

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No.302/2010**

**Coram: Shri S.Jayaraman, Member  
Shri V.S.Verma, Member  
Shri M.Deena Dayalan, Member**

**Date of Hearing: 26.5.2011**

**Date of Order: 27.6.2011**

**In the matter of**

Determination of transmission tariff for Special Protection Scheme for Rihand Dadri HVDC Bio-pole and Gorakhpur-Muzzafarpur 400 kV line in Northern Regional 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 Power Corporation Ltd., 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 U.K.Tyagi, PGCIL
2. Shri M.M. Mondal, PGCIL
3. Shri K.K.Jai, PGCIL



## **ORDER**

This petition has been filed by Power Grid Corporation of India Limited for determination of transmission tariff for Special Protection Scheme for Rihand Dadri HVDC Bio-pole and Gorakhpur-Muzzafarpur 400 kV line (hereinafter referred to as the "transmission asset") in Northern Region for the period from 1.4.2009 to 31.3.2014, based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 regulations"). The petitioner has made the following additional prayers:-

- (a) Approve the adjusted capital cost on as 31.3.2009 and projected additional capital expenditure during 2009-10 and 2010-11;
- (b) 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the service tax on transmission charges separately from the respondents, if at any time exemption from service tax is withdrawn and transmission is notified as a taxable service;
- (c) Approve reimbursement of expenditure by the beneficiaries towards petition filing fee and publication of notices in the newspaper as per the 2009 regulations;
- (d) Allow to bill and adjust impact on interest on loan due to change in interest rate on account of floating rate of interest applicable during 2009-14, if any from the respondents; and
- (e) Allow to bill and recover licence fee separately from the respondents;



2. The transmission asset was declared under commercial operation w.e.f 1.8.2008. The annual transmission charges of the transmission asset from the date of commercial operation up to 31.3.2009 were approved by the Commission vide order dated 26.4.2010 in Petition No. 249/2009.

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

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	15.18	16.76	16.84	16.84	16.84
Interest on Loan	14.26	14.40	12.92	11.35	9.78
Return on Equity	12.57	13.88	13.94	13.94	13.94
Interest on Working Capital	0.88	1.19	1.66	1.63	1.60
O & M Expenses	0.00	5.00	15.00	15.00	15.00
<b>Total</b>	<b>42.89</b>	<b>51.23</b>	<b>60.36</b>	<b>58.76</b>	<b>57.16</b>

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	0.00	0.75	2.25	2.25	2.25
O & M expenses	0.00	0.42	1.25	1.25	1.25
Receivables	7.15	8.54	10.06	9.79	9.53
<b>Total</b>	<b>7.15</b>	<b>9.71</b>	<b>13.56</b>	<b>13.29</b>	<b>13.03</b>
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
<b>Interest on working capital</b>	<b>0.88</b>	<b>1.19</b>	<b>1.66</b>	<b>1.63</b>	<b>1.60</b>

5. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under section 64 of the Electricity Act, 2003. Reply to the petition has been filed by Punjab State Power Corporation Ltd (PSPCL). The issue raised by respondent pertain to the petitioner`s claim of equity and O & M expenses. The issues have been addressed in relevant paras of this order.

## **CAPITAL COST**

6. The last proviso to clause (2) of Regulation 7 of the 2009 regulations, as amended vide Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2011, provides as under:

*“Provided also that in case of the existing projects, the capital cost admitted by the Commission prior to 1.4.2009 duly trued up by excluding un-discharged liability, if any, as on 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.”*

7. The details of approved capital cost as on the date of commercial operation and additional capital expenditure projected to be incurred during 2009-10 and 2010-11 as claimed by the petitioner are as under:

Approved cost	Admitted capital cost as on 31.3.2009	Additional initial spares	Additional Capital expenditure proposed to be incurred		Total
			2009-10	2010-11	
			375.00	216.47	

8. The petitioner had claimed the total capital expenditure of ₹ 223.34 lakh as on 31.3.2009, which included cost of spares of ₹ 10.12 lakh. The Commission vide order dated 26.4.2010 in Petition No. 249/2009 has restricted the allowable spares in the capital cost to ₹ 3.25 lakh. Thus, an amount of ₹ 6.87 lakh was deducted from the total capital expenditure claimed by the petitioner. As the major portion of the initial spares pertain to Power Line Carrier Communication (PLCC), the difference of ₹ 6.87 lakh was adjusted under the head of Power Line Carrier Communication.

## **ADDITIONAL CAPITAL EXPENDITURE**

9. Regulation 9 of the 2009 regulations, as amended by Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2011, provides as under:

*“(1) The capital expenditure incurred or projected to be incurred, on the following counts within 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 regulation 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) Deferred works relating to ash pond or ash handling system in the original scope of work;*
- (iv) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) including due to geological reasons after adjusting for proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation;*
- (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.  
*Provided that in respect sub-clauses (iv) and (v) above, any expenditure on acquiring the minor items or the assets like tools and tackles, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, fans, washing machines, heat convectors, mattresses, carpets etc. brought after the cut-off date shall not be considered for additional capitalization for determination of tariff w.e.f. 1.4.2009.**
- (vi) In case of gas/ liquid fuel based open/ combined cycle thermal generating stations, any expenditure which has become necessary on renovation of gas turbines after 15 year of operation from its COD and the expenditure necessary due to obsolescence or non-availability of spares for successful and efficient*

operation of the stations. Provided that any expenditure included in the R&M on consumables and cost of components and spares which is generally covered in the O&M expenses during the major overhaul of gas turbine shall be suitably deducted after due prudence from the R&M expenditure to be allowed.

- (vii) (vii) Any capital expenditure found justified after prudence check necessitated on account of modifications required or done in fuel receipt system arising due to non-materialisation of full coal linkage in respect of thermal generating station as result of circumstances not within the control of the generating station.
- (viii) Any undischarged liability towards final payment/withheld payment due to contractual exigencies for works executed within the cut-off date, after prudence check of the details of such deferred liability, total estimated cost of package, reason for such withholding of payment and release of such payments etc.”

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

Years	Nature and details of expenditure	Amount (₹ in lakh)
2009-10	Power Line Carrier Communication–Balance/ Retention payments	47.35
2010-11	Power Line Carrier Communication–Balance/ Retention payments	2.48
	<b>Total</b>	<b>49.83</b>

11. The petitioner has claimed additional capital expenditure of ₹ 47.25 lakh and ₹ 2.48 lakh on account of balance/retention payments incurred/proposed to be incurred during 2009-10 and 2010-11 in respect of Power Line Carrier Communication. The petitioner vide its affidavit dated 25.2.2011 has submitted that additional capital expenditure incurred during 2009-10 and 2010-11 is on account of balance and retention payment only, for which the work has been completed within cut-off date. The petitioner has further submitted that since the date of commercial operation of the transmission asset is 1.8.2008, the cut-off date as per 2004 regulations will be reckoned as 31.3.2010 and further the year 2009-10 is falling under 2009 regulations, therefore the cut-off date shall be governed by the 2009

regulations. Accordingly, the cut-off date i.e. 2 years from financial year closing after the date of commercial operation has been reckoned as 31.3.2011. The petitioner has further requested for relaxation of Regulations 7 (2) of the 2009 regulations to allow the additional capital expenditure for 2010-11 on account of undischarged liabilities after the cut-off date.

12. With regard to admissibility of undischarged liabilities, it is observed that additional capital expenditure of ₹ 47.25 lakh on account of balance/retention payments incurred during 2009-10 is within cut-off date. i.e 31.3.2010. Therefore, additional capital expenditure of ₹ 47.25 lakh is allowed under Regulation 9 (1) of the 2009 regulations. The expenditure incurred during 2010-11 is admissible under Regulation 9(2)(viii) of 2009 regulations. Accordingly, ₹ 2.48 lakh incurred during 2010-11 has been allowed.

### **INITIAL SPARES**

13. It is noted that initial spares included in the capital cost of the transmission asset has been restricted to 1.5 % of actual capital expenditure incurred up to the cut-off date (i.e.31.3.2010) in terms of Regulation 52 read with Regulation 49 (xiv) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004 (hereinafter referred to as “the 2004 regulations”). Initial spares have been recalculated considering capital expenditure up to the cut-off date. Accordingly, the initial spares have been worked out as given overleaf.

							(₹ In lakh)
Particulars	Cost as on Cutoff date	Initial spares Claimed	Rate as per 2004 regulations	Spares Worked Out	Excess Spares claimed	Adjusted in Petition No. 249/2009	Amount allowed taking into account capital cost up to the cut-off date
	(a)	(b)	(c)	$(d) = ((a - b) * c) / (100 - c)\%$	$(e) = (b) - (d)$	(f)	$(g) = (f) - (e)$
Total Expenditure	270.69	10.12	1.50%	3.97	6.15	6.87	0.72

14. It is noted that the Commission vide its order dated 26.4.2011 in Petition No. 249/2009 had calculated the initial spares considering capital cost incurred up to 31.3.2008 and accordingly, excess initial spares of ₹ 6.87 lakh claimed was deducted from the Power Line Carrier Communication during 2004-09. However, in the present petition, the spares have been recalculated considering the additional capital expenditure up to cut-off date i.e 31.3.2010 and initial spares have been worked out to ₹ 3.97 lakh. Therefore, the initial spares to the tune of ₹ 0.72 lakh (₹ 6.87 lakh – ₹ 6.15 lakh) are allowed and has been added to the opening balance of Power Line Carrier Communication as on 1.4.2009.

### **TOTAL CAPITAL COST**

15. Based on the above, gross block as given overleaf, has been considered for the purpose of tariff for the transmission assets, after allowing additional capital expenditure as claimed by the petitioner.



		(₹ in lakh)
Particulars	Amount	
Capital cost as on 1.4.2009	216.47	
Addition: Initial spares (allowed up to cut-off date i.e 31.3.2010)	0.72	
Capital cost admissible for tariff determination	217.19	
Projected additional capital expenditure during 2009-10	47.35	
Capital cost as on 1.4.2010	264.54	
Projected additional capital expenditure during 2010-11	2.48	
Capital cost as on 1.4.2011 and onwards	267.02	

16. Accordingly, capital cost of ₹ 217.19 lakh for transmission asset has been considered as opening capital cost for the purpose of tariff after allowing the initial spares of ₹ 0.72 lakh.

### **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 70.17:29.83 for the transmission asset as given below:

Particulars	Financial Package as on 1.4.2009	
	Amount (₹ Lakh)	%
<b>Asset</b>		
Debt	151.90	70.14
Equity	64.57	29.8
<b>Total</b>	<b>216.47</b>	<b>100.0</b>

19. For the purpose of tariff, debt-equity considered for the transmission asset is as under:

Particulars	Capital cost as on 31.3.2014	
	Amount (₹ in lakh)	%
<b>Asset</b>		
Debt	187.28	70.14
Equity	79.74	29.86
<b>Total</b>	<b>267.02</b>	<b>100.00</b>

20. The petitioner has further claimed the amount of additional capital expenditure in the debt-equity ratio of 70:30 and 70.16:29.84 for the years 2009-10 and 2010-11 which has been considered for the purpose of tariff as given overleaf.

	Normative (Projected)	
	(₹ in lakh)	%
<b>Additional capital expenditure for 2009-10</b>		
Debt	33.15	70.00
Equity	14.21	30.00
<b>Total</b>	<b>47.35</b>	<b>100.00</b>
<b>Additional capital expenditure for 2010-11</b>		
Debt	1.74	70.16
Equity	0.74	29.84
<b>Total</b>	<b>2.48</b>	<b>100.00</b>

21. PSPCL has submitted that in the Form 1 (a) of the petition, notional equity towards additional capital expenditure has been considered and same should be clarified by the petitioner. In response, the petitioner vide its rejoinder dated 25.5.2011 has submitted that tariff calculations have been carried out in the Forms as per the 2009 regulations. The equity has been proposed on notional basis since the additional capital expenditure is yet to be incurred. The actual expenditure and funding thereof shall be furnished at the time of truing up. It is clarified that the equity has been considered strictly as per the 2009 regulations.

### **RETURN ON EQUITY**

22. Regulation 15 of the 2009 regulations, as amended vide Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2011, 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 Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be.

(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.

(5) The generating company or the transmission licensee, as the case may be, shall recover the shortfall or refund the excess Annual Fixed Charge on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission:

Provided further that Annual Fixed Charge with respect to the 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 in accordance with Regulation 6 of these regulations."

23. The petitioner has computed return on equity on pre-tax basis on 11.33% MAT in accordance with tax rate applicable for the year 2008-09 and has claimed return on equity @ 17.481%.

24. Accordingly, the return on equity has been computed as under:

Particulars	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Equity as on 1.4.2009	64.79	78.99	79.74	79.74	79.74
Addition due to Additional Capitalisation	14.21	0.74	0.00	0.00	0.00
Closing Equity	78.99	79.74	79.74	79.74	79.74
Average Equity	71.89	79.37	79.74	79.74	79.74
Return on Equity (Base Rate )	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.33%	11.33%	11.33%	11.33%	11.33%
Rate of Return on Equity (Pre Tax )	17.481%	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	<b>12.57</b>	<b>13.87</b>	<b>13.94</b>	<b>13.94</b>	<b>13.94</b>

25. As regards the petitioner's claim for grossing up of Return on Equity as per the applicable tax rate in accordance with the relevant Finance Act, the petitioner shall be entitled to claim the short fall on account of Return of Equity due to change in the applicable Minimum Alternate Tax in accordance with clause (5) of Regulation 15 of 2009 regulations.

### **INTEREST ON LOAN**

26. 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."*

27. The interest on loan has been worked out as detailed below:
- (i) Gross amount of loan, repayment of instalments and rate of interest and weighted average rate of interest on actual average loan have been considered;
  - (ii) The repayment for the tariff period 2009-14 have been 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 shall be 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 as per (i) above 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. Any change in rate of interest subsequent to 1.4.2009 will be considered at the time of truing up.

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

(₹ in lakh)						
Details of loan	Up to 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	152.40	152.40	185.54	187.28	187.28	187.28
Cumulative Repayment up to Previous Year		8.05	23.23	39.99	56.82	73.65
Net Loan-Opening		144.35	162.31	147.29	130.46	113.63
Addition due to Additional Capitalisation		33.15	1.74	0.00	0.00	0.00
Repayment during the year		15.18	16.76	16.83	16.83	16.83
Net Loan-Closing		162.31	147.29	130.46	113.63	96.79
Average Loan		153.33	154.80	138.88	122.04	105.21
Weighted Average Rate of Interest on Loan		9.3000 %	9.3000 %	9.3000 %	9.3000 %	9.3000 %
<b>Interest</b>		<b>14.26</b>	<b>14.40</b>	<b>12.92</b>	<b>11.35</b>	<b>9.78</b>

## **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.*

*xxxx*

*(3) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.*

*(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III to these regulations for the assets of the generating station and transmission system:*

*Provided that, the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets.*

*(5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2009 from the gross depreciable value of the assets.*



(6) Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.”

30. The transmission asset was declared under commercial operation on 1.8.2008. Accordingly, it will complete 12 years after the year 2013-14. Depreciation has been calculated annually based on Straight Line Method and at rates specified in **Appendix-III** of the 2009 regulations as under:

Details of Depreciation	(₹ in lakh)					
	Up to 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Gross Block	217.19	217.19	264.54	267.02	267.02	267.02
Addition during 2009-14 due to projected ACE		47.35	2.48	0.00	0.00	0.00
Gross block		264.54	267.02	267.02	267.02	267.02
Average gross block		240.86	265.78	267.02	267.02	267.02
Rate of Depreciation		6.3019%	6.3046%	6.3047%	6.3047%	6.3047%
Depreciable Value (90%)		216.78	239.20	240.32	240.32	240.32
Remaining Depreciable Value		208.73	215.97	200.33	183.50	166.66
<b>Depreciation</b>		<b>15.18</b>	<b>16.76</b>	<b>16.83</b>	<b>16.83</b>	<b>16.83</b>

### **OPERATION & MAINTENANCE EXPENSES**

31. The petitioner has claimed the projected O & M expenditure of ₹ 5.0 lakh, ₹ 15.0 lakh, ₹ 15.0 lakh and ₹ 15.00 lakh to be incurred during 2010-11, 2011-12, 2012-13 and 2013-14, respectively. The petitioner has submitted that the O & M expenditure incurred during 2009-10 in respect of transmission asset is nil since the equipment was under warranty.

32. PSPCL has submitted that as the special protection scheme is not covered under any category of O & M expenses in the 2009 regulations, separate O & M expenses are not admissible. The claim of petitioner for O & M expenses should not be allowed. PSPCL has also submitted that 400 kV Gorakhpur-Muzzafarpur line has

its own protection scheme in line with the HVDC Rihand-Dadri line and these protections are already covered under the 2009 regulations. PSPCL has submitted that the petitioner has not requested for relaxation of the 2009 regulations to allow the O & M expenses for Special Protection Scheme. Therefore, an item which has not been claimed should not be allowed.

33. In response, the petitioner has submitted that the Commission, vide its order dated 26.4.2010 in Petition No. 249/2009 has dealt with the issue of applicability of O & M expenditure. Referring to the said order, the petitioner has submitted that the Commission has allowed 7.5% of the admitted capital even after passage of more than six years in the ULDC scheme and 15 of the 22 equipment sites are in the constituent premises (non POWERGRID sites) which have to be maintained by the nearest Power Grid site and accessing them would require considerable manpower cost. Accordingly, the petitioner has claimed 10% of capital cost as O & M expenses for the maintenance of the system during 2008-09. For the subsequent years, the petitioner has prayed for escalation at the rate of 10% of the capital cost for calculation of O & M expenses. The petitioner has further submitted that Annual Maintenance Contract has already been awarded consequent to the expiry of warranty and certain amount is required for repair/replacement of the electronic cards during the current period and hence, O & M expenses are claimed on estimated basis. The petitioner has submitted that provision has been made for expenditure on account of replacement and repair of components (other than those covered under warranty), transport and other expenditure incurred/projected to be incurred on the deployment of the manufacturer's personnel, etc.



34. We have considered the objections of PSPCL and submissions of the petitioner. It is clarified that the Special Protection Scheme has been considered as separate transmission asset. Therefore, O & M expenses of ₹ 5.0 lakh, ₹ 15.0 lakh, ₹ 15.0 lakh and ₹ 15.00 lakh to be incurred during 2010-11, 2011-12, 2012-13 and 2013-14, respectively claimed by the petitioner are allowed subject to adjustment as per actual at the time of truing up.

35. The petitioner has submitted that 50% compensation considered in the O&M norms in 2009 regulations on account of pay revision of the employees of public sector undertaking is insufficient to meet the actual impact of pay revision of its employees. The petitioner intends to approach the Commission for suitable revision in the O & M norms in case the impact of wage hike with effect from 1.1.2007 is more than 50%. If any application is made by the petitioner, the same shall 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 fixed cost. The petitioner has claimed the receivables on the basis of 2 months' transmission charges. In the tariff being allowed, receivables have been worked out on the basis 2 months' transmission charges.

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

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

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

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

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	0.00	0.75	2.25	2.25	2.25
O & M expenses	0.00	0.42	1.25	1.25	1.25
Receivables	7.15	8.54	10.06	9.79	9.53
<b>Total</b>	7.15	9.70	13.56	13.29	13.03
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest on working capital	<b>0.88</b>	<b>1.19</b>	<b>1.66</b>	<b>1.63</b>	<b>1.60</b>

## **TRANSMISSION CHARGES**

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

	(₹ in lakh)				
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	15.18	16.76	16.83	16.83	16.83
Interest on Loan	14.26	14.40	12.92	11.35	9.78
Return on Equity	12.57	13.87	13.94	13.94	13.94
Interest on Working Capital	0.88	1.19	1.66	1.63	1.60
O & M Expenses	0.00	5.00	15.00	15.00	15.00
<b>Total</b>	<b>42.88</b>	<b>51.22</b>	<b>60.35</b>	<b>58.75</b>	<b>57.15</b>

## **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.

## **SERVICE TAX**

39. 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. As the petitioner has no liability for service tax at present, the prayer is infructuous and it is accordingly rejected.

## **LICENCE FEE**

40. The petitioner has prayed for 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.

41. The transmission charges allowed shall be recovered on monthly basis in accordance with Regulation 23 and shall be shared by the respondent in accordance with Regulation 33 of the 2009 regulations up to 30.6.2011. With effect from 1.7.2011, billing, collection and disbursement of the transmission charges shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2010 and the Removal of Difficulties orders issued hereunder.

42. This order disposes of Petition No. 302/2010.

Sd/-  
**(M. Deena Dalayan)**  
Member

Sd/-  
**(V.S.Verma)**  
Member

Sd/-  
**(S.Jayaraman)**  
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	<b>Bond-XXVI</b>					
	Gross loan opening	139.00	139.00	139.00	139.00	139.00
	Cumulative Repayment up to the date of commercial operation/previous year	0.00	0.00	0.00	11.58	23.17
	Net Loan-Opening	139.00	139.00	139.00	127.42	115.83
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	11.58	11.58	11.58
	Net Loan-Closing	139.00	139.00	127.42	115.83	104.25
	Average Loan	139.00	139.00	133.21	121.63	110.04
	Rate of Interest	9.30%	9.30%	9.30%	9.30%	9.30%
	Interest	12.93	12.93	12.39	11.31	10.23
	Rep Schedule	12 Annual instalments from 7.3.2012				
	<b>Total Loan</b>					
	Gross loan opening	139.00	139.00	139.00	139.00	139.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00	0.00	11.58	23.17
	Net Loan-Opening	139.00	139.00	139.00	127.42	115.83
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	11.58	11.58	11.58
	Net Loan-Closing	139.00	139.00	127.42	115.83	104.25
	Average Loan	139.00	139.00	133.21	121.63	110.04
	Rate of Interest	9.3000%	9.3000%	9.3000%	9.3000%	9.3000%
	<b>Interest</b>	<b>12.93</b>	<b>12.93</b>	<b>12.39</b>	<b>11.31</b>	<b>10.23</b>