

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No.233/2010**

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

**Date of Hearing: 23.12.2010**

**Date of Order: 10.2.2011**

**In the matter of**

Determination of transmission tariff for 400 kV D/C Dhauliganga HEP-Bareilly (UPPCL) Transmission Line along with its associated bays at Bareilly (UPPCL) in Northern Region for the period from 1.4.2009 to 31.3.2014.

**And**

**In the matter of**

Power Grid Corporation of India Limited, Gurgaon  
Vs

**..Petitioner**

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

**ORDER**

The petition has been filed seeking approval of tariff for 400 kV D/C Dhauliganga HEP- Bareilly (UPPCL) transmission line (the transmission line) along with its associated bays at Bareilly (UPPCL) in Northern Region for the period from 1.4.2009 to 31.3.2014, in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 regulations") after accounting for projected additional capital expenditure to be incurred during 2010-11. The petitioner has made the following additional prayers:-

- (a) To allow to continue charging the lease rent as per order dated 16.7.2007 in Review Petition No. 73/2007;
- (c) To approve reimbursement of petition filing fee and publication of notices in the newspaper as per the 2009 regulations;
- (d) Allow to bill and recover the service tax on transmission charges separately from the respondents, if the petitioner is subjected to such service tax;
- (e) 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



(f) Allow to bill and recover licence fee separately from the respondents.

2. The approval for the revised cost estimate for the transmission line was accorded by Board of Directors of the petitioner company vide Memorandum dated 25.10.2006 at an estimated cost of ₹18207 lakh, which included IDC of ₹1004 lakh. The date of the commercial operation of the transmission line is 1.8.2005.

3. The annual transmission charges up to 31.3.2009 in respect of the transmission system were initially approved vide order dated 21.3.2007 in Petition No. 138/2006 and were subsequently revised vide order dated 9.6.2009 in Petition No. 41/2009 on account of additional capital expenditure incurred during 2006-07 and 2007-08 and order dated 11.2.2010 in Petition No. 243/2009 on account of additional capital expenditure incurred during 2008-09.

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

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	908.67	910.89	913.10	913.10	913.10
Interest on Loan	403.62	368.09	332.25	295.43	258.82
Return on Equity	784.66	786.86	789.06	789.06	789.06
Interest on Working Capital	61.55	61.92	62.35	62.72	63.16
O & M Expenses	356.69	377.13	398.73	421.51	445.52
<b>Total</b>	<b>2515.19</b>	<b>2504.89</b>	<b>2495.49</b>	<b>2481.82</b>	<b>2469.66</b>

5. 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	53.50	56.57	59.81	63.23	66.83
O & M expenses	29.72	31.43	33.23	35.13	37.13
Receivables	419.20	417.48	415.92	413.64	411.61
<b>Total</b>	<b>502.42</b>	<b>505.48</b>	<b>508.96</b>	<b>512.00</b>	<b>515.57</b>
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	61.55	61.92	62.35	62.72	63.16

6. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under section 64 of the Electricity Act, 2003. Replies to the petition have been filed by Jodhpur Vidyut Vitran Nigam Limited (JdVVNL), Haryana Power Purchase Centre (HPPC) and Uttar Pradesh Power Corporation Limited (UPPCL). The comments/submissions of the respondents have been dealt with in relevant paragraphs of this order.

### **CAPITAL COST**

7. As per the last proviso to clause (2) of Regulation 7 of the 2009 regulations, "in case of the existing projects, capital cost admitted by the Commission prior to 1.4.2009 and the additional capital expenditure projected to be incurred for the respective year of the tariff period 2009-14 as may be admitted by the Commission, shall form the basis for determination of tariff".

8. The petitioner has claimed the tariff after accounting for additional capital expenditure as under:

(₹ in lakh)			
Approved cost	Admitted capital cost as on 1.4.2009	Additional Capital expenditure proposed during 2010-11	Total estimated capital expenditure as on 31.3.2014
18207.00	17205.45	83.94	17289.39

### **ADDITIONAL CAPITAL EXPEDNTURE**

9. Regulation 9 of the 2009 regulations provides as under:

*“(1) The capital expenditure incurred or projected to be incurred, on the following counts with in original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:*

- (i) Undischarged liabilities;*
- (ii) Works deferred for execution;*
- (iii) Procurement of initial capital spares within the original scope of work, subject to the provisions of regulating 8 ;*
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and*
- (v) Change in law;*

*Provided that the details of works included in the original scope of work along with estimates of expenditure, undischarged liabilities and the works deferred for execution shall be submitted along with the application for determination of the tariff.*

*(2) The capital expenditure incurred on the following counts after the cut-off-date, in its discretion, be admitted by the Commission, subject to prudence check:*

- (i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;*
- (ii) Change in law;*
- (iii) \*\*\*\*\**
- (iv) \*\*\*\*\**
- (v) In case of transmission system any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement of switchyard equipment due to increase of fault level, emergency restoration system, insulators cleaning infrastructure, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of the transmission system.”*

10. The details submitted by the petitioner in support of its claim for projected additional capital expenditure during 2010-11 for the transmission line are as under:

Years	Nature and details of expenditure	Amount (₹ in lakh)
2010-11	Sub-station - Balance and retention payments	42.74
	Transmission line- Balance and retention payments	41.20
<b>Total</b>		<b>83.94</b>

11. HPCC, JdVVNL and UPPCL in their replies have submitted that the petitioner has not furnished the details of proposed additional capital expenditure for the year 2010-11. Moreover, the proposed additional capital expenditure should be dealt as per the 2009 regulations. The petitioner vide its affidavit dated 3.11.2010 has submitted the details of projected additional capital expenditure of ₹ 83.94 lakh. The petitioner in its rejoinder has submitted that the proposed additional capital expenditure shall be dealt in accordance with Regulation 9(2) of the 2009 regulations.

12. The petitioner has submitted that the assets covered under the petition were declared under Commercial operation during 2004-09 wherein the admitted capital expenditure after the cut-off date on account of deferred liabilities was allowed as per clause 53(2) of the 2004 regulations. Due to contractual exigencies and other reasons beyond the control of the petitioner, it had to make provisions for release of balance / retention payment beyond 2008-09. Since Regulation 9 (2) of 2009 Regulations does not provide for such

undischarged liabilities as part of additional capitalization after the cut-off date, the Commission may consider to invoke Regulation 44 of the 2009 Regulations for relaxation of Regulation 9 (2) of 2009 Regulations so that the additional capitalization incurred/to be incurred on account of undischarged liabilities after the cut-off date is allowed and considered for tariff fixation during 2009-14

13. The petitioner vide its affidavit dated 3.11.2010 has further submitted that the projected additional expenditure of ₹42.74 lakh towards sub-station supply and erection and ₹41.20 lakh towards transmission line supply and erection for the year 2010-11 is towards the retention payments to the contractors and works were awarded to the contractors during the month of March 2002 to January 2004 with date of completion in June/July 2005 and as on date no work is pending. The petitioner has further submitted that the closing of contract was pending as these contractors have not responded for closing of contract even after repeated reminders.

14. We have considered the submission made by the petitioner and the respondents. For the reasons recorded and the decision taken in our order dated 8.2.2011 in Petition No. 176/2010, the additional capital expenditure incurred/projected to be incurred during 2009-10 and 2010-11 after the cut-off date on account of balance and retention payments have been allowed to be capitalized in relaxation of Regulation 9(2) of 2009 regulations.



### TOTAL CAPITAL COST

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

(₹ in lakh)

Approved cost as on 31.3.2009	Admitted capital cost as on 31.3.2009	Additional Capital expenditure proposed during 2010-11	Total estimated capital expenditure as on 31.3.2014
18207.00	17205.45	83.94	17289.39

### DEBT- EQUITY RATIO

16. 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.”*

17. The petitioner has claimed tariff based on debt-equity ratio of 73.91:26.09 as admitted on 31.3.2009 vide order dated 11.2010 in Petition 243/2009. The petitioner has further claimed the amount of additional capital expenditure in the debt-equity ratio of 70:30 for the year 2010-11. For the purpose of tariff, equity considered for the transmission asset is as under:

(₹ in lakh)

Equity as on 1.4.2009	Notional equity due to additional capital expenditure for the period 2009-10	Average equity for 2009-10	Notional equity due to additional capital expenditure for the period 2010-11	Average equity for 2010-11	Equity for the period 2011-14	Average equity for 2011-14
4488.64	0.00	4488.64	25.18	4501.23	4513.82	4513.82





## RETURN ON EQUITY

18. Regulation 15 of the 2009 regulations provides that,-

*"15. (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.*

*(2) Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up as per clause (3) of this regulation:*

*Provided that in case of projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such projects are completed within the timeline specified in **Appendix-II**:*

*Provided further that the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever.*

*(3) The rate of return on equity shall be computed by grossing up the base rate with the normal tax rate for the year 2008-09 applicable to the concerned generating company or the transmission licensee, as the case may be:*

*Provided that return on equity with respect to the actual tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up separately for each year of the tariff period along with the tariff petition filed for the next tariff period.*

*(4) Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:*

*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.*

*....."*

19. UPPCL has submitted that the date of commercial operation of new asset is 1.8.2005, therefore no income tax should be leviable on the transmission asset. Thus, the grossing up of base rate of return on equity in respect of income tax is not at all justified. In this regard it is clarified that the Commission vide its order dated 3.8.2010 in Petition No. 17/2010 has already taken a decision to amend the 2009 regulations for allowing grossing up of the base rate of return with the applicable tax rate as per the Finance Act for the relevant year and for direct settlement of tax holidays of between the

generating company/transmission licensee and the beneficiaries/long- term transmission customers on year to year basis. The process of amendment to the 2009 regulations is under way and will address the grievance of the petitioner with regard to the MAT rate. Accordingly, the return on equity has been computed as per the existing provision of Regulation 15 (3) of 2009 regulation as under:

(₹ in lakh)

Particulars	2009-10	2010-11	2011-12	2012-13	2013-14
Opening Equity as on 1.4.2009	4488.64	4488.64	4513.82	4513.82	4513.82
Addition due to Additional Capitalisation	0.00	25.18	0.00	0.00	0.00
Closing Equity	4488.64	4513.82	4513.82	4513.82	4513.82
Average Equity	4488.64	4501.23	4513.82	4513.82	4513.82
Return on Equity (Base Rate )	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for the year 2008-09	11.330%	11.330%	11.330%	11.330%	11.330%
Rate of Return on Equity (Pre Tax )	17.481%	17.481%	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	<b>784.66</b>	<b>786.86</b>	<b>789.06</b>	<b>789.06</b>	<b>789.06</b>

## **INTEREST ON LOAN**

20. 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."*

21. HPPC has submitted that the petitioner be directed to furnish the details of interest rates applicable on different dates and adjustment made in the past on account of floating rate of interest. UPPCL has submitted that the 2009 regulations make provisions for swapping of loans in the interest of consumers. Therefore, prayer of petitioner in respect of floating rate of interest is not tenable. In response, the petitioner has submitted that for the period 2004-09, the Commission had allowed the direct settlement with the beneficiaries, any change in interest on account of floating rate of interest and same practice has been followed with regard to claiming change in interest due to floating rate of interest for the tariff period 2009-14. Accordingly, interest on loan has been worked out as detailed overleaf:

- (i) Details of net outstanding loan as on 31.3.2009, cumulative repayment up to 31.3.2009, repayment schedule for the loans, rate of interest etc. have been taken from the order dated 11.2.2010 in Petition No. 243/2009 for working out weighted average rate of interest;
- (ii) For loans with floating interest rates, rates of interest as on 1.4.2009 have been considered;
- (iii) Tariff has been worked out considering normative loan and normative repayments. Depreciation allowed have been taken as normative repayment for the tariff period 2009-14;
- (iv) Weighted average rate of interest on actual loan has been worked out as per above and applied on the average loan during the year to arrive at the interest on loan;
- (v) The following has been noted in regard to JBIC loan:

Drawals	Date of Drawal	Gross Amount in (₹)	Exchange Rate
Drawal 1	1.8.2005	28093.91	0.3909
Drawal 2	4.11.2005	249.24	0.3891
Drawal 3	9.9.2005	1528.69	0.3998
Drawal 4	20.9.2005	316.27	0.398
Drawal 5	26.12.2005	340.99	0.3916

- (vi) During the calculation for tariff for the period 2004-09 all the drawals were clubbed and the repayment was worked out by

applying the exchange rate of first drawal. This resulted in difference in the value of repayment amount vis-a-vis the repayments corresponding to respective exchange rates. This anomaly has now been rectified while working out the weighted average rate of interest. In the present petition, interest for each drawal of JBIC loan has been calculated individually with repayments corresponding to their exchange rates. Difference in repayment amount during 2004-09 period due to difference in ER corresponding to different drawals is being adjusted by adding amount proportionate to the individual drawals

22. Based on the above, the year-wise details of interest worked out are given hereunder:

(₹ in lakh)						
Details of loan	Up to 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	12716.81	12716.81	12716.81	12775.57	12775.57	12775.57
Cumulative Repayment up to Previous Year		1690.54	2599.21	3510.10	4423.20	5336.30
Net Loan-Opening		11026.27	10117.60	9265.47	8352.37	7439.27
Addition due to Additional Capitalisation		0.00	58.76	0.00	0.00	0.00
Repayment during the year		908.67	910.89	913.10	913.10	913.10
Net Loan-Closing		10117.60	9265.47	8352.37	7439.27	6526.17
Average Loan		10571.94	9691.54	8808.92	7895.82	6982.72
Weighted Average Rate of Interest on Loan		3.8179%	3.7980%	3.7717%	3.7415%	3.7065%
<b>Interest</b>		<b>403.62</b>	<b>368.09</b>	<b>332.25</b>	<b>295.43</b>	<b>258.82</b>

23. The detailed calculations in support of the weighted revised average rate of interest are contained in Annexure attached.



## DEPRECIATION

24. Regulation 17 of the 2009 regulations provides for computation of depreciation in the following manner:

*"17. (1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.*

*(2) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.*

*Provided that.....*

*Provided further that.....*

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

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

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

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

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

25. The depreciation has been worked out for 2009-14 as under on the admitted capital cost of ₹17205.45 lakh as on 31.3.2009:

( ₹ in lakh)

Details of Depreciation		Up to 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Gross block as per last order		17205.45	17205.45	17205.45	17289.39	17289.39	17289.39
Addition during 2009-14 due to projected Additional Capitalisation			0.00	83.94	0.00	0.00	0.00
Gross block as on 31.3.2009			17205.45	17289.39	17289.39	17289.39	17289.39
Average gross block			17205.45	17247.42	17289.39	17289.39	17289.39
Rate of Depreciation			5.2813%	5.2813%	5.2813%	5.2813%	5.2813%
Depreciable Value	90%		15484.91	15522.68	15560.45	15560.45	15560.45
Remaining Depreciable Value			13852.04	12981.14	12108.03	11194.92	10281.82
<b>Depreciation</b>			<b>908.67</b>	<b>910.89</b>	<b>913.10</b>	<b>913.10</b>	<b>913.10</b>



## OPERATION & MAINTENANCE EXPENSES

26. In accordance with clause (g) of Regulation 19 the 2009 regulations, the following norms for 400 kV D/C, Twin conductor, Transmission line and 220 kV bay are prescribed for O & M expenses:

	Year				
	2009-10	2010-11	2011-12	2012-13	2013-14
400 kV D/C twin conductor transmission line (₹ in lakh /km)	0.267	0.663	0.701	0.741	0.783
220 kV bay (₹ in lakh/bay)	36.68	38.78	41.00	43.34	45.82

27. The petitioner has claimed O & M expenses for 234.59 ckt/km and four bays. Accordingly, the petitioner's entitlement to O & M expenses has been worked out as given hereunder:

(₹ in lakh)

	Year				
	2009-10	2010-11	2011-12	2012-13	2013-14
O&M expenses for 400 kV D/C twin conductor transmission line (234.59 ckt/km)	147.09	155.53	164.45	173.83	183.68
O&M expenses for 220 kV ( 4 bays)	146.72	155.12	164.00	173.36	183.28
Total	<b>293.81</b>	<b>310.65</b>	<b>328.45</b>	<b>347.19</b>	<b>366.96</b>

28. HPPC has submitted that though the line is 400 kV for which the transmission tariff and capital cost of 400 kV system is being charged, it is presently being operated at 220 kV. The petitioner should provide details regarding future power projects for evacuation of power through this line. In response, the petitioner in its rejoinder has submitted that as per master plan developed by Central Electricity Authority, the power from Khasiya bara (240 MW) and Urthing Soble (280 MW) would be evacuated through the subject



transmission line. After commissioning of any of these projects, the line would be charged at 400 kV. The Khasiya bara (240 MW) project is being developed by NTPC with commissioning schedule of February 2015. The 400 kV transmission line was planned keeping in view the hydro potential of about 1240 MW in Sharda basin and right of way limitation in wild life sanctuary. The petitioner has submitted that the subject transmission system was planned in consultation with stakeholders including HPPC. The petitioner has further submitted that the voltage level of the bays is inadvertently mentioned as 400 kV in the petition instead of 220 kV and has submitted revised Form 2 with request to consider the same for the purpose of tariff. We have considered the objections of HPPC. Since the line has been planned in consultation with all stakeholders including the beneficiaries, the tariff for the same shall be shared by the beneficiaries.

29. The petitioner has submitted that O & M norms for 2009-14 tariff block has been arrived on the basis of normalized actual O & M expenses of the petitioner during the year 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking was also considered while calculating the O & M charges for 2009-14 periods. The petitioner has submitted that it would approach the Commission for suitable revision in the norms of O & M expense in case the impact of wage hike w.e.f 1.1.2007 is more than 50%.





30. HPCC has submitted that O & M charges should be allowed on normative basis as per the 2009 regulations. UPPCL has submitted that since 2009 regulations have been framed after detailed consultation, discussion and public hearing, the request for revision in O & M norms should not be considered. We have considered the submissions of the petitioner and the respondents. The Commission has made provisions in 2009 regulations for absorption of impact of wage revision. If the petitioner approaches the Commission for or revision of O & M norms, the same shall be considered in accordance with law.

#### **INTEREST ON WORKING CAPITAL**

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

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

(ii) **Maintenance spares:** Regulation 18(1)(c)(ii) of the 2009 regulations provides for maintenance spares @ 15% per annum of the

O & M expenses specified in Regulation 19 of the 2009 regulations. The value of maintenance spares has been accordingly worked out.

**(ii) 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.

32. 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	44.07	46.60	49.27	52.08	55.04
O & M expenses	24.48	25.89	27.37	28.93	30.58
Receivables	408.19	405.85	403.62	400.63	397.86
<b>Total</b>	<b>476.75</b>	<b>478.33</b>	<b>480.25</b>	<b>481.64</b>	<b>483.48</b>
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	58.40	58.60	58.83	59.00	59.23

## TRANSMISSION CHARGES

33. 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	908.67	910.89	913.10	913.10	913.10
Interest on Loan	403.62	368.09	332.25	295.43	258.82
Return on Equity	784.66	786.86	789.06	789.06	789.06
Interest on Working Capital	58.40	58.60	58.83	59.00	59.23
O & M Expenses	293.81	310.65	328.45	347.19	366.96
<b>Total</b>	<b>2449.16</b>	<b>2435.08</b>	<b>2421.69</b>	<b>2403.78</b>	<b>2387.17</b>

### **Application fee and the publication expenses**

34. The petitioner has sought approval for the reimbursement of fee paid by it for filing the petition for determination of transmission tariff. Regulation 42 of the 2009 regulations provides as under:

“The application filing fee and the expenses incurred on publication of notices in the application for approval of tariff, may in the discretion of the Commission, be allowed to be recovered by the generating company or the transmission licensee, as the case may be, directly from the beneficiaries or the transmission customers, as the case may be.”

35. UPPCL has submitted that the filing fee should be allowed in view of the Hon`ble Commission`s order dated 11.9.2008 in Petition No. 129/2005. It is clarified that the said decision was applicable to the tariff period 2004-09. However, Regulation 42 of the 2009 regulation provides for reimbursement of filing fees and expenses on publication of notices may be allowed in the direction of the Commission. 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.

36. Accordingly, expenses incurred by the petitioner on application filing fees and publication of notices in connection with the present petition shall be directly recovered from the beneficiaries on *pro rata* basis.

### **Service Tax**

37. The prayer of the petitioner for reimbursement of service tax if it is revised in future has been opposed by UPPCL and HPPC. We have already decided in our order dated 23.9.2010 in Petition No. 62/2009 that the petitioner's claim for reimbursement of service tax has become infructuous as transmission of electricity is exempted from service tax as per the extent policy of the Government of India. As regards the reimbursement of service tax is imposed on the petitioner in future, the prayer is premature at this stage and if any application is made by the petitioner, the same will be dealt in accordance with law.

### **Licence fee**

38. UPPCL has submitted that licence fee is the onus of the licensee and therefore, it should not be passed on to the consumers. In this regard it is clarified that a view in the matter is yet to be taken by the Commission.

39. The transmission charges allowed shall be recovered on monthly basis in accordance with Regulation 23 and shall be shared by the respondents in accordance with Regulation 33 of the 2009 regulations.

40. This order disposes of Petition No. 233/2010.

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

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

**Sd/-**  
**(S.Jayaraman)**  
**Member**



## Annexure

## CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN

		(₹ in lakh)				
	Details of Loan	2009-10	2010-11	2011-12	2012-13	2013-14
<b>1</b>	<b>Bond X</b>					
	Gross loan opening	225.00	225.00	225.00	225.00	225.00
	Cumulative Repayment up to the date of commercial operation/previous year	93.75	112.50	131.25	150.00	168.75
	Net Loan-Opening	131.25	112.50	93.75	75.00	56.25
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	18.75	18.75	18.75	18.75	18.75
	Net Loan-Closing	112.50	93.75	75.00	56.25	37.50
	Average Loan	121.88	103.13	84.38	65.63	46.88
	Rate of Interest	10.90%	10.90%	10.90%	10.90%	10.90%
	Interest	13.28	11.24	9.20	7.15	5.11
	Rep Schedule	12 Annual instalments from 21.6.2004				
<b>2</b>	<b>Bond XI-option- I</b>					
	Gross loan opening	240.00	240.00	240.00	240.00	240.00
	Cumulative Repayment up to the date of commercial operation /previous year	80.00	100.00	120.00	140.00	160.00
	Net Loan-Opening	160.00	140.00	120.00	100.00	80.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	20.00	20.00	20.00	20.00	20.00
	Net Loan-Closing	140.00	120.00	100.00	80.00	60.00
	Average Loan	150.00	130.00	110.00	90.00	70.00
	Rate of Interest	9.80%	9.80%	9.80%	9.80%	9.80%
	Interest	14.70	12.74	10.78	8.82	6.86
	Rep Schedule	12 Annual Installments w.e.f 7.12.2005				
<b>3</b>	<b>Bond XII</b>					
	Gross loan opening	17.00	17.00	17.00	17.00	17.00
	Cumulative Repayment up to the date of commercial operation /previous year	5.67	7.08	8.50	9.92	11.33
	Net Loan-Opening	11.33	9.92	8.50	7.08	5.67
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	1.42	1.42	1.42	1.42	1.42
	Net Loan-Closing	9.92	8.50	7.08	5.67	4.25
	Average Loan	10.63	9.21	7.79	6.38	4.96
	Rate of Interest	9.70%	9.70%	9.70%	9.70%	9.70%
	Interest	1.03	0.89	0.76	0.62	0.48
	Rep Schedule	12 annual Instalments from 28.3.2006				
<b>10</b>	<b>Bond XXII</b>					
	Gross loan opening	185.00	185.00	185.00	185.00	185.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00	15.42	30.83	46.25



	Net Loan-Opening	185.00	185.00	169.58	154.17	138.75
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	15.42	15.42	15.42	15.42
	Net Loan-Closing	185.00	169.58	154.17	138.75	123.33
	Average Loan	185.00	177.29	161.88	146.46	131.04
	Rate of Interest	8.68%	8.68%	8.68%	8.68%	8.68%
	Interest	16.06	15.39	14.05	12.71	11.37
	Rep Schedule	12 annual Instalments from 7.12.2010				
<b>4</b>	<b>OBC</b>					
	Gross loan opening	110.00	<b>110.00</b>	<b>110.00</b>	<b>110.00</b>	<b>110.00</b>
	Cumulative Repayment up to the date of commercial operation /previous year	45.83	<b>55.00</b>	<b>64.17</b>	<b>73.33</b>	<b>82.50</b>
	Net Loan-Opening	64.17	55.00	45.83	36.67	27.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	9.17	9.17	9.17	9.17	9.17
	Net Loan-Closing	55.00	45.83	36.67	27.50	18.33
	Average Loan	59.58	50.42	41.25	32.08	22.92
	Rate of Interest	9.60%	9.60%	9.60%	9.60%	9.60%
	Interest	5.72	4.84	3.96	3.08	2.20
	Rep Schedule	12 annual Instalments from 22.3.2005				
<b>5</b>	<b>PNB- II</b>					
	Gross loan opening	132.00	<b>132.00</b>	<b>132.00</b>	<b>132.00</b>	<b>132.00</b>
	Cumulative Repayment up to the date of commercial operation /previous year	55.00	<b>66.00</b>	<b>77.00</b>	<b>88.00</b>	<b>99.00</b>
	Net Loan-Opening	77.00	66.00	55.00	44.00	33.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	11.00	11.00	11.00	11.00	11.00
	Net Loan-Closing	66.00	55.00	44.00	33.00	22.00
	Average Loan	71.50	60.50	49.50	38.50	27.50
	Rate of Interest	9.35%	9.35%	9.35%	9.35%	9.35%
	Interest	6.69	5.66	4.63	3.60	2.57
	Rep Schedule	12 annual Instalments from 8.3.2005				
<b>6</b>	<b>JBIC/OECF Exchange Rate 0.3909 Drawal 1</b>					
	Gross loan opening	10981.91	<b>10981.91</b>	<b>10981.91</b>	<b>10981.91</b>	<b>10981.91</b>
	Cumulative Repayment up to the date of commercial operation /previous year	685.54	<b>1257.56</b>	<b>1829.58</b>	<b>2401.60</b>	<b>2973.62</b>
	Net Loan-Opening	10297.36	9725.34	9153.32	8581.30	8009.28
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	572.02	572.02	572.02	572.02	572.02
	Net Loan-Closing	9725.34	9153.32	8581.30	8009.28	7437.25
	Average Loan	10011.35	9439.33	8867.31	8295.29	7723.26
	Rate of Interest	3.50%	3.50%	3.50%	3.50%	3.50%
	Interest	350.40	330.38	310.36	290.33	270.31
	Rep Schedule	Half Year Installments from 20.2.2007				
<b>7</b>	<b>JBIC/OECF Exchange Rate 0.3891 Drawal 2 on 04.11.2005</b>					
	Gross loan opening	96.98	<b>96.98</b>	<b>96.98</b>	<b>96.98</b>	<b>96.98</b>



	Cumulative Repayment up to the date of commercial operation /previous year	6.05	<b>11.11</b>	<b>16.16</b>	<b>21.21</b>	<b>26.26</b>
	Net Loan-Opening	90.93	85.88	80.83	75.78	70.73
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	5.05	5.05	5.05	5.05	5.05
	Net Loan-Closing	85.88	80.83	75.78	70.73	65.68
	Average Loan	88.41	83.36	78.31	73.25	68.20
	Rate of Interest	3.50%	3.50%	3.50%	3.50%	3.50%
	Interest	3.09	2.92	2.74	2.56	2.39
	Rep Schedule	Half Year Installments from 20.2.2007				
<b>8</b>	<b>JBIC/OECF Exchange Rate 0.3998 Drawal 3 on 09.09.2005</b>					
	Gross loan opening	611.17	<b>611.17</b>	<b>611.17</b>	<b>611.17</b>	<b>611.17</b>
	Cumulative Repayment up to the date of commercial operation /previous year	38.15	<b>69.99</b>	<b>101.82</b>	<b>133.66</b>	<b>165.49</b>
	Net Loan-Opening	573.07	541.24	509.40	477.57	445.74
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	31.83	31.83	31.83	31.83	31.83
	Net Loan-Closing	541.24	509.40	477.57	445.74	413.90
	Average Loan	557.16	525.32	493.49	461.65	429.82
	Rate of Interest	3.50%	3.50%	3.50%	3.50%	3.50%
	Interest	19.50	18.39	17.27	16.16	15.04
	Rep Schedule	12 annual Instalments from 8.3.2005				
<b>9</b>	<b>JBIC/OECF Exchange Rate 0.398 drawal 4 on 20.09.2005</b>					
	Gross loan opening	125.88	<b>125.88</b>	<b>125.88</b>	<b>125.88</b>	<b>125.88</b>
	Cumulative Repayment up to the date of commercial operation /previous year	7.86	<b>14.41</b>	<b>20.97</b>	<b>27.53</b>	<b>34.08</b>
	Net Loan-Opening	118.03	111.47	104.92	98.36	91.80
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	6.56	6.56	6.56	6.56	6.56
	Net Loan-Closing	111.47	104.92	98.36	91.80	85.25
	Average Loan	114.75	108.19	101.64	95.08	88.52
	Rate of Interest	3.50%	3.50%	3.50%	3.50%	3.50%
	Interest	4.02	3.79	3.56	3.33	3.10
	Rep Schedule	12 annual Instalments from 8.3.2005				
<b>10</b>	<b>JBIC/OECF Exchange Rate 0.3916 Drawal 5 on 26.12.2005</b>					
	Gross loan opening	133.53	<b>133.53</b>	<b>133.53</b>	<b>133.53</b>	<b>133.53</b>
	Cumulative Repayment up to the date of commercial operation /previous year	8.34	<b>15.29</b>	<b>22.25</b>	<b>29.20</b>	<b>36.16</b>
	Net Loan-Opening	125.21	118.25	111.30	104.34	97.39
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	6.96	6.96	6.96	6.96	6.96
	Net Loan-Closing	118.25	111.30	104.34	97.39	90.43
	Average Loan	121.73	114.78	107.82	100.86	93.91
	Rate of Interest	3.50%	3.50%	3.50%	3.50%	3.50%





Interest	4.26	4.02	3.77	3.53	3.29
Rep Schedule	12 annual Instalments from 8.3.2005				
<b>Total</b>					
Gross loan opening	12858.47	12858.47	12858.47	12858.47	12858.47
Cumulative Repayment up to the date of commercial operation /previous year	1026.19	1708.94	2407.11	3105.28	3803.45
Net Loan-Opening	11833.35	11150.60	10452.43	9754.26	9056.10
Additions during the year	0.00	0.00	0.00	0.00	0.00
Repayment during the year	682.75	698.17	698.17	698.17	698.17
Net Loan-Closing	11150.60	10452.43	9754.26	9056.10	8357.93
Average Loan	11491.98	10801.52	10103.35	9405.18	8707.01
Rate of Interest	3.82%	3.80%	3.77%	3.74%	3.71%
Interest	438.75	410.24	381.07	351.90	322.73

