

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No.224/2010

**Coram: 1. Dr. Pramod Deo, Chairperson
2. Shri V. S. Verma, Member
3. Shri M.Deena Dayalan, Member**

DATE OF HEARING: 22.2.2011

DATE OF ORDER: 16.5.2011

In the matter of:

Approval under regulation-86 of Central Electricity Regulatory Commission (Conduct of Business), Regulations 1999 and Central Electricity Regulatory Commission CERC (Terms and Conditions of Tariff) Regulations' 2009 for determination of Transmission Tariff from date of commercial operation to 31.3.2014 for Asset-I : LILO of One Circuit of 400 kV D/C Kankroli- Zarda line at Bhinmal along with 80 MVAR Bus Reactor at Bhinmal and Asset- 2 : 400 kV /220 kV 315 MVA ICT-I at Bhinmal S/S along with associated bays at Bhinmal Sub- Station under Transmission System associated with Northern Region System Strengthening Scheme- VIII (NRSS-VIII), in the Northern Region.

And in the matter of:

Power Grid Corporation of India Ltd.,Gurgaon

.... Petitioner

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited, Jaipur
2. Ajmed Vidyut Vitran Nigam Limited, Jaipur
3. Jaipur Vidyut Vitran Nigam Limited, Jaipur
4. Jodhpur Vidyut Vitran Nigam Limited, Jaipur
5. Himachal Pradesh State Electricity Board, Shimla
6. Punjab State Electricity Board, Patiala
7. Haryana Power Purchase Centre, Panchkula (Haryana)
8. Power Development Deptt., 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 M. M. Mondal, PGCIL
2. Shri Rajeev Gupta, PGCIL
3. Shri R. Prasad, PGCIL

ORDER

The petition has been filed for approval under regulation-86 of the Central Electricity Regulatory Commission (Conduct of Business), Regulations 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations' 2009 (hereinafter referred to as "the 2009 regulations") for determination of Transmission Tariff from date of commercial operation i.e. 1.9.2009 to 31.3.2014 for LILO of One Circuit of 400 kV D/C Kankroli- Zarda line at Bhinmal along with 80 MVAR Bus Reactor at Bhinmal (hereinafter referred to as "Asset – 1") and 400 kV /220 kV 315 MVA ICT-I at Bhinmal S/S along with associated bays at Bhinmal Sub- Station (hereinafter referred to as "Asset- 2") under Transmission System (both Asset-1 and Asset – 2 collectively referred to as "the transmission Assets") associated with Northern Region System Strengthening Scheme- VIII (hereinafter referred to as "the scheme"), for tariff block 2009-14 period in Northern Region. The petitioner has made the following prayers:-

(a) Approve the Transmission Tariff for assets covered under this petition, as per para-11 of the petition;

(b) In addition, invoke the provision of regulation 44 (Power to Relax) of the 2009 regulations, for relaxation of Regulation 15(3) of the above regulations, so that grossing up the base rate of RoE may be

allowed considering the tax rates viz., MAT, surcharge, any other cess, charges, levies etc., as per the relevant Finance Act and accordingly consequential impact of tariff on account of truing up may be allowed to be billed and settled directly with the beneficiaries every year in the tariff block.

(c) Allow the reimbursement of expenditure by the beneficiaries towards petition filing fee, and publishing of notices in newspapers in terms of Regulation 42 of the 2009 regulations and other expenditure (if any) in relation to the filing of petition;

(d) Allow the petitioner to bill and recover Licensee fee separately from the respondents;

(e) and pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.

2. The Investment approval to the scheme was accorded by Board of Directors of petitioner company vide letter dated 26.10.2006 at an estimated cost of Rs. 22069 lakh including IDC of Rs. 1144 lakh based on the 2nd quarter price level of 2006.

3. Both the assets for which transmission tariff has been claimed in this petition were commissioned on 1.9.2009.

4. The present petition covers determination of tariff based on actual expenditure incurred up to date of commercial operation and estimated additional capital expenditure projected to be incurred from date of commercial operation to 31.3.2014. The details of apportioned approved cost as on date of commercial operation and estimated additional capital expenditure (referred to as "Add Cap" in the table below) projected to be incurred for the transmission assets in this petition are summarized below:

Asset	Apportioned approved Cost	Actual Cost incurred as on date of commercial operation	Add Cap Proposed during 2009-10 period	Total Projected Add Cap during 2009-14	Total Estimated Capital Cost as on 31.3.2014
Asset - 1	11909.97	9069.67	652.71	652.71	9722.38
Asset - 2	3764.53	2154.36	1288.55	1288.55	3442.91
Total	15674.50	11224.33	1941.26	1941.26	13165.29

5. The petitioner has claimed the transmission charges during 2009-14 as under:

(₹ in lakh)

Asset-1					
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	286.68	507.71	507.71	507.71	507.71
Interest on Loan	347.76	580.52	533.48	486.35	439.23
Return on Equity	287.42	509.83	509.83	509.83	509.83
Interest on Working Capital	26.34	46.22	45.98	45.77	45.62
O & M Expenses	142.39	258.07	272.84	288.44	304.91
Total	1090.59	1902.35	1869.84	1838.10	1807.30

(₹ in lakh)

Asset-2					
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	84.38	177.15	177.15	177.15	177.15
Interest on Loan	101.33	202.72	186.67	170.51	154.36
Return on Equity	85.62	180.57	180.57	180.57	180.57
Interest on Working Capital	10.40	20.27	20.43	20.61	20.82
O & M Expenses	94.76	171.74	181.57	191.94	202.92
Total	376.49	752.45	746.39	740.78	735.82

6. The details submitted by the petitioner in support of its claim for Interest on Working Capital are given hereunder:

(₹ in lakh)

Asset-1					
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	36.61	38.71	40.93	43.27	45.74
O & M expenses	20.34	21.51	22.74	24.04	25.41
Receivables	311.60	317.06	311.64	306.35	301.22
Total	368.55	377.28	375.31	373.66	372.37
Interest	15.05	46.22	45.98	45.77	45.62
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%

(₹ in lakh)

Asset-2					
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	24.37	25.76	27.24	28.79	30.44
O & M expenses	13.54	14.31	15.13	16.00	16.91
Receivables	107.57	125.41	124.40	123.46	122.64
Total	145.48	165.48	166.77	168.25	169.99
Interest	10.40	20.27	20.43	20.61	20.82
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%

7. From the documents placed on record it is observed that there is no time or cost overrun in execution of the assets covered in the petition. However, in Form 5 B for the assets, it was noted that there was cost variation in certain items.

8. The Commission vide letter dated 28.9.2010 directed the petitioner to submit the following information/clarification on affidavit, latest by 15th October, 2010:

- (a) Justification along with relevant documents for the cost variation in items given in Form 5-B (at page 31 & 32 of petition) for LILO of One Circuit of 400kV D/C Kankroli-Zerda line at Bhinmal along with 80MVAR Bus Reactor at Bhinmal, specially, Earth wire, Control Room

and office building including HVAC, Sub-station equipments and establishment.

(b) Justification for cost variation in Transformer and Control Relay and Control panel and Bus Bars/Conductors/Insulators as indicated in Form 5B (at page 55 & 56 of the petition) for 400kV/220kV 315 MVA ICT-1 at Bhinmal S/S along with associated bays at Bhinmal Sub-station.

9. In this regard, the petitioner vide affidavit dated 29.10.2010, submitted that the main reason for increase in price of items like earth wire, control room and office building, sub stations equipments, compensating equipments, transformer and control relay and protection panel was the price escalation between 2006, when investment approval was accorded and placement of award in mid-2007 and further upto the date of commercial operation in September 2009, during which time the cost of materials such as copper, steel etc. has increased. It was further submitted that there has been over all increase in the prices of various power industry material viz. steel, cement, insulating materials etc during the above period. We are satisfied that the reason for variation in cost is mainly due to increase in the price of materials and hence equipment, during the above period, which is beyond the control of petitioner. The petitioner submitted indices and prices of various materials.

10. Bench marking data was also submitted by the petitioner vide affidavit dated 10.1.2011. After analysis, we notice that the cost of the assets

mentioned by the petitioner is less than the cost calculated from the benchmarking model.

11. Reply to the petition has been filed by Haryana Power Purchase Centre (HPPC), Uttar Pradesh Power Corporation (UPPCL), Ajmer Vidyut Vitaran Nigam Ltd., Jodhpur Vidyut Vitaran Nigam Ltd and Jaipur Vidyut Vitaran Nigam Ltd. The Respondent No. 3, Haryana Power Purchase Centre (HPPC), in its reply submitted that O&M charges should be paid on normative basis only. HPPC has also raised the issue the 80 MVAR bus reactor and 50 MVAR Line Reactor at Bhinmal were specifically not mentioned in the standing Committee approval or in memorandum dated 26.10.2006. It was also stated by them that apportionment of control room and office expenditure between two assets should be 50:50.

12. The petitioner in its rejoinder dated 21.2.2011 submitted that the 80 MVAR bus reactor and 50 MVAR Line Reactor at Bhinmal were covered under the scope of the work, under investment approval dated 26.10.2006. The petitioner submitted the document i.e. Annexure-I of the memorandum dated 26.10.2006 in which both of these elements are mentioned. Regarding O&M, the petitioner re-iterated its claim.

The Respondent No. 5, UPPCL has raised the issue of cost variation and O&M. Regarding cost-variation, UPPCL has submitted that the petitioner may be directed to submit certificates in respect of rise in prices of copper/steel based on documents published by IEEMA and Ministry of Steel, Gol. Regarding O&M, UPPCL has submitted that petitioner's claim for revision in

O&M norms should not be considered as once the normative parameters have been defined, the question of considering actual does not arise. UPPCL has further raised issues in regard to licence fee, impact of wage revision, grossing up of the ROE with MAT rate as per applicable Finance Act and floating rate of interest.

13. The petitioner in its rejoinder dated 21.2.2011 submitted that there was no cost over-run involved. However, there had been increase in prices of various power industry materials viz. Steel, cement, insulating material etc. from April, 2006, when investment approval was accorded to September 2009 when the transmission assets were commissioned. It was also submitted that statement showing indices and prices of various materials had already been submitted to Commission with copy to the respondent. Regarding O&M, the petitioner reiterated its claim.

14. The respondents No. 10,11 and 12 , Ajmer Vidyut Vitaran Nigam Ltd., Jodhpur Vidyut Vitaran Nigam Ltd and Jaipur Vidyut Vitaran Nigam Ltd. also raised the issue of O&M. The petitioner in its rejoinder reiterated its claim.

The submissions made by the respondents are addressed in the respective paragraphs hereunder.

15. 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. The issues raised by the Respondents have been considered at the relevant places in the order.

CAPITAL COST

16. As per proviso of Regulation 7(1) of the CERC (Terms and Conditions of Tariff) Regulations, 2009:

“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.”

17. Capital cost as on 1.9.2009 of ₹ 9069.67 lakh for Asset 1 as per the Auditor’s certificate dated 7.5.2010 and ₹ 2154.36 lakh for Asset 2 as per the Auditor’s certificate dated 24.12.2009 has been considered for the purpose of Tariff calculation.

PROJECTED ADDITIONAL CAPITAL EXPENDITURE

18. As regards 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”*

19. The 2009 regulations 2009, defines Cut off date as under:

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

20. Based on the above, the cut-off dates of the transmission assets will be 31.3.2012.

21. Petitioner has claimed Additional Capital Expenditure of ₹ 652.71 lakh for Asset 1 and ₹ 1288.55 lakh for Asset 2 for the year 2009-10 i.e from the date of commercial operation to 31.3.2010). There is no further projected add-cap beyond 31.3.2010. Apparently, the Additional capital expenditure claimed falls within the cut-off date. Hence, the same has been considered for the purpose of tariff calculation.

INITIAL SPARES

22. Capital Cost as on date of commercial operation is inclusive of initial spares of ₹ 103.01 lakh and ₹ 36.48 lakh for Asset 1 and Asset 2 respectively. Considering the additional capital expenditure and cut- off date, it is observed that the initial spares are within the ceiling limit as specified in Clause 8 of the 2009 regulations.

DEBT- EQUITY RATIO

23. Regulation 12 of the 2009 regulations provides as under:-

“(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.

(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.”

24. Details of Debt-Equity of the transmission assets as on the date of commercial operation are as per following:-

Asset 1	Approved		Capital Cost as on date of commercial operation	
Particulars	Amount (₹ in lakh)	%	Amount (₹ in lakh)	%
Debt	8336.98	70.00%	6349.00	70.00%
Equity	3572.99	30.00%	2720.67	30.00%
Total	11909.97	100.00%	9069.67	100.00%
Asset 2	Approved		Capital Cost as on date of commercial operation	
Particulars	Amount (₹ in lakh)	%	Amount (₹ in lakh)	%
Debt	2635.17	70.00%	1508.05	70.00%
Equity	1129.36	30.00%	646.31	30.00%
Total	3764.53	100.00%	2154.36	100.00%

25. Detail of Projected Additional Capitalisation Claimed by the Petitioner as follows:

	Normative	
	(₹ in lakh)	%
Asset 1	Add Cap for 2009-10	
Debt	456.90	70.00%
Equity	195.81	30.00%
Total	652.71	100.00%
Asset 2	Add Cap for 2009-10	
Debt	901.99	70.00%
Equity	386.57	30.00%

Total	1288.55	100.00%
-------	---------	---------

RETURN ON EQUITY

26. Regulation 15 of the 2009 regulations provides as under:

“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.”

27. The Petitioner has prayed for grossing up of base rate of return with MAT rate as per the applicable Finance Act. UPPCL has opposed the prayer of the petitioner on the ground that there is specific provision in 2009 Regulations for truing up of the expenditure at the end of the tariff period to take care of the situation.

28. 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 liability 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 regulation is under way and will address the concern of the petitioner with regard to the MAT rate.

29. The Return on Equity for **Asset 1** works out to ₹ 287.42 lakh for the period 2009-10(date of commercial operation to 31.3.2010) and ₹ 509.83 lakh for 2010-11 onwards to 2013-14. Return on Equity for **Asset 2** works out to ₹ 85.62 lakh for the period 2009-10 (date of commercial operation to 31.3.2010) and ₹ 180.56 lakh for 2010-11 onwards to 2013-14.

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 our calculation, the interest on loan has been worked out as detailed below:

(a) Gross amount of loan, repayment of installments, rate of interest and weighted average rate of interest on actual average loan have been considered as per the petition.

(b) The repayment for the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that period.

(c) Where the moratorium period has been availed by the transmission licensee, the repayment of the loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.

(d) Weighted average rate of interest on actual loan worked as per (a) above has been applied on the notional average loan during the year to arrive at the interest on loan.

32. Based on the above, Interest on loan has been worked out for the period 2009-14 as under:

(₹ in lakh)

Asset - 1					
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	6349.00	6805.90	6805.90	6805.90	6805.90
Cumulative Repayment up to Previous Year	0.00	286.68	794.39	1302.10	1809.81
Net Loan-Opening	6349.00	6519.22	6011.51	5503.80	4996.09
Addition due to Additional Capitalization	456.90	0.00	0.00	0.00	0.00
Repayment during the year	286.68	507.71	507.71	507.71	507.71
Net Loan-Closing	6519.22	6011.51	5503.80	4996.09	4488.38
Average Loan	6434.11	6265.36	5757.65	5249.94	4742.23
Weighted Average Rate of Interest on Loan	9.2656%	9.2656%	9.2656%	9.2639%	9.2620%
Interest	347.76	580.52	533.48	486.35	439.22

(₹ in lakh)

Asset - 2					
	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	1508.05	2410.04	2410.04	2410.04	2410.04
Cumulative Repayment up to Previous Year	0.00	84.38	261.53	438.68	615.83
Net Loan-Opening	1508.05	2325.65	2148.50	1971.36	1794.21
Addition due to Additional Capitalization	901.99	0.00	0.00	0.00	0.00
Repayment during the year	84.38	177.15	177.15	177.15	177.15
Net Loan-Closing	2325.65	2148.50	1971.36	1794.21	1617.06
Average Loan	1916.85	2237.08	2059.93	1882.78	1705.64
Weighted Average Rate of Interest on Loan	9.0621%	9.0621%	9.0621%	9.0567%	9.0505%
Interest	101.33	202.73	186.67	170.52	154.37

33. The detailed calculations in support of the weighted average rates of interest on loan have been computed as per the **Annexure-1** and **Annexure-2** to this order.

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.

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.

(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. The assets covered in the petition were put under commercial operation on 1.9.2009 and accordingly they will complete 12 years beyond 2013-14 and thus depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix-III.

36. For the period 1.4.2009 to 31.3.2014 the depreciation of the transmission assets has been worked out as under:

(₹ in lakh)

Asset - 1						
Details of Depreciation	As per DOCO	2009-10	2010-11	2011-12	2012-13	2013-14
Gross block as per DOCO	9069.67	9069.67	9722.38	9722.38	9722.38	9722.38
Addition during 2009-14 due to projected Additional Capital Expenditure		652.71	0.00	0.00	0.00	0.00
Gross block as per DOCO		9722.38	9722.38	9722.38	9722.38	9722.38
Average gross block		9396.03	9722.38	9722.38	9722.38	9722.38
Rate of Depreciation		5.2304%	5.2221%	5.2221%	5.2221%	5.2221%
Depreciable Value		8403.01	8677.32	8677.32	8677.32	8677.32
Remaining Depreciable Value		8403.01	8390.65	7882.94	7375.22	6867.51
Depreciation		286.68	507.71	507.71	507.71	507.71
Cumulative Depreciation/ Advance against Depreciation		0.00	0.00	0.00	0.00	0.00
Addition due to Additional Capitalisation		0.00	0.00	0.00	0.00	0.00
Cumulative Depreciation/ Advance against Depreciation		286.68	794.39	1302.10	1809.81	2317.52

(₹ in lakh)

Asset - 2						
Details of Depreciation	As per DOCO	2009-10	2010-11	2011-12	2012-13	2013-14
Gross block as per DOCO	2154.36	2154.36	3442.91	3442.91	3442.91	3442.91
Addition during 2009-14 due to projected Additional Capital Expenditure		1288.55	0.00	0.00	0.00	0.00
Gross block as per DOCO		3442.91	3442.91	3442.91	3442.91	3442.91
Average gross block		2798.64	3442.91	3442.91	3442.91	3442.91
Rate of Depreciation		5.1689%	5.1453%	5.1453%	5.1453%	5.1453%
Depreciable Value		2481.36	3035.12	3035.12	3035.12	3035.12
Remaining Depreciable Value		2481.36	2950.74	2773.59	2596.44	2419.30
Depreciation		84.38	177.15	177.15	177.15	177.15
Cumulative Depreciation/ Advance against Depreciation		0.00	0.00	0.00	0.00	0.00
Addition due to Additional Capitalisation		0.00	0.00	0.00	0.00	0.00
Cumulative Depreciation/ Advance against Depreciation		84.38	261.53	438.68	615.83	792.97

OPERATION & MAINTENANCE EXPENSES

37. In accordance with clause (g) of Regulation 19 of the 2009 regulations, the following norms have been specified for operation and maintenance expenses:

Transmission Line/Bays:	Year				
	2009-10	2010-11	2011-12	2012-13	2013-14
D/C, Twin Conductor T/Line (₹ in lakh/per kms.)	0.627	0.663	0.701	0.741	0.783
400 KV bay (₹ lakh/bay)	52.40	55.40	58.57	61.92	65.46
200 KV bay (₹ lakh/bay)	36.68	38.78	41.00	43.34	45.82

38. Accordingly, the petitioner's entitlement to O & M expenses has been worked out as under:

(₹ in lakh)

Asset-1					
	2009-10	2010-11	2011-12	2012-13	2013-14
55.006 Kms., 400 kV Double Circuit ,twin conductor transmission line	20.12	36.47	38.56	40.76	43.07
4 nos. 400 kV bays	122.27	221.60	234.28	247.68	261.84
Total	142.39	258.07	272.84	288.44	304.91

(₹ in lakh)

Asset -2					
	2009-10	2010-11	2011-12	2012-13	2013-14
1 no. 400 kV bay	30.57	55.40	58.57	61.92	65.46
3 nos. 220 kV bays	64.19	116.34	123.00	130.02	137.46
Total	94.76	171.74	181.57	191.94	202.92

39. The petitioner has further submitted that it reserves the right to approach the Commission for suitable revision in the norms for O & M expenditure in case the impact of wage hike w.e.f 1.1.2007 is more than 50%. UPPCL has opposed the claim of the petitioner on the ground that 2009 regulations do not have any provision for revision of O&M expenses under

any circumstances. It is clarified that any application filed by the petitioner for revision of O&M norms on account of pay revision will be dealt with in accordance with law.

INTEREST ON WORKING CAPITAL

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

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

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

(iv) **Rate of interest on working capital:** As per Regulation 18(3) of the 2009 regulations, rate of interest on working capital shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on 1.4.2009 or on 1st April of the year in which the project or part thereof (as the case may be) is declared under commercial operation, whichever is later. The interest on working capital is payable on normative basis notwithstanding that the transmission licensee has not taken working capital loan from any outside agency. The petitioner has claimed interest on working capital @ 12.25% based on SBI PLR as on 1.4.2009, which is in accordance with the 2009 regulations and has been allowed.

41. Necessary details in support of the computations of interest on working capital as under:

(₹ in lakh)

Asset - 1					
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	36.61	38.71	40.93	43.27	45.74
O & M expenses	20.34	21.51	22.74	24.04	25.41
Receivables	311.59	317.06	311.64	306.35	301.22
Total	368.55	377.27	375.30	373.65	372.36
Interest	26.34	46.22	45.97	45.77	45.61
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%

(₹ in lakh)

Asset - 2					
	2009-10	2010-11	2011-12	2012-13	2013-14
Maintenance Spares	24.37	25.76	27.24	28.79	30.44
O & M expenses	13.54	14.31	15.13	16.00	16.91
Receivables	107.57	125.41	124.40	123.46	122.64
Total	145.47	165.48	166.76	168.25	169.98
Interest	10.40	20.27	20.43	20.61	20.82
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%

TRANSMISSION CHARGES

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

(₹ in lakh)

Asset - 1					
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	286.68	507.71	507.71	507.71	507.71
Interest on Loan	347.76	580.52	533.48	486.35	439.22
Return on Equity	287.42	509.83	509.83	509.83	509.83
Interest on Working Capital	26.34	46.22	45.97	45.77	45.61
O & M Expenses	142.39	258.07	272.84	288.44	304.91
Total	1090.58	1902.35	1869.84	1838.11	1807.29

(₹ in lakh)

Asset - 2					
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	84.38	177.15	177.15	177.15	177.15
Interest on Loan	101.33	202.73	186.67	170.52	154.37
Return on Equity	85.62	180.56	180.56	180.56	180.56
Interest on Working Capital	10.40	20.27	20.43	20.61	20.82
O & M Expenses	94.76	171.74	181.57	191.94	202.92
Total	376.48	752.44	746.37	740.77	735.82

Application fee and the publication expenses

43. The petitioner has sought approval for the reimbursement of fee paid by it for filing the petition. In accordance with our decision in order dated 11.1.2010 in Petition No. 109/2009, the petitioner shall be entitled to recover the filing fee from the beneficiaries.

Licence Fee

44. The petitioner has prayed to bill and recover licence fees separately from the respondents. The cost accounted with licence fee has not been captured in the 2009 regulations. UPPCL in its reply has submitted that licence fee being the onus of licensee should not be passed over to the beneficiaries. In this connection it is clarified that the matter is under consideration and decision as and when taken will be applicable in this case.

45. 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.

46. This order disposes of Petition No. 224/2010.

sd/-
(M.DEENA DAYALAN)
MEMBER

sd/-
(V.S.VERMA)
MEMBER

sd/-
(Dr. PRAMOD DEO)
CHAIRPERSON

Annexure-1

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN						
					(₹ in lakh)	
	Details of Loan	2009-10	2010-11	2011-12	2012-13	2013-14
1	Bond XXVIII					
	Gross loan opening	4800.00	4800.00	4800.00	4800.00	4800.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	400.00
	Net Loan-Opening	4800.00	4800.00	4800.00	4800.00	4400.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	400.00	400.00
	Net Loan-Closing	4800.00	4800.00	4800.00	4400.00	4000.00
	Average Loan	4800.00	4800.00	4800.00	4600.00	4200.00
	Rate of Interest	9.33%	9.33%	9.33%	9.33%	9.33%
	Interest	447.84	447.84	447.84	429.18	391.86
	Rep Schedule	12 annual installments from 15.12.2012				
2	Bond XXIX					
	Gross loan opening	1030.00	1030.00	1030.00	1030.00	1030.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	85.83
	Net Loan-Opening	1030.00	1030.00	1030.00	1030.00	944.17
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	85.83	85.83
	Net Loan-Closing	1030.00	1030.00	1030.00	944.17	858.33
	Average Loan	1030.00	1030.00	1030.00	987.08	901.25
	Rate of Interest	9.20%	9.20%	9.20%	9.20%	9.20%
	Interest	94.76	94.76	94.76	90.81	82.92
	Rep Schedule	12 annual installments from 12.03.2013				
3	Bond XXX					
	Gross loan opening	519.00	519.00	519.00	519.00	519.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	519.00	519.00	519.00	519.00	519.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	43.25
	Net Loan-Closing	519.00	519.00	519.00	519.00	475.75
	Average Loan	519.00	519.00	519.00	519.00	497.38
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	45.67	45.67	45.67	45.67	43.77
	Rep Schedule	12 annual installments from 29.09.2013				

	Total Loan					
	Gross loan opening	6349.00	6349.00	6349.00	6349.00	6349.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	485.83
	Net Loan-Opening	6349.00	6349.00	6349.00	6349.00	5863.17
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	485.83	529.08
	Net Loan-Closing	6349.00	6349.00	6349.00	5863.17	5334.08
	Average Loan	6349.00	6349.00	6349.00	6106.08	5598.63
	Rate of Interest	9.2656%	9.2656%	9.2656%	9.2639%	9.2620%
	Interest	588.27	588.27	588.27	565.66	518.54

Annexure-2

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN						
					(₹ in lakh)	
	Details of Loan	2009-10	2010-11	2011-12	2012-13	2013-14
1	Bond XXVIII					
	Gross loan opening	640.00	640.00	640.00	640.00	640.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	53.33
	Net Loan-Opening	640.00	640.00	640.00	640.00	586.67
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	53.33	53.33
	Net Loan-Closing	640.00	640.00	640.00	586.67	533.33
	Average Loan	640.00	640.00	640.00	613.33	560.00
	Rate of Interest	9.33%	9.33%	9.33%	9.33%	9.33%
	Interest	59.71	59.71	59.71	57.22	52.25
	Rep Schedule	12 annual installments from 15.12.2012				
2	Bond XXIX					
	Gross loan opening	140.00	140.00	140.00	140.00	140.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	11.67
	Net Loan-Opening	140.00	140.00	140.00	140.00	128.33
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	11.67	11.67
	Net Loan-Closing	140.00	140.00	140.00	128.33	116.67
	Average Loan	140.00	140.00	140.00	134.17	122.50
	Rate of Interest	9.20%	9.20%	9.20%	9.20%	9.20%
	Interest	12.88	12.88	12.88	12.34	11.27
	Rep Schedule	12 annual installments from 12.03.2013				
3	Bond XXX					
	Gross loan opening	728.00	728.00	728.00	728.00	728.00
	Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	728.00	728.00	728.00	728.00	728.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	0.00	60.67
	Net Loan-Closing	728.00	728.00	728.00	728.00	667.33
	Average Loan	728.00	728.00	728.00	728.00	697.67
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	64.06	64.06	64.06	64.06	61.39
	Rep Schedule	12 annual installments from 29.09.2013				

Total Loan					
Gross loan opening	1508.00	1508.00	1508.00	1508.00	1508.00
Cumulative Repayment upto DOCO/previous year	0.00	0.00	0.00	0.00	65.00
Net Loan-Opening	1508.00	1508.00	1508.00	1508.00	1443.00
Additions during the year	0.00	0.00	0.00	0.00	0.00
Repayment during the year	0.00	0.00	0.00	65.00	125.67
Net Loan-Closing	1508.00	1508.00	1508.00	1443.00	1317.33
Average Loan	1508.00	1508.00	1508.00	1475.50	1380.17
Rate of Interest	9.0621%	9.0621%	9.0621%	9.0567%	9.0505%
Interest	136.66	136.66	136.66	133.63	124.91