

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**PETITION NO. 248/TT/2013**

**Coram:**

**Shri A.S. Bakshi, Member  
Dr. M. K. Iyer, Member**

**Date of Hearing: 16.11.2015**

**Date of Order : 18.12.2015**

**In the matter of:**

Determination of transmission tariff for 2009-14 block in respect of 765 KV, 3X110 MVAR Bus Reactor along with associated bays at Sasaram Sub-station under the common scheme for 765 KV Pooling Stations and Network for NR, import by NR from ER and NER/SR/WR via ER and common scheme for network for WR and import by WR from ER and from NER/SR/WR via ER in the Eastern Region 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.

**And in the Matter of:**

Power Grid Corporation of India Ltd,  
'Saudamini', Plot No-2,  
Sector-29, Gurgaon-122 001 (Haryana)

**.....Petitioner**

**Versus**

1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd.,  
Vidyut Bhawan, Vidyut Marg,  
Jaipur - 302 005.
2. Ajmer Vidyut Vitran Nigam Ltd.,  
400 kV GSS Building (Ground Floor), Ajmer Road,  
Heerapura, Jaipur.
3. Jaipur Vidyut Vitran Nigam Ltd.,  
400 kV GSS Building (Ground Floor), Ajmer Road,  
Heerapura, Jaipur.



4. Jodhpur Vidyut Vitran Nigam Ltd.,  
400 kV GSS Building (Ground Floor), Ajmer Road,  
Heerapura, Jaipur
5. Himachal Pradesh State Electricity Board,  
Vidyut Bhawan, Kumar House Complex Building II,  
Shimla - 171 004.
6. Punjab State Electricity Board,  
The Mall, Patiala - 147 001.
7. Haryana Power Purchase Centre,  
Shakti Bhawan, Sector - 6  
Panchkula (Haryana) - 134 109
8. Power Development Department,  
Govt. of Jammu and Kashmir  
Mini Secretariat, Jammu .
9. Uttar Pradesh Power Corporation Ltd.,  
Shakti Bhawan, 14, Ashok Marg,  
Lucknow - 226 001.
10. Delhi Transco Ltd.,  
Shakti Sadan, Kotla Road,  
New Delhi - 110 002
11. BSES Yamuna Power Ltd.,  
Shakti Kiran Building, Karkardooma,  
Delhi – 110 092.
12. BSES Rajdhani Power Ltd.,  
BSES Bhawan, Nehru Place,  
New Delhi.
13. North Delhi Power Ltd.,  
Power Trading & Load Dispatch Group,  
Cennet Building,  
Adjacent to 66/11kV Pitampura - ,  
Grid Building,  
Near PP Jewellers,  
Pitampura, New Delhi - 110 034
14. Chandigarh Administration,  
Sector - 9, Chandigarh
15. Uttarakhand Power Corporation Ltd.,  
Urja Bhawan, Kanwali Road,



Dehradun

16. North Central Railway,  
Allahabad

17. New Delhi Municipal Council,  
Palika Kendra, Sansad Marg,  
New Delhi - 110 002

.....Respondent(s)

The following were present:

For Petitioner: Shri S K Niranjn  
Shri Jasbir Singh  
Shri S S Raju  
Shri A K Verma  
Shri Rakesh Prasad  
Shri M M Mondal  
Shri S K Venkatesan

For Respondents: None

### **ORDER**

The petition has been preferred by Power Grid Corporation of India Limited ("the petitioner"), a transmission licensee, for determination of tariff under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 (hereinafter referred to as "the 2009 Tariff Regulations") for 2009-14 block in respect of 765 KV, 3X110 MVAR Bus Reactor along with associated bays at Sasaram Sub-station under the common scheme for 765 KV Pooling Stations and Network for NR, import by NR from ER and NER/SR/WR via ER and common scheme for network for WR and import by WR from ER and from NER/SR/WR via ER in the Eastern Region (hereinafter referred to as "the transmission assets").



2. The respondents are distribution licensees, who are procuring transmission service from the petitioner, mainly beneficiaries of Northern Region.

3. The brief facts of the case are as follows:-

a) The investment approval and expenditure sanction for the transmission system was accorded by the Board of Directors of the petitioner company vide Memorandum No. C/CP/DVC and Maithon RB Project dated 29.8.2008 at an estimated cost of ₹707533 lakh including an IDC of ₹71360 lakh (based on 1st Quarter 2008 price level). The transmission system was scheduled to be commissioned within 48 months from the date of IA in a progressive manner. Therefore, the scheduled date of commissioning of the transmission system was 1.9.2012. The transmission assets were commissioned on 1.3.2013 i.e. with a delay of six months. The petitioner has submitted letter dated 20.3.2013 regarding COD of the transmission assets. The present petition has been filed for determination of the transmission tariff for 2009-14 tariff period in accordance with the 2009 Tariff Regulations.

b) The petitioner has served the petition to the respondents and notice of this application has been published in the newspaper in accordance with Section 64 of the Electricity Act 2003. No comments/objections have been received from the public in response to the notice in newspapers. Uttar Pradesh Power Corporation Limited (UPPCL), Respondent No.9 has filed reply to the petition vide affidavit dated 26.9.2013. UPPCL has raised certain objections regarding outstanding liabilities/provisions after the commissioning of the transmission assets, quantum of provisional tariff, discrepancy regarding the quantum of initial spares, grossing up the rate of return on



equity, admissibility of floating rate of interest, revision of O&M expenses based on additional manpower cost consequent to wage revision, evidence in support of the rate at which interest on working capital has been claimed for reimbursement of service tax and reimbursement of licensee fee, However, no rejoinder was received from the petitioner in response to UPPCL's reply. While the objection pertaining to provisional tariff is not relevant at the present juncture, the rest of the submissions of the respondent are addressed in the respective paragraphs hereunder. The hearing in this matter was held on 16.11.2015.

c) In response to a query vide letter dated 29.5.2015, the petitioner has submitted vide its affidavit dated 29.7.2015, the element wise capital expenditure upto COD, additional capital expenditure from COD to 31.3.2014, documents in respect of rate of interests, repayment schedule, drawl dates and exchange rates, details of IDC discharged and liabilities discharged towards initial spares and the revised tariff forms for the purpose of truing up for the tariff period 2009-14. The petitioner has submitted revised Auditor`s Certificate dated 29.6.2015.

d) Having heard the representatives of the parties and perused the records we proceed to dispose of the petition.

#### **DETERMINATION OF ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD**

4. The transmission charges claimed by the petitioner based on the actual date of commercial operation are as below:-



(₹ in lakh)		
<b>Particulars</b>	<b>2012-13</b>	<b>2013-14</b>
Depreciation	18.74	244.03
Interest on Loan	17.87	226.91
Return on Equity	20.64	271.90
Interest on Working Capital	1.72	22.16
O & M Expenses	7.22	91.64
<b>Total</b>	<b>66.19</b>	<b>856.64</b>

### **Capital Cost**

5. Regulation 7 of the 2009 Tariff Regulations provides that:-

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

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

(b) capitalised initial spares subject to the ceiling rates specified in regulation 8; and

(c) additional capital expenditure determined under regulation 9: Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost.

(2) The capital cost admitted by the Commission after prudence check shall form the basis for determination of tariff”

6. The details of apportioned approved cost, actual expenditure incurred as on date of commercial operation and additional capital expenditure incurred/projected to be incurred for the period from COD to 31.3.2014 for the transmission asset as submitted by the petitioner are as follows:-

(₹ in lakh)

Name of the Element	Cost as per FR (apportioned)	Cost incurred as on COD (1.3.2013)	Additional capital expenditure COD to 31.3.2013	Additional capital expenditure during 2013-14	Total
765 KV, 3X110 MVAR Bus Reactor along with associated bays	5943.31	4190.21	140.02	583.26	<b>4913.49</b>

7. The above cost includes the cost of initial spares amounting to ₹95.00 lakh based on the Auditor's Certificate.

8. The petitioner has claimed capital cost of ₹4190.21 lakh, as on date of commercial operation, for the transmission asset vide Auditor's Certificate dated 29.6.2015. The capital cost as on COD has been considered after prudence check in accordance with Regulation 7 of 2009 Tariff Regulations as discussed in subsequent paras, for the purpose of determination of transmission tariff.

### **Time over-run**

9. The transmission system was scheduled to be commissioned within 48 months from the date of investment approval. Therefore, the scheduled date of commissioning of the transmission system was 1.9.2012. However, the transmission assets were commissioned on 1.3.2013 i.e. with a time over-run of six months.

10. The petitioner has, vide its affidavit dated 9.11.2015, has submitted that the time over-run is attributed to the following reasons and contended that the same are beyond the petitioner's control:-



a) One reactor was to be type tested in Ukraine and then it had to be manufacture and again tested in India based on same design and supervision of ZTR personnel. Ukraine being a disturbed country, there was visa restriction and therefore the personnel who had to carry out testing of the reactor in India could not stay for more than 15 weeks. This necessitated different personnel being deployed for different activities. Due to this force majeure condition the equipments manufactured and supplied from India were delayed. This was a pre-requirement and could not be avoided to ensure quality of equipments since they were being manufactured for the first time in India. The delay is taken up with the ZTR personnel and any documentary evidence in support of the time over-run in this connection shall be made available.

b) In view of the huge size of the consignments which was being transported by road, Delhi-Howrah railway track had to be shut down for crossing the railway track, which required permission from Railway authorities. Despite diligent pursuit, this process consumed 11 weeks.

c) Heavy rainfall during June-September, 2012 also caused delay due to stoppage of work, because the equipments defoliation/damage had to be avoided.

d) Delay of 4 weeks was caused in obtaining permission from the forest department for cutting trees.

e) Fog conditions during December 2011-January 2012 and December 2012-January 2013 reduced effective working hours. Besides, it delayed





achieving of 800 kV HV Bushing Tan delta values for many days due to high moisture content of air in foggy days.

11. We have considered the submissions of the petitioner and our views are as under:-

a) The petitioner has not indicated the period of delay which can be attributed to the impact of visa restrictions. It is indicated that the personnel of ZTR were not permitted to stay beyond 15 weeks. The petitioner has not submitted any documents to show that there was delay due to visa restrictions.

b) As regards the delay attributable to obtaining permission from the Railway authorities, the petitioner has stated that first application was made on 6.2.2012 and permission was granted on 27.4.2012. The letters of communication submitted in this regard submitted to the Commission vide affidavit dated 9.11.2015, reveal that the petitioner was diligently pursuing the matter with the Sr. Divisional Engineer, East Central Railway. As there is documentary evidence in support of the claim, we condone the delay of 11 weeks on account of this factor.

c) The petitioner has claimed that there were rains during June, to September 2012 and has tried to explain the delay of four months based on this. However, after a close examination of the meteorological data and the site photographs presented by the petitioner, it reveals that there have been excessive rains during the month of September, 2012 and this has caused



delay in the execution of the project. Accordingly, we condone delay of one month on account of this factor.

d) The petitioner has submitted that there was a delay of four weeks in obtaining permission from Forest authorities for tree cutting. According to the petitioner, permission from Forest Department was sought on 14.9.2011 and permission was received on date 11.10.2011. In our view, four weeks time taken by the forest department authorities cannot be said to be abnormal period and by no means can this be perceived as an unforeseeable factor. Accordingly, the delay of four weeks claimed by the petitioner is not condoned. There is no justification for saddling the consumers with the IDC and IEDC charges for this period. Our view is in line with the decision taken by the Hon'ble Appellate Tribunal for Electricity in its judgment dated 13.8.2015 in Appeal No.281/2014, as may be seen from the following extract from para 9.3 thereof.

“The permission for tree cutting was granted by the competent authority within a month from the date the application was made. One month period for granting permission for tree cutting, by any stretch of imagination cannot be said to be abnormal or unusual time because before granting such kind of permission, every aspect has to be considered by the competent authority, considering the environmental impact thereof.”

e) Petitioner has attributed eight weeks delay due to foggy conditions. We are of the view that fog being a recurring annual seasonal feature, there is no justification for condoning the delay on this account. Therefore, the delay of eight weeks sought on this ground is not condoned.

12. Based on the above, we partially condone the delay in commissioning of the transmission asset. The 11 week delay attributable to obtaining permission



from the railway authorities during the period 6.2.2012 to 27.4.2012, is condoned. Similarly one month delay attributable to rainfall during September, 2012 is also condoned. There is however, no justification for condoning the delay of 9 weeks attributed to obtaining clearance for tree cutting and foggy conditions. Accordingly, proportionate deduction has been made from the capital cost on account of IDC and IEDC corresponding to 2 months.

13. The petitioner has intimated that LD is leviable on the contractor towards delay in the construction of extension of bays and this can be done only on completion of the whole work including the extension work of at Sasaram Sub-station and on detailed analysis of the reasons for delay.

14. We direct that the petitioner shall, within three months of realisation/adjustment of the LD, file the details before this Commission under intimation to the respondents so as to facilitate revision of capital cost and consequent revision of tariff.

### **Interest During Construction**

15. The petitioner has submitted the details of IDC and IEDC vide Auditor's certificate dated 29.6.2015 as below:-

(₹ in lakh)

<b>Details of IDC &amp; IEDC discharged up to COD given above</b>		
<b>Period</b>	<b>IDC</b>	<b>IEDC</b>
Up to 31.3.2012	242.76	62.34
From 1.4.2012 to 28.2.2013	188.78	59.04
<b>Total</b>	<b>431.54</b>	<b>121.38</b>

16. In response to Commission`s query for providing the computation of IDC on cash basis and IEDC capitalized on cash basis for the asset, the petitioner has submitted the details of IDC and IEDC discharged up to the date of commercial operation vide affidavit dated 29.7.2015. The details submitted by the petitioner are as follow:-

(₹ in lakh)

<b>Details of IDC &amp; IEDC discharged up to COD</b>		
<b>Period</b>	<b>IDC</b>	<b>IEDC</b>
Up to 31.3.2012	242.76	62.34
From 1.4.2012 to 28.2.2013	115.6 (188.78-19.03-54.15)	59.04
<b>Total</b>	<b>358.36</b>	<b>121.38</b>

17. With reference to para 14 above, proportionate IDC and IEDC disallowed is shown below:-

(₹ in lakh)

<b>Proportionate IDC &amp; IEDC disallowed for 2 months</b>			
<b>Period</b>	<b>IDC</b>	<b>IEDC</b>	<b>Total</b>
Up to 31.3.2012	-	-	-
From 1.4.2012 to 28.2.2013	21.02	10.73	31.75
<b>Total disallowed (2 months)</b>	<b>21.02</b>	<b>10.73</b>	<b>31.75</b>

18. Thus, IDC amounting to ₹21.02 lakh and IEDC amounting to ₹10.73 lakh are deducted from the capital cost based on the above, capital cost of ₹4085.28 lakh ((₹4190.21- ₹431.54+₹358.36) lakh – ₹21.02 lakh – ₹10.73 lakh) on cash basis as on COD is considered for the purpose of tariff determination.

### **Initial Spares**

19. The petitioner has claimed the initial spares of ₹95 lakh for 2009-14 tariff period. UPPCL has submitted that the petitioner has claimed initial spares more than the norms specified in the 2009 Tariff Regulations. We have considered the claim of the petitioner and the objection raised by UPPCL. It is observed that the initial spares claimed by the petitioner are within the ceiling limit of 2.50% for sub-station and therefore the O&M expenses claimed by the petitioner are allowed.

### **Additional Capital Expenditure**

20. Clause (1) of Regulation 9 of the 2009 Tariff 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) 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:”

21. Further, clause (11) of Regulation 3 of the 2009 Tariff Regulations defines ‘cut-off’ date as under:

“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 in case 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”.

22. As per the above definition, the cut-off date in respect of the subject transmission asset is 31.3.2016.

23. The petitioner has claimed additional capital expenditure of ₹140.02 lakh and ₹583.26 lakh during 2012-13 and 2013-14.

24. Further, the petitioner has also submitted the details of IDC discharged after COD, vide affidavit dated 29.7.2015, as shown below:-

<b>Statement showing IDC discharged upto DOCO(₹ in Lakh) (stated in affidavit dated 30.7.2015)</b>	
Total IDC as per Management Certificate	431.54
IDC discharged up to COD	358.36
Accrual IDC up to COD (discharged during 2012-13)	19.03
Accrual IDC up to COD (discharged during 2013-14)	54.15

25. The actual additional capital expenditure is towards balance and retention payments within the cut-off date and the same have been supported by Auditor Certificate dated 29.6.2015. UPPCL as requested that additional capital expenditure amounting ₹138.83 lakh towards liabilities/provisions and ₹31.78 lakh of excess charge in respect of spares may not be allowed. As the additional capital expenditure claimed by the petitioner is towards balance payments and not deferred work, the claim made by the petitioner is allowed.

26. In view of the foregoing we allow the additional capital expenditure, along with the IDC discharged after COD as below:

<b>Capital cost as on COD after deducting IDC/ IEDC</b>	<b>Additional capital expenditure</b>		<b>Capital cost as on 31.3.2014</b>
	<b>2012-13</b>	<b>2013-14</b>	
4085.28	159.05	637.41	<b>4881.74</b>



27. The completion cost of ₹4881.74 lakh is within the approved apportioned cost of ₹5943.31 lakh. The petitioner has submitted that the variation is based on actual and the same has been considered for the purpose of tariff.

28. The debt-equity ratio 70:30 as claimed by the petitioner is in accordance with the Regulation 12 (3) of 2009 Tariff Regulations and hence, same has been considered towards financing of the additional capital expenditure.

**Debt: Equity**

29. Regulation 12 of the 2009 Tariff Regulations provides as under:-

“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:

.....

(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.”

30. The debt:equity ratio of 70:30 has been considered as on the date of commercial operation for determination of tariff in accordance with the Regulation 12 of the 2009 Tariff Regulations.

31. The details of the debt:equity considered for the purpose of tariff for 2009-14 tariff period is as follows:-



( ₹ in lakh)

	As on COD	Additional capital expenditure during 2009-14	As on 31.3.2014	(%)
Debt	2859.69	557.52	3417.22	70.00
Equity	1225.58	238.94	1464.52	30.00
<b>Total</b>	<b>4085.28</b>	<b>796.46</b>	<b>4881.74</b>	<b>100.00</b>

### **Return on Equity (“ROE”)**

32. Clause (3), (4) and (5) of the Regulation 15 of the 2009 Tariff Regulations provide that

“(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.”

33. Regulation 15 of the 2009 Tariff Regulations provides for grossing up of ROE with the actual tax rate for the purpose of ROE. UPPCL in the reply has stated that the petitioner may be directed to file Auditors Certificate indicating the actual income tax paid by petitioner. We don't find anything for justification. In fact the petitioner prayer is that it may be allowed to recover the shortfall or refund the





excess due to change in MAT rate. The petitioner has submitted the MAT rate applicable during the various years of 2009-14 tariff period.

(₹ in lakh)

<b>Return on Equity</b>	<b>2012-13 (Pro-rata)</b>	<b>2013-14</b>
Opening Equity	1,225.58	1,273.30
Additions	47.72	191.22
Closing Equity	1,273.30	1,464.52
Average Equity	1,249.44	1,368.91
Return on Equity (Base Rate) (%)	15.500%	15.500%
MAT Rate for respective year (%)	20.010%	20.960%
Rate of Return on Equity (%)	19.377%	19.610%
Return on Equity	16.14	212.18

### **Interest on Loan (“IoL”)**

34. Clause (5) and (6) of Regulation 16 of the 2009 Tariff Regulations provide the methodology for working out weighted average rate of IoL as under:

“(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.”

35. The weighted average rate of IoL has been considered on the basis of actual loan portfolio and the rate of interest submitted by the petitioner. UPPCL has stated that the prayer for adjustment of IoL on account of floating rate of interest is not tenable because the existing financial packages do not have any floating rate

of interest. We note that this objection is already taken care of by considering the actual rates. By considering the above, the IoL has been worked out in accordance with Regulation 16 of the 2009 Tariff Regulations. The details of weighted average rate of interest for 2009-14 tariff period are placed at Annexure-1 and the IoL has been worked out and allowed as follows:-

(₹ in lakh)

<b>Interest on Loan</b>	<b>2012-13 (Pro-rata)</b>	<b>2013-14</b>
Gross Normative Loan	2,859.69	2,971.03
Cumulative Repayment upto Previous Year	-	18.33
Net Loan-Opening	2,859.69	2,952.70
Additions	111.34	446.19
Repayment during the year	18.33	240.93
Net Loan-Closing	2,952.70	3,157.96
Average Loan	2,906.20	3,055.33
Weighted Average Rate of Interest on Loan (%)	7.2084	7.3326
Interest on Loan	17.46	224.04

### **Depreciation**

36. The depreciation has been worked out as per the methodology provided in the Regulation 17 of the 2009 Tariff Regulations provided as under

#### **“Depreciation.**

(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 in case of hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site:

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciable value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff.

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.

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 upto 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.”

37. The depreciation has been worked out and allowed as follows:-

(₹ in lakh)

Particulars	2012-13 (Pro-rata)	2013-14
Opening Gross Block	4,085.28	4,244.33
Additional Capitalisation	159.05	637.41
Closing Gross Block	4,244.33	4,881.74
Average Gross Block	4,164.80	4,563.03
Freehold Land (Av. Cost)	-	-
Rate of Depreciation (%)	5.28%	5.28%
Depreciable Value	3,748.32	4,178.30
Balance useful life of the asset	25.00	24.00
Elapsed life	-	1.00
Remaining Depreciable Value	3,748.32	4,088.40
Depreciation during the year	18.33	240.93
Depreciation upto previous year	-	18.33
Cumulative depreciation (incl. of AAD)	18.33	259.25

### **Operation & Maintenance Expenses (“O&M Expenses”)**

38. Clause (g) of Regulation 19 of the 2009 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. Normative O&M Expenses in respect of the transmission assets covered in the instant petition are as under:-

(₹ in lakh)			
Particulars	No. of Bays	2012-13	2013-14
765kV Bay	1	86.68	91.64

39. The petitioner has submitted that O&M expenses for the period 2009-14 was arrived at on the basis of normalized actual O&M expenses during the period 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking has also been considered while calculating the O&M Expenses for the tariff period 2009-14. The petitioner has further submitted that it would approach the Commission for additional manpower cost on account of wage revision (if any) during the tariff block 2009-14 for claiming in the tariff. UPPCL has objected to the revision of O&M norms consequent to the wage revision.

40. While specifying the norms for the O & M Expenses, the Commission has in the 2009 Tariff Regulations, given effect to impact of pay revision by factoring 50% on account of pay revision of the employees of PSUs after extensive consultations with the stakeholders, as one time compensation for employee cost. We do not see any reason why the admissible amount is inadequate to meet the requirement of the employee cost. In this order, we have allowed O&M Expenses as per the existing norms.

41. Based on the above norms, the following O&M Expenses are allowed for the transmission assets:-

(₹ in lakh)

Particulars	No. of Bays	2012-13 (Pro-rata)	2013-14
765 kV Bay	1	7.22	91.64

### **Interest on Working Capital (“IWC”)**

42. The IWC has been worked out as per the methodology provided in the Regulation 18 of the 2009 Tariff Regulations. The above provision provides that IWC is payable on normative basis. Thus, the objection by UPPCL in this regard is misconceived. IWC allowed is as under:-

(₹ in lakh)

<b>Interest on Working Capital</b>	<b>2012-13 (Pro-rata)</b>	<b>2013-14</b>
O & M expenses	7.22	7.63
Maintenance Spares	13.00	13.75
Receivables	107.93	131.57
<b>Total</b>	<b>128.15</b>	<b>152.95</b>
Rate of Interest (%)	13.50	13.50
Interest on Working Capital	1.44	20.65

### **APPROVED ANNUAL FIXED CHARGES FOR 2009-14 TARIFF PERIOD**

43. Based on the foregoing, the annual fixed charges for the transmission assets for the 2009-14 tariff period is summarised below:-

(₹ in lakh)

<b>Particulars</b>	<b>2012-13</b>	<b>2013-14</b>
<b>Depreciation</b>		
Opening Gross Block	4085.28	4244.33
Additional Capitalisation	159.05	637.41
Closing Gross Block	4244.33	4881.74
Average Gross Block	4164.80	4563.03
Rate of Depreciation (%)	5.28	5.28
Depreciable Value	3748.32	4178.30
Balance Useful life of the asset	25	24
Elapsed Life	0	1
Remaining Depreciable Value	3748.32	4088.40
Depreciation during the year	18.33	240.93
Cumulative Depreciation	18.33	259.25



<b>Particulars</b>	<b>2012-13</b>	<b>2013-14</b>
<b>Interest on Loan</b>		
Gross Normative Loan	2859.69	2971.03
Cumulative Repayment upto Previous Year	0.00	18.33
Net Loan-Opening	2859.69	2952.70
Additions	111.34	446.19
Repayment during the year	18.33	240.93
Net Loan-Closing	2952.70	3157.96
Average Loan	2906.20	3055.33
Weighted Average Rate of Interest on Loan (%)	7.2084	7.3326
Interest on Loan	209.49	224.04
Pro rate Interest on Normative Loan	17.46	224.04
<b>Return on Equity</b>		
Opening Equity	1225.58	1273.30
Additions	47.72	191.22
Closing Equity	1273.30	1464.52
Average Equity	1249.44	1368.91
Return on Equity (Base Rate) (%)	15.500	15.500
MAT rate for the respective year (%)	20.010	20.960
Rate of Return on Equity (%)	19.377	19.610
Return on Equity	193.66	212.18
Pro rate Return on Equity	16.14	212.18
<b>Interest on Working Capital</b>		
O & M expenses	7.22	7.63
Maintenance Spares	13.00	13.75
Receivables	107.93	131.57
Total	128.15	152.95
Rate of Interest	13.50%	13.50%
Interest on Working Capital	17.30	20.65
Pro rate Interest on working capital	1.44	20.65
<b>Annual Transmission Charges</b>		
Depreciation	18.33	240.93
Interest on Loan	17.46	224.04
Return on Equity	16.14	212.18
Interest on Working Capital	1.44	20.65
O & M Expenses	0.60	91.64
<b>Total</b>	<b>53.97</b>	<b>789.43</b>

### **Filing Fee and the Publication Expenses**

44. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 42 of the 2009 Tariff Regulations.

### **Licence Fee & RLDC Fees and Charges**

45. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42A (1) (b) of the 2009 Tariff Regulations for 2009-14 tariff period. The petitioner shall also be entitled for recovery of RLDC fee & charges in accordance with Regulations 42A (1) (a) of the 2009 Tariff Regulations for 2009-14 tariff period. This being a statutory entitlement of the petitioner, the objection by UPPCL in this regard is not sustainable.

### **Service Tax**

46. The petitioner has prayed for reimbursement of service tax if it is subjected to such tax in future. We are of the view that the petitioner's prayer is premature. .

### **Sharing of Transmission Charges**

47. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010, as amended from time to time.

48. This order disposes of Petition No. 248/TT/2013.

Sd/-  
**(Dr. M.K. Iyer)**  
**Member**

Sd/-  
**(A.S. Bakshi)**  
**Member**





**Annexure-1**

**CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST**

(₹ in lakh)

<b>Particulars</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
<b>Bond XXX</b>					
Gross Opening Loan				240.00	240.00
Cumulative Repayments of Loans upto Previous Year		-	-	-	
Net Loans Opening	-	-	-	240.00	240.00
Add: Draw(s) during the Year					
Less: Repayments of Loan during the year					20.00
Net Closing Loan	-	-	-	240.00	220.00
Average Net Loan	-	-	-	240.00	230.00
Rate of Interest on Loan (%)				8.80%	8.80%
Interest on Loan	-	-	-	21.12	20.24
<b>Bond XXXI-DOCO loan</b>					
Gross Opening Loan				800.00	800.00
Cumulative Repayments of Loans upto Previous Year		-	-	-	-
Net Loans Opening	-	-	-	800.00	800.00
Add: Draw(s) during the Year					
Less: Repayments of Loan during the year					66.67
Net Closing Loan	-	-	-	800.00	733.33
Average Net Loan	-	-	-	800.00	766.67
Rate of Interest on Loan (%)				8.90%	8.90%
Interest on Loan	-	-	-	71.20	68.23
<b>Bond XXXV-DOCO drawl on 1.3.2013</b>					
Gross Opening Loan				500.00	500.00
Cumulative Repayments of Loans upto Previous Year		-	-	-	-
Net Loans Opening	-	-	-	500.00	500.00
Add: Draw(s) during the Year					
Less: Repayments of Loan during the year					
Net Closing Loan	-	-	-	500.00	500.00
Average Net Loan	-	-	-	500.00	500.00
Rate of Interest on Loan (%)				9.64%	9.64%



<b>Particulars</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Interest on Loan	-	-	-	48.20	48.20
<b>Bond XXXVI-DOCO loan 2</b>					
Gross Opening Loan				350.00	350.00
Cumulative Repayments of Loans upto Previous Year		-	-	-	-
Net Loans Opening	-	-	-	350.00	350.00
Add: Draw(s) during the Year					
Less: Repayments of Loan during the year					
Net Closing Loan	-	-	-	350.00	350.00
Average Net Loan	-	-	-	350.00	350.00
Rate of Interest on Loan (%)				9.35%	9.35%
Interest on Loan	-	-	-	32.73	32.73
<b>SBI(21.3.2012)-Add cap for 2013-14(Add cap-loan 1)</b>					
Gross Opening Loan					
Cumulative Repayments of Loans upto Previous Year		-	-	-	-
Net Loans Opening	-	-	-	-	-
Add: Draw(s) during the Year					408.28
Less: Repayments of Loan during the year					
Net Closing Loan	-	-	-	-	408.28
Average Net Loan	-	-	-	-	204.14
Rate of Interest on Loan (%)					10.2922%
Interest on Loan	-	-	-	-	21.01
<b>Bond XL(ADDCAP FOR 2012-2013 DRAWL ON 28-JUN-2012)</b>					
Gross Opening Loan					98.01
Cumulative Repayments of Loans upto Previous Year		-	-	-	-
Net Loans Opening	-	-	-	-	98.01
Add: Draw(s) during the Year				98.01	
Less: Repayments of Loan during the year					
Net Closing Loan	-	-	-	98.01	98.01
Average Net Loan	-	-	-	49.00	98.01
Rate of Interest on Loan (%)				9.30%	9.30%
Interest on Loan	-	-	-	4.56	9.11



<b>Particulars</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
<b>IFC (IFC -A loan) DOCO Loan 1-55.06</b>					
Gross Opening Loan				1,043.15	1,043.15
Cumulative Repayments of Loans upto Previous Year		-	-	-	-
Net Loans Opening	-	-	-	1,043.15	1,043.15
Add: Draw(s) during the Year					
Less: Repayments of Loan during the year					
Net Closing Loan	-	-	-	1,043.15	1,043.15
Average Net Loan	-	-	-	1,043.15	1,043.15
Rate of Interest on Loan (%)				3.5627%	3.31%
Interest on Loan	-	-	-	37.16	34.53
<b>Summary</b>					
Gross Opening Loan	-	-	-	2,933.15	3,031.16
Cumulative Repayments of Loans upto Previous Year	-	-	-	-	-
Net Loans Opening	-	-	-	2,933.15	3,031.16
Add: Draw(s) during the Year	-	-	-	98.01	408.28
Less: Repayments of Loan during the year	-	-	-	-	86.67
Net Closing Loan	-	-	-	3,031.16	3,352.77
Average Net Loan	-	-	-	2,982.15	3,191.97
Rate of Interest on Loan (%)				7.2084%	7.3326%
Interest on Loan	-	-	-	214.97	234.06