

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 17/TT/2011**

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

**Date of Hearing: 19.7.2011**

**Date of Order: 23.5.2012**

**In the matter of:**

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 for determination transmission tariff for combined assets of 400 kV D/C Kanpur- Ballabgarh Transmission Line (DOCO 1.11.2010) and 40% FSC at Ballabgarh on 400 kV D/C Kanpur- Ballabgarh Transmission Line (anticipated DOCO 1.3.11) along with associated bays under NRSS-IX, from anticipated DOCO to 31.3.2014 for tariff block 2009-14 period in Northern Region (Combined Assets of NRSS-IX).

**And**

**In the matter of:**

Power Grid Corporation of India Limited, Gurgaon

.....**Petitioner**

**Vs**

1. Rajasthan Power Procurement Centre, Jaipur
2. Ajmer Vidyut Vitaran Nigam Ltd., Ajmer
3. Jaipur Vidyut Vitaran Nigam Ltd, Jaipur
4. Jodhpur Vidyut Vitaran Nigam Ltd, Jodhpur
5. Himachal Pradesh State Electricity Board, Shimla
6. Punjab State Electricity Board, Patiala
7. Haryana Vidyut Prasaran Nigam Ltd, 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 Ltd., 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. G. Agarwal, PGCIL
2. Shri S.S. Raju, PGCIL
3. Shri T.P.S. Bawa, PSPCL

**ORDER**

This petition has been filed by Power Grid Corporation of India Limited (PGCIL) under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 (hereinafter referred to as ("2009 regulations") for determination transmission tariff for combined assets of 400 kV D/C Kanpur- Ballabgarh Transmission Line (date of commercial operation 1.11.2010) and 40% FSC at Ballabgarh on 400 kV D/C Kanpur- Ballabgarh transmission line (anticipated date of commercial operation 1.3.11) along with associated bays under NRSS-IX, from anticipated date of commercial operation to 31.3.2014 for tariff block 2009-14 period in Northern Region (Combined Assets of NRSS-IX).

2. Administrative approval and expenditure sanction to the transmission scheme was accorded by the Board of Directors of POWERGRID vide C/CP/NRSS-IX dated 7.7.2008 for ₹52514 lakh including an IDC of ₹3855 lakh based on 1st Quarter, 2008 price level. The scope of work covered under the project broadly includes construction of following transmission lines and sub-stations:-

**Transmission Lines:**

- Kanpur –Ballabgarh 400 kV D/C Line

**Sub-Stations:**

- Extension of existing Kanpur Sub-Station
- Extension of existing Ballabgarh Sub-Station

- 40% Series Compensation on proposed Kanpur – Ballabgarh 400 kV D/C Line

**Reactive Compensation:**

- 80 MVAR line reactor on each circuit at both ends on proposed Kanpur –Ballabgarh 400 kV D/C Line

3. The details of the assets covered in the petition and their date of commercial operation are as under:-

<b>Sr. No.</b>	<b>Asset</b>	<b>Particulars</b>	<b>DOCO</b>
1	Asset 1	400 kV D/C, twin conductor Kanpur- Ballabgarh Transmission Line	1.11.2010
2	Asset 2	40% FSC at Ballabgarh on 400 kV D/C Kanpur-Ballabgarh Transmision Line	1.6.2011 (Anticipated DOCO)

4. The transmission tariff for Asset 1 was approved by the Commission vide order dated 1.8.2011 in Petition No.329/2010 and Asset 2 has been clubbed with Asset 1, as on 1.6.2011, in the instant petition. The petitioner has submitted, vide affidavit dated 5.5.2011, that the anticipated date of commercial operation was 1.6.2011. The applicant has not placed on record the actual date of commercial operation of Asset 2. Therefore, the capital cost incurred/projected to be incurred as on 1.6.2011 for the combined asset has been taken into consideration for determination of the annual transmission charges. The transmission charges allowed in the petition will, however, be applicable from the date of actual commercial operation of Asset 2. It is clarified that the transmission charges for Asset 1, allowed in our order dated 1.8.2011 in Petition No.329/2010 would continue to be applicable till the commercial operation of Asset 2.

5. Details of the transmission charges claimed by the petitioner are as under:-

(₹ in lakh)			
Combined Asset	2011-12 (pro-rata)	2012-13	2013-14
Depreciation	1679.20	2044.58	2044.58
Interest on Loan	1880.63	2108.20	1922.11
Return on equity	1719.58	2093.69	2093.69
Interest on Working Capital	129.88	155.75	153.80
O & M Expenses	509.44	646.26	683.07
<b>Total</b>	<b>5918.73</b>	<b>7048.48</b>	<b>6897.25</b>

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

(₹ in lakh)			
Combined Asset	2011-12 (pro-rata)	2012-13	2013-14
Maintenance Spares	76.42	96.94	102.46
O & M expenses	42.45	53.86	56.92
Receivables	986.46	1174.75	1149.54
<b>Total</b>	<b>1105.33</b>	<b>1325.55</b>	<b>1308.92</b>
Rate of Interest	129.88	155.75	153.80
<b>Interest</b>	<b>11.75%</b>	<b>11.75%</b>	<b>11.75%</b>

7. Reply to the petition has been filed by Respondent No.6, Punjab State Power Corporation Limited (PSPCL) and Respondent No.9, Uttar Pradesh Power Corporation Ltd. (UPPCL). PSPCL, in its reply dated 27.5.2011, has raised the issue of cost over-run, additional RoE and O&M expenses, etc. UPPCL, in its reply dated 14.7.2011, has raised the issue of cost over-run, application fee, depreciation, service tax, licence fee and return on equity.

8. Having heard the representatives of the parties and perused the material on record, we proceed to dispose of the petition. While doing so, we also take care of the submissions of the respondents in their replies and address them in the relevant paragraphs.

9. The petitioner initially, in the petition has submitted that the anticipated date of commercial operation of the Asset 2 as 1.3.2011. Subsequently, vide affidavit dated 4.5.2011, the petitioner has submitted that the anticipated date of commercial operation has been revised to 1.6.2011. The petitioner was directed to file the revised Chartered Accountant Certificate/Management Certificate indicating the expenditure as on the date of commercial operation. In reply, the petitioner, vide affidavit dated 13.6.2012 has submitted that the petition was filed on 7.2.2011 in line with Regulation 5(1) and 5 (2) of 2009 regulations which stipulates that an application can be made for transmission lines or sub-stations, projected to be completed within six months from the date of application. It shall make an application as per the Appendix-I to the 2009 regulations for determination of tariff based on capital expenditure incurred duly certified by the Chartered Accountant or projected to be incurred during the tariff period for the transmission system. It was also submitted that even if the formats/Chartered Accountant's Certificate are revised, the tariff would be projected and shall have to be trued up later. Accordingly, the tariff in the instant petition has been worked out for Asset 1 on the basis of admitted expenditure in the order dated 1.8.2011 in Petition No.329/2010 and for Asset 2 on the basis of the cost details submitted by the petitioner in the instant petition.

10. The details of apportioned approved cost as on the date of commercial operation and the projected additional capital expenditure for the above mentioned assets are as follows:-

(₹ in lakh)

Particulars	Date of commercial operation	Apportioned approved cost	Expenditure up to DOCO	Expenditure from DOCO to 31.3.2011	Projected expenditure from 1.4.2011 to 31.3.2012	Estimated completion cost
Asset 1	1.11.2010	49473.45	33724.07	1430.27	469.74	35624.08
Asset 2	1.06.2011 (anticipated)	3040.55	2071.33	414.11	666.74	3151.71
TOTAL		52514.00	35795.40	1844.38	1136.01	38775.79

### **CAPITAL COST**

11. As regards the capital cost, Regulation 7 (1) of the 2009 regulations provides as under:-

*“The expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan – (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the fund deployed, - up to the date of commercial operation of the project, as admitted by the Commission, after prudence check.”*

12. UPPCL in its reply has submitted that the apportioned approved cost of Asset 2 is ₹3040.55 lakh and as per the petitioner the estimated completion cost is ₹3151.71 lakh. There has been of cost over-run of ₹111.16 lakh. The petitioner has not furnished the reasons for cost over-run and the petitioner should furnish the component wise cost. PSPCL has also submitted that there has been cost over-run in case of Asset 2 and it should not be allowed. We would like to clarify that Asset 2 is yet to be commissioned and in the instant petition only ₹2485.44 lakh is considered for the purpose of tariff calculations, though the petitioner has submitted that the estimated completion cost is ₹3151.71 lakh. The completion cost of Asset 2 as on the actual date of commercial operation shall be considered and allowed at the time of truing up at the end of the tariff period after prudence check. The capital cost considered for the purpose of tariff calculations is as follows:-

(₹ in lakh)

Particulars	Capital cost	Projected additional capital expenditure	Considered for calculation
Asset-1 (DOCO 1.11.2010)	33694.21	1430.27	35124.48
Asset-2 (Anticipated DOCO 1.6.2011)	2485.44	0.00	2485.44
Total			37609.92

### **PROJECTED ADDITIONAL CAPITAL EXPENDITURE**

13. With regard to additional capital expenditure, clause 9(1) of the 2009 regulations provides as under:-

*“Additional Capitalisation: (1) The capital expenditure incurred or projected to be incurred, on the following counts within the 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) XXX
- (iii) XXX
- (iv) XXX
- (v) XXX”

14. The 2009 regulations further define cut-off date as follows:-

*“cut-off date means 31<sup>st</sup> march of the year closing after 2 years of the year of commercial operation of the project, and incase of the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31<sup>st</sup> March of the year closing after 3 years of the year of commercial operation”.*

Therefore, the cut-off date for the above mentioned assets is 31.3.2013.

15. The petitioner has claimed projected additional capital expenditure of ₹1844.38 lakh and ₹1136.01 lakh for the years 2010-11 and 2011-12 respectively against balance and retention payment. The additional capital expenditure of ₹1844.38 lakh has already been included in the capital cost up to 31.3.2011 for Asset-I and Asset-II. The additional capital expenditure of ₹1136.01 lakh claimed is within the cut-off date. Hence, the additional capital

expenditure claimed by the petitioner has been considered for the purpose of tariff calculation.

### **DEBT- EQUITY RATIO**

16. Regulation 12 of the 2009 regulations provides that,-

*“12. **Debt-Equity Ratio.** (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:*

*Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.*

**Explanation.-** *The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.*

*(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.*

*(3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation.”*

17. Details of debt-equity in respect of the transmission assets as on the date of commercial operation are as follows:-

<b>Particulars</b>	<b>Amount (₹ in lakh)</b>	<b>%</b>
Debt	26327.03	70.00
Equity	11282.89	30.00
<b>Total</b>	<b>37609.92</b>	<b>100.00</b>



18. The details of debt-equity of asset considered for additional capital expenditure during 2011-12 is as under:-

2011-12	Amount (₹ in lakh)	%
<b>Particulars</b>	Normative	
Debt	795.21	70.00
Equity	340.80	30.00
<b>Total</b>	<b>1136.01</b>	<b>100.00</b>

19. Debt equity ratio of the assets as on 31.3.2014 is as follows:-

Capital cost as on 31.3.014		
Particulars	Amount (₹ in lakh)	%
Debt	27122.23	70.00
Equity	11623.70	30.00
<b>Total</b>	<b>38745.93</b>	<b>100.00</b>

### **RETURN ON EQUITY**

20. 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 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.”*

21. The petitioner has prayed to allow grossing up the base rate of return on equity based on tax rates viz., MAT, surcharge, any other cess, chares, levies etc., as per relevant Finance Act. UPPCL in its reply has submitted that the as per section 80-IA of Income Tax Act provides for 100% deduction in respect of profits for ten consecutive assessment years and the assessee may opt for any ten years out of 15 years beginning with the year in which the undertaking starts the eligible work by laying a network of new transmission or distribution lines during 1.4.1999 – 31.3.2011. In the instant case the date of commercial operation of new asset is anticipated on 1.3.2011 and therefore no Income Tax is leviable on this asset. Hence, the grossing up of base rate of return on equity with the applicable MAT rates for the relevant year and realisation is not justified.

22. The petitioner's prayer to allow grossing up the base rate of return on equity based on tax rates viz., MAT, surcharge, any other cess, chares, levies

etc., as per relevant Finance Act, shall be settled in accordance with the provisions of Regulation 15 of 2009 regulations.

23. The petitioner has claimed additional return on equity of 0.5% under the proviso to clause 15(2) of the 2009 regulations, extracted hereinabove, for timely completion of Kanpur – Ballabgarh 400 kV D/C Line.

24. The Respondent No.9, UPPCL, vide affidavit dated 14.7.2011, has submitted that the additional return on equity is admissible only if the whole projected is completed within the timeline specified in the 2009 regulations. As one of the assets is yet to be commissioned, the petitioner's request for additional return on equity should be rejected.

25. The Respondent No.6, PSPCL, has submitted that there was a delay of 11 months in commissioning the asset and hence the petitioner's claim for additional return on equity is not justified.

26. The petitioner in its rejoinder, dated 1.9.2011, has submitted the following reasons for claiming additional return on equity:-

(a) The 2009 regulations do not stipulate that the additional return on equity would be applicable in case whole scheme is completed within the stipulated time schedule. Even if part of the project is completed within the eligible time lines, the beneficiaries would be benefited by the reduced IDC & IEDC components of the project cost and the Utility would also be incentivized for early completion of the given asset(s).

(b) Para 2 (c) of Appendix-II of the 2009 regulations contains qualifying time schedule in months for different elements of a project. Combined reading of the above provisions establish that different elements would be eligible for additional return on equity if it is completed within the eligible time line specified in the 2009 regulations. The eligible time line in case of a scheme having combination of the various elements would be the time line having maximum time period. Further, Regulations 4(1) and 4(2) of 2009 regulations also allows filing of petitions for determination of tariff for units or block of assets.

(c) The timeline for this project is same as for 400 kV D/C transmission line i.e. 28 months for Plain Area from the date of investment approval, which is November 2010. Therefore, the petitioner has claimed additional return on equity for Asset-I 400 kV D/C Kanpur-Ballabgarh transmission line alongwith associated bays which was commissioned within the qualifying time as per Appendix-II of 2009 regulations.

(d) The 2009 regulations recognizes through various provisions that a transmission project is allowed to be completed gradually by commissioning different identifiable elements leading to the completion of the entire project. It is essential that a Transmission Project should be completed in different elements or stages as these would bring all the assets into gradual utilization as and when they are completed, instead of waiting for all the assets to be commissioned at one go. The

prudence of gradual commissioning has been envisaged in the various provisions of tariff 2009 regulations. Therefore, as many elements are completed before the timeline specified in the 2009 regulations, there will be reduction in the overall cost of completion of the project as a whole due to reduction in IDC/IEDC. The beneficiaries also would start utilizing these assets. Therefore, stage-wise commissioning of transmission projects as envisaged in the 2009 regulations is in the interest of the Power sector as a whole, both in terms of reduction in cost as well as socio-economic benefits due to early beneficial use. It was also submitted that the assets covered under the instant petition covers the complete scope of the project.

27. The petitioner had claimed additional return on equity for timely completion of Kanpur – Ballabgarh 400 kV D/C Line in Petition No.329/2010. The petitioner's request was considered and it was rejected by us. The relevant portion of our order dated 1.8.2011 in Petition No. 329/2010 is extracted below:-

*"28. In view of the above, the scheme accorded investment approval by the Government of India and Board of Petitioner Company, is entitled to the 0.5% incentive for timely completion of the project only if all elements of the project are completed within the time schedule specified in the 2009 regulations. The time schedule of the project would be the maximum of time schedule of the individual asset of the project as given in the 2009, regulations. In the present case, only 4000 kV Kanpur-Ballabgarh D/C transmission line has been commissioned within the time schedule as series compensation has not been commissioned yet. The project as a whole has not been commissioned within the time schedule, therefore, the petitioner is not entitled to additional return on equity of 0.5% in terms of Regulations 15 (2) of the 2009 regulations."*

28. The petitioner's request for additional return on equity has already been considered and rejected and we do not see any reason for reconsidering or

reviewing it. Accordingly, the petitioner's request for additional return on equity is rejected.

29. Accordingly, the following amount of return on equity has been allowed:-

(₹ in lakh)

<b>Combined Asset 1 &amp; 2</b>			
<b>Particulars</b>	<b>2011-12 (pro-rata)</b>	<b>2012-13</b>	<b>2013-14</b>
Opening Equity	11282.89	11623.70	11623.70
Addition due to additional capital expenditure	340.80	0.00	0.00
Closing Equity	11623.70	11623.70	11623.70
Average Equity	11453.29	11623.70	11623.70
Return on Equity (Base Rate )	15.50%	15.50%	15.50%
Tax rate for the year 2008-09	11.330%	11.330%	11.330%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%
<b>Return on Equity (Pre- Tax)</b>	<b>1668.46</b>	<b>2031.94</b>	<b>2031.94</b>

### **INTEREST ON LOAN**

30. 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.”*

31. In these calculations, interest on loan has been worked out as follows:-

- (a) 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, which includes the loans corresponding to Asset-I considered in Petition No. 329/2010.
- (b) Tariff is worked out considering normative loan and normative repayments. Depreciation allowed has been taken as normative repayment for the tariff period 2009-14.
- (c) Weighted average rate of interest on actual loan worked out as above has been applied on the notional average loan during the year to arrive at the interest on loan.

32. Detailed calculation of the weighted average rate of interest has been given in Annexure to this order.

33. Details of the interest on loan worked on the above basis are as under:-

(₹ in lakh)			
<b>Combined Asset 1 &amp; 2</b>			
Particulars	<b>2011-12 (pro-rata)</b>	<b>2012-13</b>	<b>2013-14</b>
Gross Normative Loan	26327.03	27122.23	27122.23
Cumulative Repayment upto Previous Year	1067.50	2745.38	4788.39
Net Loan-Opening	25259.53	24376.85	22333.84
Addition due to additional capital expenditure	795.21	0.00	0.00
Repayment during the year	1677.88	2043.01	2043.01
Net Loan-Closing	24376.85	22333.84	20290.84
Average Loan	24818.19	23355.35	21312.34
Weighted Average Rate of Interest on Loan	9.0376%	9.0332%	9.0267%
<b>Interest</b>	1869.15	2109.74	1923.79

## **DEPRECIATION**

34. Regulation 17 of the 2009 regulations provides for computation of depreciation in the following manner, namely:-

*“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.”

35. Depreciation has been worked out as per clause 17 (4) of 2009 regulations, 2009. Accordingly, depreciation has been worked out on the basis of capital expenditure as on the notional date of commercial operation, wherein depreciation for the first year is calculated on pro-rata basis for the part of year.

36. Details of the depreciation worked out are as under:-

(₹ in lakh)			
<b>Combined Asset 1 &amp; 2</b>			
	<b>2011-12 (pro-rata)</b>	<b>2012-13</b>	<b>2013-14</b>
Opening Gross Block	37609.92	38745.93	38745.93
Addition during 2009-14 due to projected additional capital expenditure	1136.01	0.00	0.00
Closing Gross Block	38745.93	38745.93	38745.93
Average Gross Block	38177.92	38745.93	38745.93
Rate of Depreciation	5.2739%	5.2728%	5.2728%
Depreciable Value	34360.13	34871.34	34871.34
Remaining Depreciable Value	33292.63	32125.95	30082.95
Depreciation	1677.88	2043.01	2043.01

### **OPERATION & MAINTENANCE EXPENSES**

37. The petitioner submitted that the O&M expenses 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 expenses for tariff period 2009-14. The petitioner has submitted that it would approach the Commission for suitable

revision in the norms for O&M expenses in case the impact of wage hike w.e.f 1.1.2007 is more than 50%.

38. PSPCL has submitted that O&M expenses should be allowed only as per the 2009 regulations and any extra claim may not be allowed.

39. Clause (9) of Regulation 19 of the 2009 regulations prescribes the norms for operation and maintenance expenses based on the type of sub-station and line. The norms for the assets covered in this petition are as follows:-

Element	2011-12	2012-13	2013-14
400 kV D/C twin conductor T/Line ( ₹ in lakh / Kms)	0.701	0.741	0.783
400 kV, bay ( ₹ in lakh / bay)	58.57	61.92	65.46

40. In accordance with the 2009 regulations, allowable O&M expenses for the assets covered in this petition are allowed as under:-

Element	(₹ in lakh)		
	2011-12 (Pro-rata for six month)	2012-13	2013-14
370.772 Kms., 400 kV D/C twin conductor T/Line	216.59	274.74	290.31
6 nos., 400 kV, bays	292.85	371.52	392.76
<b>Total</b>	<b>509.44</b>	<b>646.26</b>	<b>683.07</b>

## **INTEREST ON WORKING CAPITAL**

41. As per the 2009 regulations 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 claimed in the petition. In the tariff being allowed, receivables have been worked out on the basis of 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 has accordingly been 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 one month 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 the notional date of commercial operation of the assets is 1.6.2011, 11.75% interest rate has been considered as the rate of interest on working capital.

42. Necessary computations in support of interest on working capital are as follows:-

(₹ in lakh)

<b>Combined Asset 1 &amp; 2</b>			
	<b>2011-12 (pro-rata)</b>	<b>2012-13</b>	<b>2013-14</b>
Maintenance Spares	91.70	96.94	102.46
O & M expenses	50.94	53.86	56.92
Receivables	1170.71	1164.24	1139.06
Total	1313.35	1315.04	1298.45
Rate of Interest	11.75%	11.75%	11.75%
<b>Interest</b>	<b>128.60</b>	<b>154.52</b>	<b>152.59</b>

### **TRANSMISSION CHARGES**

43. The transmission charges being allowed for the transmission assets are summarized below:-

(₹ in lakh)

<b>Combined Asset 1 &amp; 2</b>			
	<b>2011-12 (pro-rata)</b>	<b>2012-13</b>	<b>2013-14</b>
Depreciation	1677.88	2043.01	2043.01
Interest on Loan	1869.15	2109.74	1923.79
Return on Equity	1668.46	2031.94	2031.94
Interest on Working Capital	128.60	154.52	152.57
O & M Expenses	509.44	646.26	683.07
<b>Total</b>	<b>5853.53</b>	<b>6985.46</b>	<b>6834.37</b>

### **FILING FEE AND THE PUBLICATION EXPENSES:-**

44. An application for determination of tariff for inter-State transmission system should be accompanied by an application fee at the rate of 0.05% of the total annual transmission charges per annum claimed in the application, subject to a minimum of ₹40,000/- as per the Central Electricity Regulatory Commission (Payment of Fees) Regulations, 2008. The petitioner has requested to adjust the excess filing fee already paid in Petition No. 329/2010

towards the filing fee to be paid in the petition. UPPCL has requested to abolish the requirement of payment of minimum filing fee of ₹40,000/- by invoking Regulation 9, Power to Relax, of the Payment of Fee Regulations. As per the Payment of Fees Regulations, a minimum of ₹40,000/- has to be deposited by an applicant for transmission tariff for every petition. Accordingly, the petitioner is required to pay the minimum prescribed fee of ₹40,000/-. As such, the petitioner's request for adjusting the filing fee deposited is rejected. The petitioner has deposited the filing fee of ₹2,000/- in the instant petition. The petitioner is directed to deposit the remaining ₹38,000/- within 30 days from the date of this order.

45. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. UPPCL and BRPL submitted that the filing fee shall be governed as per the Commission's order. In accordance with the Commission's order dated 11.1.2010 in Petition No. 109/2009, the petitioner shall be entitled to recover the filing fee directly from the beneficiaries on *pro-rata* basis. The petitioner shall also be entitled for reimbursement of the publication expenses in connection with the present petition, directly from the beneficiary on *pro-rata* basis.

### **LICENCE FEE**

46. The petitioner has submitted that they be allowed to bill and recover the licence fee separately from the respondents. The petitioner further submitted that in O&M norms for tariff block 2009-14, the cost associated with license

fees had not been captured and hence the license fee may be allowed to be recovered separately from the respondents.

47. UPPCL has submitted that as per Central Electricity Regulatory Commission (Payment of Fees) Regulations 2008, the petitioner being a deemed licensee is required to pay the licence fee. Further, the 2009 regulations do not provide for levy of licence fee on the beneficiaries and further submitted that the licence fee is the onus of the petitioner. It is clarified that the petitioner's prayer for licence fee shall be dealt with in accordance with our order dated 25.10.2011 in Petition No. 21/2011 and 22/2011.

#### **SERVICE TAX**

48. The petitioner has prayed that it be allowed to bill and recover the service tax on transmission charges separately from the respondents, if it is subjected to such service tax in future. The UPPCL has objected to levying of service tax on the beneficiaries. We consider the prayer of the petitioner premature and accordingly it is rejected.

#### **SHARING OF TRANSMISSION CHARGES**

49. The transmission charges allowed shall be recovered on monthly basis in accordance with Regulation 23 and shared by the beneficiaries in accordance with Regulation 33 of the 2009 regulation up to 30.6.2011. With effect from 1.7.2011, the billing, collection & disbursement of the transmission charges shall be governed by the provision of Central Electricity Regulatory Commission (sharing of inter-state transmission charges and losses) Regulations, 2010 as amended from time to time.

50. This order disposes of Petition No. 17/TT/2011.

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

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

Sd/-  
**(Dr. Pramod Deo)**  
Chairperson



<b>CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN</b>				
(₹ in lakh)				
	<b>Details of Loan</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
<b>1</b>	<b>Bond XXIX</b>			
	Gross loan opening	8867.00	<b>8867.00</b>	<b>8867.00</b>
	Cumulative Repayment upto DOCO/previous year	0.00	<b>0.00</b>	<b>738.92</b>
	Net Loan-Opening	8867.00	8867.00	8128.08
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	738.92	738.92
	Net Loan-Closing	8867.00	8128.08	7389.17
	Average Loan	8867.00	8497.54	7758.63
	Rate of Interest	9.20%	9.20%	9.20%
	Interest	815.76	781.77	713.79
	Rep Schedule	12 Annual instalments from 12.03.2013		
<b>2</b>	<b>Bond XXVIII</b>			
	Gross loan opening	4000.00	<b>4000.00</b>	<b>4000.00</b>
	Cumulative Repayment upto DOCO/previous year	0.00	<b>0.00</b>	<b>333.33</b>
	Net Loan-Opening	4000.00	4000.00	3666.67
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	333.33	333.33
	Net Loan-Closing	4000.00	3666.67	3333.33
	Average Loan	4000.00	3833.33	3500.00
	Rate of Interest	9.33%	9.33%	9.33%
	Interest	373.20	357.65	326.55
	Rep Schedule	12 Annual instalments from 15.12.2012		
<b>3</b>	<b>Bond XXXI</b>			
	Gross loan opening	4624.00	<b>4624.00</b>	<b>4624.00</b>
	Cumulative Repayment upto DOCO/previous year	0.00	<b>0.00</b>	<b>0.00</b>
	Net Loan-Opening	4624.00	4624.00	4624.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	385.33
	Net Loan-Closing	4624.00	4624.00	4238.67
	Average Loan	4624.00	4624.00	4431.33
	Rate of Interest	8.90%	8.90%	8.90%
	Interest	411.54	411.54	394.39
	Rep Schedule	12 Annual instalments from 25.02.2014		
<b>4</b>	<b>Bond XXXIV</b>			
	Gross loan opening	1429.82	<b>1429.82</b>	<b>1429.82</b>
	Cumulative Repayment upto DOCO/previous year	0.00	<b>0.00</b>	<b>0.00</b>



	Net Loan-Opening	1429.82	1429.82	1429.82
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	1429.82	1429.82	1429.82
	Average Loan	1429.82	1429.82	1429.82
	Rate of Interest	8.84%	8.84%	8.84%
	Interest	126.40	126.40	126.40
	Rep Schedule	12 Annual instalments from 21.10.2014		
<b>5</b>	<b>Bond XXX</b>			
	Gross loan opening	4686.00	<b>4686.00</b>	<b>4686.00</b>
	Cumulative Repayment upto DOCO/previous year	0.00	<b>0.00</b>	<b>0.00</b>
	Net Loan-Opening	4686.00	4686.00	4686.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	390.50
	Net Loan-Closing	4686.00	4686.00	4295.50
	Average Loan	4686.00	4686.00	4490.75
	Rate of Interest	8.80%	8.80%	8.80%
	Interest	412.37	412.37	395.19
	Rep Schedule	12 Annual instalments from 29.09.2013		
<b>6</b>	<b>Bond XXXIII</b>			
	Gross loan opening	1450.00	<b>1450.00</b>	<b>1450.00</b>
	Cumulative Repayment upto DOCO/previous year	0.00	<b>0.00</b>	<b>0.00</b>
	Net Loan-Opening	1450.00	1450.00	1450.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	1450.00	1450.00	1450.00
	Average Loan	1450.00	1450.00	1450.00
	Rate of Interest	8.64%	8.64%	8.64%
	Interest	125.28	125.28	125.28
	Rep Schedule	12 Annual instalments from 08.07.2014		
	<b>Total Loan</b>			
	Gross loan opening	25056.82	25056.82	25056.82
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	1072.25
	Net Loan-Opening	25056.82	25056.82	23984.57
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	1072.25	1848.08
	Net Loan-Closing	25056.82	23984.57	22136.49
	Average Loan	25056.82	24520.70	23060.53
	<b>Weighted Average Rate of Interest</b>	<b>9.0376%</b>	<b>9.0332%</b>	<b>9.0267%</b>
	<b>Interest</b>	<b>2264.54</b>	<b>2215.00</b>	<b>2081.59</b>