submitted the following:

- (i) The petitioner has claimed additional capitalization under Regulation 9(2)(v) of 2009 regulations and Regulation 10 was mentioned in the petition due to typographical error.
- (ii) In regard to tax holiday it has been submitted that tax holiday is available to the petitioner as it has commenced operation of transmission lines before the date specified in the Section. The deduction is available for an amount equal to 100% of the profit and gains derived from such business. The assessee has also the option to claim this deduction for any 10 consecutive assessment years out of 15 years beginning from the year in which the undertaking commences operation. The petitioner is entitled to claim tax holiday in accordance with provisions of Section 80 I A of the IT Act. The petitioner has further submitted that Section 115JB of the IT Act pertaining to MAT states that "notwithstanding anything contained in any other provision of this Act, wherein the case of an assessee being a company, the Income Tax payable on the total income as computed under this Act is less than 15% of its book profit than such book profit shall be deemed to be the total income of the assessee and the tax payable by the assessee on such total income shall be an amount of Income Tax calculated @ 15%(for the Financial year 2009-10) ". The provisions of Section 115JB are overriding in nature, and an assessee is



required to pay MAT despite the fact that the total taxable income is Nil during the tax holiday period under Section 80IA of the IT Act. Accordingly, the petitioner would be paying MAT at the rate applicable for respective financial year even during the tax holiday period of 10 years out of the 15 years from the date of commencement of operation. The petitioner has further submitted that it has grossed up the ROE at the MAT rate applicable for financial year 2008-09 as per the 2009 regulations and submitted the revised calculation based on this rate.

- (iii) With regard to filing fees and publication charges, it has been submitted that these are additional expenses incurred for compliance with the statutory requirement and should be allowed to be reimbursed from the respondents.

9. We have considered the submissions with reference to the documents produced. The Commission has taken necessary steps to notify the consumer forums/organizations to represent the interest of consumers during the course of the proceedings before the Commission and notices are being issued to such organizations to participate in the proceedings. As regards the questions of Tax Holiday, the respondent has raised the issue in a number of petitions filed by Powergrid Corporation of India Ltd. The issue is being separately addressed and decision therein will be applicable in case of this petition also. Other points raised by BSEB have been dealt with in relevant parts of this order.



10. Last proviso to Clause (2) of Regulation 7 of 2009 regulations provides as under:

“Provided also that in case of the existing projects, the 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.”

Admitted capital cost of the transmission lines as on 31.3.2009 which have been allowed in order dated 30.7.2009 in Petition No. 65/2009 is ₹ 70179.61 lakh has been considered as the opening capital cost as on 1.4.2009.

ADDITIONAL CAPITAL EXPENDITURE FOR THE YEAR 2009-14

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 petitioner has claimed an additional capital expenditure of ₹ 298.83 lakh during 2009-14 on account of shifting of towers with pile foundations due to change in river course. It has been submitted that the location No. 87/0 of 400 kV D/C Siliguri-Purnea transmission line has been badly affected by the change in the course of River Parman during last three years. At the time of construction in year 2004, the tower was at a safe distance from the river. In year 2006, the distance was reduced due to advancement of river. However, the river continued changing its course in 2007 also. In order to safeguard tower foundation from erosion of the soil, the protection work was carried out as an immediate measure, with the help of sandbags and wooden logs. The change in river course and associated flood has eroded the river bank completely and the river is only a few meters away from the tower. This location needs to be protected urgently against further erosion of soil caused by change in course of the river. As a permanent remedial measure, the petitioner has decided to construct a new foundation using RCC Pile. It has been submitted that the change of river course should be considered as a Force Majeure event being an act of God and the petitioner having absolutely no control on such events. Accordingly, projected additional capital expenditure of ₹ 298.83 lakh has been claimed in the petition.

13. BSEB the fourth respondent, has submitted that the expenditure of ₹ 298.83 lakh for shifting of towers cannot be covered under Regulation 10 of 2009 regulations and the petitioner should meet this expenditure from O&M expenses. The petitioner in its rejoinder dated 7.7.2010 has clarified that Regulation 10 was mentioned on account of typographical error and the expenditure has been claimed under Regulation 9(2)(v) of 2009 regulation.

14. The petitioner has placed on record at Enclosure 7 of the petition copy of the management certificate for the projected additional capital expenditure along with photographs of the tower affected due to change in the course of river. The petitioner in its affidavit dated 7.7.2010 has submitted the break-up/details of cost of pile foundation expenditure as under:

Particulars	Estimated Amount (₹)
L&T LOA based on the basis of competitive bidding for Labour Charges	2,24,71,978
Service Tax on above order @ 4.12%	9,25,845
Engg. Consultancy from PGCIL	3,53,318
Supply of replacement of damaged stub, tower parts, bolts & nuts, conductor, earth-wire, hardware fittings and accessories	61,31,859
Total Amount	2,98,83,000

During the hearing, the representative of Respondent No. 1 confirmed that pile foundation becomes necessary if the tower is in the river bed.

15. We are of the view that a new foundation with RCC pile is necessary for successful and efficient operation of the transmission system and, accordingly, the expenditure claimed as in para 14 is allowed under Regulation 9(2)(v) of the 2009 regulations.

TOTAL CAPITAL COST

16. In view of the above, gross block as given below has been considered for the purpose of tariff for the transmission lines during 2009-14

(₹ in lakh)		
Admitted capital cost as on 1.4.2009 as per order dated 30.7.2009	projected capital expenditure during 2009-14	Total
70719.61	Shifting of tower with pile foundation due to change in river course = 298.83	71018.44

DEBT- EQUITY RATIO

17. 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.”

18. The petitioner has claimed tariff based on debt-equity ratio of 70:30 as considered by the Commission in its order dated 30.7.2009 *ibid*. The petitioner has further claimed the amount of additional capital expenditure in the debt-equity ratio of 70:30 during the period 2009-14. For the purpose of tariff, equity considered for the transmission asset as given overleaf.

(₹ in lakh)

Equity as on 1.4.2009	Notional equity due to additional capital expenditure for the period 2009-10	Average equity for 2009-10	Notional equity due to additional capital expenditure for the period 2010-14	Average equity for 2010-14	Equity as on 1.4.2014
21215.89	89.65	21260.71	0.00	21305.54	21305.54

RETURN ON EQUITY

19. 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:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

Where t is the applicable tax rate in accordance with clause (3) of this regulation.

....."

20. The petitioner has submitted that the Return on Equity has been calculated @ 18.67% based on the MAT rate applicable for the Financial Year 2009-10 i.e 16.995%. The petitioner in its affidavit dated 9.6.2010 has filed the revised calculation of return on equity by grossing up the base rate with the



MAT rate applicable for the financial year 2008-09 i.e. 11.33%. The petitioner has further submitted that it has filed Petition No. 17/2010 under Regulation 44 of the 2009 regulations praying for Fixation of Tariff after grossing up ROI with the MAT rate of 16.995% as applicable for the financial year 2009-10.

21. The Commission in its order dated 3.8.2010 in Petition No. 17/2010 has already taken a decision to amend the 2009 regulations to allow grossing up of base rate of return with the applicable tax rate as under:

"We are of the view that this issue of 'grossing up the base rate with the normal tax rate for the year 2008-09' is generic in nature and therefore, it will be appropriate to make suitable provisions in the 2009 regulations to cater to any future changes in the tax rate. Accordingly, we direct the staff of the Commission to prepare and submit draft amendment to the 2009 regulations for allowing grossing up of base rate of return with the applicable tax rate as per the Finance Act for the relevant year and direct settlement of tax liability between the generating company/transmission licensee and the beneficiaries/long term transmission customers on year to year basis. Any under/over recovery on account of direct settlement of tax liability shall be subject to the final adjustment at the time of true up exercise."

22. In view of our above order, the prayer of the petitioner will be taken care of after amendment of the regulations.

23. Accordingly, return on equity in respect of the transmission lines during the tariff period 2009-14 has been worked out as under:

Particulars	(₹ in lakh)					
	Upto 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Equity	21215.89	21215.89	21305.54	21305.54	21305.54	21305.54
Addition due to Additional Capitalisation		89.65	0.00	0.00	0.00	0.00
Closing Equity		21305.54	21305.54	21305.54	21305.54	21305.54
Average Equity		21260.71	21305.54	21305.54	21305.54	21305.54
Return on Equity (Base Rate)		15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)		11.330%	11.330%	11.330%	11.330%	11.330%
Rate of Return on Equity (Pre Tax)		17.481%	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)		3716.59	3724.42	3724.42	3724.42	3724.42

INTEREST ON LOAN

24. 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."

25. The petitioner has considered actual repayment of loan for calculation of interest on loan instead of considering depreciation as repayment. As per the Regulation 16(3) as quoted above, the repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year and accordingly repayment of loan has been considered for the purpose of tariff.

26. The petitioner vide its affidavit dated 9.6.2010 has submitted that the company has taken loans from SBI and IDFC on floating rate basis, which requires to be reset every three years. The reset shall take place on the basis of prevailing G-Sec rate plus 250 basis point. The Interest for SBI loan has been reset on 12.5.2010 and next reset will be done on May 2013 and the petitioner has submitted the recalculated interest on loan on the basis of reset interest rates. The petitioner has also placed on record the reset letters from SBI and IDFC.

27. In our calculation, the interest on loan has been worked out as per the following principles in accordance with Regulation 16 of 2009 regulations:

- (a) The normative loan outstanding as on 1.4.2009 has been worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan. The rate of interest has been taken as weighted average rate of interest calculated on the basis of the actual average loan portfolio for each year of the tariff period.



- b) The repayment during each year of the period 2009-14 has been considered equal to the depreciation allowed for that year. Tariff has been worked out considering normative loan and normative repayments.
- c) Weighted average rate of interest on actual loan worked out as per (i) above is applied on the average loan during the year to arrive at the interest on loan.
- (d) The rates as on 1.4.2009 have been taken into consideration for calculating the interest on loan and any change subsequently, including any on account of reset, will be considered at the time of truing up.

28. Calculations in support of the weighted revised average rate of interest are contained in **Annexure** enclosed with this order. Interest on loan during 2009-14 has been worked out as under:

(₹ in lakh)

Details of loan	Up to 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Notional loan	49503.72					
Addition due to additional capitalisation	0.00					
Gross Normative Loan	49503.72	49503.72	49712.90	49712.90	49712.90	49712.90
Cumulative Repayment up to Previous Year		9102.41	12821.88	16549.23	20276.59	24003.95
Net Loan-Opening		40401.31	36891.02	33163.67	29436.31	25708.96
Addition due to Additional Capitalisation		209.18	0.00	0.00	0.00	0.00
Repayment during the year		3719.47	3727.36	3727.36	3727.36	3727.36
Net Loan-Closing		36891.02	33163.67	29436.31	25708.96	21981.60
Average Loan		38646.17	35027.35	31299.99	27572.63	23845.28
Weighted Average Rate of Interest on Loan		9.5504%	9.5500%	9.5495%	9.5489%	9.5480%
Interest		3690.86	3345.12	2989.00	2632.87	2276.74



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.

Provided that.....

Provided further that.....

(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 lines were declared under commercial operation on 1.9.2006 and will complete 12 years beyond the year 2013-14. Therefore, depreciation for the period 2009-14 has been calculated annually based on straight line method and at the rate specified in **Appendix-III** of the 2009 regulations. Accordingly, depreciation has been computed as given overleaf.



(₹ in lakh)

Details of Depreciation	Up to 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
As per order dated 30.7.2009	70719.61	70719.61	71018.44	71018.44	71018.44	71018.44
Addition during 2009-14 due to projected Additional Capitalisation		298.83	0.00	0.00	0.00	0.00
Gross block as on 31.3.2009		71018.44	71018.44	71018.44	71018.44	71018.44
Average gross block		70869.03	71018.44	71018.44	71018.44	71018.44
Rate of Depreciation		5.2484%	5.2484%	5.2484%	5.2484%	5.2484%
Depreciable Value (90%)		63725.58	63860.06	63860.06	63860.06	63860.06
Remaining Depreciable Value		54623.17	51038.18	47310.82	43583.47	39856.11
Depreciation		3719.47	3727.36	3727.36	3727.36	3727.36

OPERATION & MAINTENANCE EXPENSES

31. In accordance with clause (g) of Regulation 19 the 2009 regulations, the following O&M norms have been specified for 400 kV D/C quad conductor and 220 kV D/C, Single conductor transmission lines:

	Year				
	2009-10	2010-11	2011-12	2012-13	2013-14
Double circuit (Bundled conductor with four or more sub-conductors) (Rs in lakh/kms)	0.940	0.994	1.051	1.111	1.174
Double circuit (Single conductor) (Rs in lakh/kms)	0.269	0.284	0.301	0.318	0.336

32. Accordingly, 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 Double circuit, Bundled conductor with four sub-conductors (399 kms)	375.06	396.61	419.35	443.29	468.43
Double circuit single conductor (24 kms)	6.46	6.82	7.22	7.63	8.06
Total	381.52	403.42	426.57	450.92	476.49



INTEREST ON WORKING CAPITAL

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

(i) Receivables: As per Regulation 18(1)(c)(i) of the 2009 regulations, receivables will be equivalent to two months average billing calculated on target availability level. The petitioner has claimed the receivables on the basis 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 from 1.4.2009. The value of maintenance spares works out to Rs. 57.23 lakh as on 1.4.2009.

(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 one month of O&M expenses of the respective year as claimed in the petition. This has been considered in the working capital.

(iv) Rate of interest on working capital: As per Regulation 18(3) of the 2009 regulations, rate of interest on working capital shall be on normative basis and shall be equal to the short-term Prime Lending Rate



of State Bank of India as on 1.4.2009 or on 1st April of the year in which the transmission system is declared under commercial operation, whichever is later. Regulation 18(4) of 2009 regulations further provides that interest on working capital is payable on normative basis notwithstanding that the transmission licensee has not taken working capital loan from any outside agency. 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.

34. Interest on working capital in respect of the transmission lines have been computed as under:

	(Rs. in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	57.23	60.51	63.99	67.64	71.47
O & M expenses	31.79	33.62	35.55	37.58	39.71
Receivables	1959.90	1907.59	1851.05	1794.72	1738.60
Total	2,048.93	2,001.72	1,950.58	1,899.93	1,849.78
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	250.99	245.21	238.95	232.74	226.60

TRANSMISSION MAJORATION FACTOR

35. The petitioner has claimed Transmission Majoration Factor (TMF) @ 10% on the transmission charges during 2009-14.

36. Regulation 4.10A of the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2001 (hereinafter "2001 regulations") provides as under:

4.10A Transmission Majoration Factor

In respect of the transmission projects executed through IPTC/JV routes, 10% (ten percent) mark up (pre-tax) on transmission charges shall be allowed as Transmission Majoration Factor.

TRANSMISSION CHARGES

39. The transmission charges for the transmission lines allowed in this order have been summarised in the table below:

(Rs. in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	3719.47	3727.36	3727.36	3727.36	3727.36
Interest on Loan	3690.86	3345.12	2989.00	2632.87	2276.74
Return on Equity	3716.59	3724.42	3724.42	3724.42	3724.42
Interest on Working Capital	250.99	245.21	238.95	232.74	226.60
O & M Expenses	381.52	403.42	426.57	450.92	476.49
Sub Total	11759.43	11445.52	11106.29	10768.31	10431.61
Transmission Majoration Factor	1175.94	1144.55	1110.63	1076.83	1043.16
Total	12935.37	12590.08	12216.92	11845.14	11474.77

APPLICATION FEE AND THE PUBLICATION EXPENSES

40. In accordance with our decision in order dated 11.1.2010 in Petition No. 109/2009, the petitioner shall be entitled to reimbursement of filling fee. The petitioner shall also be entitled to reimbursement of expenses on publication of notices in connection with the present petition.

41. In terms of the Transmission System Agreement entered into between the petitioner and Powergrid Corporation of India Ltd., the Respondent No. 1, the petitioner shall claim all charges from Respondent No. 1 on monthly basis. Respondent No. 1 has entered into BPTAs with Respondent Nos. 2 to 7 and accordingly, Respondent No. 1 shall be entitled to raise bills for all charges approved in this order in accordance with Regulation 23 which shall be shared by Respondent Nos. 2 to 7 in accordance with Regulation 33 of 2009 regulations.

42. This order disposes of Petition No. 288/2009.

Sd/-
(M.DEENA DAYALAN)
MEMBER

sd/-
(V.S.VERMA)
MEMBER



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 IFC					
Gross loan opening	14958.11	15021.32	15021.32	15021.32	15021.32
Cumulative Repayment up to the date of commercial operation/previous year	2491.58	3743.36	4995.14	6246.92	7498.70
Net Loan-Opening	12466.53	11277.96	10026.18	8774.40	7522.62
Additions during the year	63.21	0.00	0.00	0.00	0.00
Repayment during the year	1251.78	1251.78	1251.78	1251.78	1251.78
Net Loan-Closing	11277.96	10026.18	8774.40	7522.62	6270.84
Average Loan	11872.25	10652.07	9400.29	8148.51	6896.73
Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
Interest	1044.76	937.38	827.23	717.07	606.91
Rep Schedule	24 equal half yearly installments from 15.7.2007				
2 ADB					
Gross loan opening	13300.27	13356.47	13356.47	13356.47	13356.47
Cumulative Repayment up to the date of commercial operation /previous year	2215.44	3328.48	4441.52	5554.56	6667.60
Net Loan-Opening	11084.83	10027.99	8914.95	7801.91	6688.87
Additions during the year	56.20	0.00	0.00	0.00	0.00
Repayment during the year	1113.04	1113.04	1113.04	1113.04	1113.04
Net Loan-Closing	10027.99	8914.95	7801.91	6688.87	5575.83
Average Loan	10556.41	9471.47	8358.43	7245.39	6132.35
Rate of Interest	9.14%	9.14%	9.14%	9.14%	9.14%
Interest	964.86	865.69	763.96	662.23	560.50
Rep Schedule	24 semi annual equal installments from 15.7.2007				
3 IDFC					
Gross loan opening	11238.10	11285.56	11285.56	11285.56	11285.56
Cumulative Repayment up to the date of commercial operation /previous year	1871.94	2812.40	3752.86	4693.32	5633.78
Net Loan-Opening	9366.16	8473.16	7532.70	6592.24	5651.78
Additions during the year	47.46	0.00	0.00	0.00	0.00
Repayment during the year	940.46	940.46	940.46	940.46	940.46
Net Loan-Closing	8473.16	7532.70	6592.24	5651.78	4711.32
Average Loan	8919.66	8002.93	7062.47	6122.01	5181.55
Rate of Interest	10.48%	10.48%	10.48%	10.48%	10.48%
Interest	934.78	838.71	740.15	641.59	543.03
Rep Schedule	48 quarterly installments from 15.4.2007				
4 SBI					
Gross loan opening	10007.28	10049.57	10049.57	10049.57	10049.57
Cumulative Repayment up to the date of commercial operation /previous year	1871.49	2708.95	3546.41	4383.87	5221.33
Net Loan-Opening	8135.79	7340.62	6503.16	5665.70	4828.24
Additions during the year	42.29	0.00	0.00	0.00	0.00



Repayment during the year	837.46	837.46	837.46	837.46	837.46
Net Loan-Closing	7340.62	6503.16	5665.70	4828.24	3990.78
Average Loan	7738.21	6921.89	6084.43	5246.97	4409.51
Rate of Interest	10.19%	10.19%	10.19%	10.19%	10.19%
Interest	788.52	705.34	620.00	534.67	449.33
Rep Schedule	48 quarterly installments from 31.3.2007				
Total Loan					
Gross loan opening	49503.76	49712.92	49712.92	49712.92	49712.92
Cumulative Repayment up to the date of commercial operation /previous year	8450.45	12593.19	16735.93	20878.67	25021.41
Net Loan-Opening	41053.31	37119.73	32976.99	28834.25	24691.51
Additions during the year	209.16	0.00	0.00	0.00	0.00
Repayment during the year	4142.74	4142.74	4142.74	4142.74	4142.74
Net Loan-Closing	37119.73	32976.99	28834.25	24691.51	20548.77
Average Loan	39086.52	35048.36	30905.62	26762.88	22620.14
Rate of Interest	9.5504%	9.5500%	9.5495%	9.5489%	9.5480%
Interest	3732.92	3347.12	2951.34	2555.55	2159.76

