

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No.73/2010

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

Date of Hearing: 25.11. 2010

Date of Order: 15.2.2011

In the matter of

Determination of transmission tariff for (i) one circuit of 132 kV D/C Sewa-II-Hiranagar line along with associated bay at Hiranagar sub-station; and (ii) one circuit of 132 kV D/C Sewa-II-Mahanpur line along with associated bays at Mahanpur-sub-station under transmission system associated with SEWA-II HEP 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 R.Prasad, PGCIL
3. Shri R.K.Gupta, PGCIL

ORDER

The petition has been filed by Power Grid Corporation of India Limited for approval of tariff for (i) one circuit of 132 kV D/C Sewa-II-Hiranagar line along with associated bay at Hiranagar sub-station; and (ii) one circuit of 132 kV D/C Sewa-II-Mahanpur line along with associated bays at Mahanpur-sub-station (hereinafter collectively referred to as the “transmission assets”) under transmission system associated with SEWA-II HEP(the transmission system) in Northern Region for the period from 1.4.2009 to 31.3.2014, based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as “the 2009 regulations”) after accounting for additional capital expenditure incurred during 2009-10 and 2010-11. The petitioner has made the following additional prayers:-

- (a) To invoke the provision of Regulation 44 of the 2009 regulations for relaxation of regulations 15 (3) of the 2009 regulations so that grossing up the base rate shall be allowed considering the revised rate of MAT as per the relevant Finance Acts and allow consequential impact on tariff for 2009-14 period accordingly;
- (b) To approve reimbursement of petition filing fee and publication of notices in the newspaper as per the 2009 regulations;

(c) Allow to bill and recover the service tax on transmission charges separately from the respondents, if the petitioner is subjected to such service tax; and

(d) Allow reimbursement of licence fee separately from the respondents.

2. The administrative approval and expenditure sanction to the transmission system was accorded by Board of Directors of the petitioner company vide Memorandum Ref: C/CP/SEWA-II dated 18.7.2005 at an estimated cost of ₹ 9847.00 lakh, which included IDC of ₹ 473.00 lakh, based on 4th quarter, 2004 price level. The date of the commercial operation of the transmission assets is 1.9.2009.

3. The details of apportioned approved cost, capital cost as on date of the commercial operation and projected additional capital expenditure for the transmission assets are as under:

(₹ in lakh)				
Apportioned approved cost	Actual cost as on the date of commercial operation	Capital expenditure incurred from the date of the commercial operation to 31.3.2010	Capital expenditure incurred from 1.4.2010 to 31.3.2011	Total capital expenditure
7225.50	4901.68	425.24	369.80	5696.72

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

(₹ in lakh)					
	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	157.23	290.39	300.07	300.07	300.07
Interest on Loan	196.00	340.97	324.58	295.47	266.57
Return on Equity	156.47	289.09	298.78	298.78	298.78
Interest on Working Capital	12.40	22.99	23.27	22.90	22.54
O & M Expenses	42.02	76.14	80.51	85.18	90.04
Total	564.12	1019.58	1027.21	1002.41	978.01

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	6.30	11.42	12.08	12.78	13.51
O & M expenses	6.00	6.35	6.71	7.10	7.50
Receivables	161.18	169.93	171.20	167.07	163.00
Total	173.48	187.70	189.99	186.95	184.01
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	12.40	22.99	23.27	22.90	22.54

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 (the Act). Replies to the petition have been filed by Haryana Power Purchase Centre (HPPC) and Uttar Pradesh Power Corporation (UPPCL), respondent No.7 and 9 respectively.

7. HPPC has raised the following objections:

(e) The investment approval for SEWA-II Hiranagar and SEWA-II Mahanpur lines were for 95 km and 40 km respectively against which the actual length is 78.46 km and 31.249 km. The discrepancies in line length should be explained by the petitioner.

(f) 132 kV Hiranagar Sewa line was charged on 5.8.2009 bypassing Sewa switchyard to give supply to Mahanpur sub-station of J & K from Hiranagar substation. Therefore, COD should be 5.8.2009 and not 1.9.2009. By declaring COD on 1.9.2009, J & K would get transmission service free of charge and simultaneously the IDC component of capital cost would increase from 5.8.2009 to 31.8.2009.

(g) Commissioning schedule of Sewa HEP has been delayed and till such time Sewa commences generation, the transmission charges of 132 kV Hiranagar-Sewa-Mahanpur section should be borne entirely by J & K. Apportionment of transmission charges on the beneficiaries should commence from the date of synchronising the first unit of Sewa II.

(h) The O & M charges prescribed in the 2009 regulations are on normative basis and as such prayer of the petitioner for reimbursement of additional expenditure on employee cost and licence fee should not be allowed or considered.

8. UPPCL in its reply has made the following submissions:

a) The 132 kV SEWA-II Mahanpur transmission lines were test checked on 31.3.2009 but could not be charged due to delay in completion of SEWA-II HEP which was being executed by NHPC. On a request from CE (S & O), PDD J & K, on the assurance of bearing wheeling charges, these lines were commissioned on 1.9.2009. Therefore, NHPC should bear the additional burden of IDC from 31.3.2009 to 31.8.2009 and the IDC for these five months should not be loaded on the beneficiaries.

b) The total time delay from the scheduled date of completion till 1.9.2009 is 16 months out of which the period of at the most 27 days for sorting out the problem of right of way seems reasonable and the balance period of delay has not been convincingly explained by the petitioner and the Commission may absolve the beneficiaries from

the burden of IDC and other charges due to time over-run of 15 months and 4 days.

- c) The total cost overrun due to transmission line material, sub-station equipments and IDC which will have effect of additional burden on the transmission tariff , is ₹451.23 lakh and the same may not be included in tariff as the amount of cost overrun has been triggered due to time overrun which is unjustified.
- d) The date of commercial operation of the assets is 1.9.2009 and the period is covered under section 80 IA of the Income Tax Act, 1961. Therefore, no income tax should be leviable on these assets and the grossing up of base rate of return on equity with MAT rates is not justified.
- e) As regards the O&M expenses on account of hike in wages, it has been submitted that the sanctity of 2009 regulations should be maintained.
- f) Licence fee is the onus of the licensee, therefore, there is no justification for passing over the burden to the consumers.

9. The petitioner has filed its rejoinder to the reply of UPPCL. It has been explained that the time overrun took place for the reasons beyond the control of the petitioner. It has been submitted that the lines were commissioned on 1.9.2009 which is beyond the zero date of IA while the first unit of SEWA II could be commissioned by NHPC on 29.6.2010, therefore, the situation went beyond the purview of IA. As regards the cost,



it has been submitted that the estimated completion cost of the transmission line component is ₹42.88 crore as against the original estimate of ₹60.11 crore which is within the approved cost. However, the cost of individual items is appearing on the higher side due to inclusion of taxes and duties in the respective elements as against the original estimates where they were shown separately. The petitioner has reiterated its contention with regard to wage revision and licence fee.

10. We have considered the submissions of both respondents and the petitioner. The petitioner has explained certain issues satisfactorily. In respect of other issues like time and cost overrun, the same has been dealt with in appropriate places of this order.

CAPITAL COST

11. Regulation 7 of the 2009 regulations provides for determination of capital cost as under:

“7. Capital Cost. (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 funds 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.”



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

(₹ in lakh)				
Apportioned approved cost	Actual cost as on the date of commercial operation	Projected capital expenditure from the date of the commercial operation to 31.3.2010	Projected capital expenditure incurred from 1.4.2010 to 31.3.2011	Total capital expenditure
7225.50	4901.68	425.24	369.80	5696.72

Time over-run

13. As per the investment approval, the transmission assets were to be commissioned by May 2008. However, the transmission assets were declared under commercial operation w.e.f 1.9.2009 and, therefore, there is a time over- run of 16 months. The petitioner has explained the reasons for time over run as under:

- (a) There was a delay in work due to agitation during Amarnath Shrine Board between June 2008 to August 2008.
- (b) The forest case was approved by the Govt. Of J&K vide order No. 554 dated 17.10.2006 and accordingly payments were made by the petitioner. However, during the construction of the line in the forest area near Hiranagar it was objected by the forest authorities on the ground that the area was not included in the earlier forest approval. The approval for forest clearance for the balance 4.7 kilometres of line length was received in November 2008. The forest clearance took time from October

2006 to November 2008 as against the time frame of 20 weeks anticipated by the petitioner for the project.

- (c) There was severe ROW problem in Kathua section and the last ROW was cleared only by end of February, 2009.
- (d) The transmission line was ready for commissioning by the 31.3.2009, but the Power Development Department, Govt. of Jammu and Kashmir officials did not allow commissioning of the transmission line. However, the circuit-I each of 132 kV D/C Sewa-II Harinagar line and 132 k V-II Mahanpur line were commissioned on 5.8.2009 and the transmission line was declared under commercial operation with effect from 1.9.2009.

14. The petitioner in its affidavit dated 14.7.2010 has explained that on account of the problems encountered in different stretches of the line at different time, the contractors have experienced problems for mobilization, demobilization and remobilisation of their gangs. However, work could be carried out by March 2009 immediately after obtaining the clearances, though the SEWA-II generation was not ready. Only after the insistence of Power Development Deptt., Govt. of J&K for utilisation of the line and assurance of paying the transmission charges, the line was charged and

commissioned. However, the delay due to the contractor and the LD amount, if any, shall be settled after the completion of the balance portion of work and at the time of contract closing and shall be accounted for in the project cost.

15. UPPCL in its reply has submitted that the causes of time over run of sixteen (16) months shown by the petitioner do not appear to be reasonable, particularly the reasons given for Amarnath agitation, forest clearance, late commissioning of SEWA-II HEP and partly the problem of Right of Way. At the most a period of 27 days for sorting out the problem of Right of Way seems reasonable and the beneficiaries may be absolved from the burden of additional interest during construction and other charges due to time over run of 15 months and 4 days. HPCC has submitted that the 132kV Hiranagar SEWA line was charged on 5.8.2009 at the instance of the Govt. of J&K and, therefore, the charges are to be entirely borne by the Govt. of J&K from 5.8.2009 till the date of synchronisation of the first unit of SEWA-II.

16. The Commission during the course of the hearing on 25.11.2010 directed the petitioner to furnish the following information:

- (a) Details of Indemnification Agreement with the generating company along with relevant documents.
- (b) Details of cost implication on the project due to delay in commissioning of the transmission system. The contribution in

this cost implications due to delay in commissioning of the Generating Station.

- (c) Details of Action envisaged to be taken regarding the recovery of cost implication due to delay as per indemnification agreement with the generating company; and
- (d) The justification for the actual cost as well as the cost increase in some items as given in From-5B, in spite of reduction of line length 109.709 km, from the estimated length of 135 km.

17. The petitioner in its reply dated 21.12.2010 has submitted that the petitioner had undertaken implementation of activities of the transmission system keeping in view the progress of generation project as it helps in optimum utilisation of recourses by the petitioner. However, it was not possible to delay the progress of the transmission system beyond a certain extent as it had an adverse bearing on the project cost. The petitioner was constraint to complete the construction activity and the lines were charges in March 2009 ahead of the commissioning of the SEWA-II generation project in June 2010. At the request of the Govt. of J&K who assured to pay the transmission charges, the lines were charged and commissioned with effect from 1.9.2009. As a result, it reduced the tariff burden of the beneficiaries to some extent. The petitioner has further submitted that since the lines were commissioned on 1.9.2009 which was beyond the zero date as per the Implementation Agreement, the situation went beyond the purview of the Implementation Agreement. The petitioner has further

submitted that the estimated completion cost of the transmission lines component is ₹ 42.88 crores as against the approved cost of ₹ 60.11 crores and, therefore, the overall project cost was within the original approved cost.

18. We have examined the submission of the petitioner and objection of the respondents with regard to time over run. On perusal of documents submitted by the petitioner, it is noted that the delay of 11 months from May 2008 to March 2009 was on account of agitation ROW problem and forest clearance which appear to be justified for the detailed reasons given by the petitioner. Moreover, it is noticed that the petitioner in its letter dated 6.8.2009 informed the Northern Regional Power Committee and the beneficiaries that the transmission lines were test checked on 31.3.2009 but could not be charged due to delay in completion of SEWA-II Hydro Electric Project. It was also mentioned by the petitioner that on request of Jammu and Kashmir, the transmission lines were charged on 5.8.2009 and was declared under commercial operation w.e.f. 1.9.2009. Therefore, we find that the delay of five months is not justified as the petitioner has not built in the sufficient safeguard in the Implementation Agreement to take care of the delay in the commissioning of the generating station. Accordingly, IEDC and IDC have not been allowed from 1.4.2009 till 31.8.2009 which amount to ₹177.32 lakh, ₹11.78 lakh and ₹0.41 lakh in respect of transmission line, sub-station and PLCC respectively.

Cost variation

19. UPPCL has submitted that there is cost over-run of ₹451.23 lakh due to transmission line material, sub-station equipments and IDC which will have the effect of additional burden on the transmission tariff and the same should not be included in the tariff. In response, the petitioner vide its rejoinder has submitted that there is not cost over-run. The estimated completion cost of the transmission line component is ₹42.88 crore as against the original estimate of ₹ 60.11 crore which is within approved cost. The cost of the individual item is appearing on higher side due to the inclusion of taxes and duties in respective elements. The explanation given by the petitioner is found to be justified and is accepted.

ADDITIONAL CAPITAL EXPEDNTURE

20. 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.”

21. The petitioner has submitted the following details in support of its claim for projected additional capital expenditure for the transmission assets:

Years	Nature and details of expenditure	Amount (₹ in lakh)
2009-10	Leasehold land - Balance and retention payments.	6.00
	Transmission line - Balance and retention payments.	386.60
	Sub-station - Balance and retention payments	30.80
	PLCC- Balance and retention payments.	1.84
	Total	425.24
2010-11	Leasehold land - Balance and retention payments.	10.39
	Transmission line - Balance and retention payments.	322.57
	Sub-station - Balance and retention payments.	34.76
	PLCC-Balance and retention payments.	2.08
	Total	369.80

22. The above additional capital expenditures are in the nature of undischarged liabilities and are projected to be capitalised within the cutoff date of the transmission assets which is upto 31.3.2012 as computed according to Regulation 3(11) of 2009 regulations. Therefore, the projected additional capital expenditure during 2009-10 and 2010-11 are admissible under Regulation 9(1) of 2009 regulations and are accordingly allowed.

TOTAL CAPITAL COST

23. Based on the above, gross block as given hereunder 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)

Particulars	Amount
capital cost as on date of commercial operation	4901.68
Less: IDC and IEDC	189.81
Capital Cost admissible for tariff determination	4712.51
Projected Additional capital expenditure during 2009-10	425.24
Capital cost as on 1.4.2010	5137.41
Projected Additional capital expenditure during 2010-11	369.80
Capital Cost as on 1.4.2011, 1.4.2012 and 1.4.2013	5507.21

DEBT- EQUITY RATIO

24. 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.”

25. The petitioner has claimed tariff based on debt-equity ratio of 70:30 as on the date of commercial operation. The petitioner has further claimed the amount of additional capital expenditure in the debt-equity ratio of 70:30 for the year 2009-10 and 2010-11. For the purpose of tariff, equity considered for the transmission asset is as under:

(₹ in lakh)

Equity as on date of commercial operation	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
1413.65	127.57	1477.44	110.94	1596.69	0.00	1652.16

RETURN ON EQUITY

26. Regulation 15 of the 2009 regulations provides for computation of return on equity 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 tried 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. UPPCL has submitted that grossing up of base rate of return on equity should not be allowed in terms of Income Tax Act, 1961. In response, the petitioner has submitted that return on equity has been grossed up as per the provisions of the 2009 regulations. It is clarified that the Commission vide its order dated 3.8.2010 in Petition Nos. 17/2010 and

38/2010 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 applicable 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 regulations is under way and will address the grievance of the petitioner with regard to the MAT rate.

28. 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	1413.65	1451.22	1652.16	1652.16	1652.16
Addition due to ACE	127.57	110.94	0.00	0.00	0.00
Closing Equity	1541.22	1652.16	1652.16	1652.16	1652.16
Average Equity	1477.44	1596.69	1652.16	1652.16	1652.16
Return on Equity(Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Tax rate for 2008-09	11.33%	11.33%	11.33%	11.33%	11.33%
Rate of ROE(Pre-tax)	17.481%	17.481%	17.481%	17.481%	17.481%
Return on Equity(Pre-tax)	150.66	279.12	288.81	288.81	288.81

INTEREST ON LOAN

29. Regulation 16 of the 2009 regulations provides for computation of interest on loan capital as under:

“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."

30. The interest on loan has been worked out in the manner detailed below:

- (i) Gross amount of the loan, repayment of instalments and rate of interest and weighted average rate of interest on actual average loan have been considered as per the petition;

- (ii) The repayment for the period 2009-14 shall be deemed to be equal to the depreciation allowed for that period;
- (iii) Moratorium period availed by the transmission licensee, the repayment of the loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed;
- (iv) Weighted average rate of interest on actual loan has been worked out as per (i) above and applied on the average loan during the year to arrive at the interest on loan; and
- (v) The interest on loan has been calculated on the basis of rate prevailing as on 1.4.2009. Any change in rate of interest subsequent to 1.4.2009 will be considered at the time of truing up.

31. The detailed calculations in support of the weighted revised average rate of interest are contained in Annexure attached to this order. The year-wise details of interest on loan have been worked out as under:

(₹ in lakh)

Details of loan	Up to 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Gross Normative Loan	3298.52	3298.52	3596.19	3855.05	3855.05	3855.05
Cumulative Repayment up to Previous Year		0.00	151.39	431.78	721.84	1011.89
Net Loan-Opening		3298.52	3444.79	3423.27	3133.21	2843.15
Addition due to Additional Capitalisation		297.67	258.86	0.00	0.00	0.00
Repayment during the year		151.39	280.38	290.06	290.06	290.06
Net Loan-Closing		3444.79	3423.27	3133.21	2843.15	2553.10
Average Loan		3371.66	3434.03	3278.24	2988.18	2698.13
Weighted Average Rate of Interest on Loan		9.5968%	9.5896%	9.5751%	9.5629%	9.5555%
Interest		188.75	329.31	313.89	285.76	257.82

DEPRECIATION

32. 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."

33. The transmission assets covered in the petition was notionally declared under commercial on 1.9.2009 and accordingly, assets will complete 12 years beyond 2013-14. Therefore, depreciation for the period 2009-14 has been calculated annually based on Straight Line Method and rate specified in Appendix-III of the 2009 regulations. Accordingly,

depreciation during the period 2009-14 in respect of the transmission assets has been worked out as under:

(₹ in lakh)

Details of Depreciation	Up to 31.3.2009	2009-10	2010-11	2011-12	2012-13	2013-14
Gross block as on date of commercial operation	4712.17	4712.17	5137.41	5507.21	5507.21	5507.21
Addition during 2009-14 due to projected Additional Capitalisation		425.24	369.80	0.00	0.00	0.00
Gross block		5137.41	5507.21	5507.21	5507.21	5507.21
Average gross block		4924.79	5322.31	5507.21	5507.21	5507.21
Rate of Depreciation		5.2699%	5.2681%	5.2669%	5.2669%	5.2669%
Depreciable Value (90%)		4432.31	4790.08	4956.49	4956.49	4956.49
Remaining Depreciable Value		4432.31	4638.68	4524.71	4234.65	3944.60
Depreciation		151.39	280.38	290.06	290.06	290.06

OPERATION & MAINTENANCE EXPENSES

34. In accordance with clause (g) of Regulation 19 the 2009 regulations, the following norms for 132 kV, S/C, Single conductor, transmission line and 132 kV bay are prescribed for O & M expenses:

Details of Transmission Assets	2009-10	2010-11	2011-12	2012-13	2013-14
132 kV S/C Single conductor transmission line (₹ in lakh /km)	0.179	0.189	0.200	0.212	0.224
132 kV and below bay (₹ in lakh/bay)	26.20	27.70	29.28	30.96	32.73

35. The petitioner has claimed O & M expenses for 109.73 ckt/km of transmission line and two bays. Accordingly, the petitioner's entitlement to O & M expenses has been worked out as under:

(₹ in lakh)

Details of the Transmission Assets	2009-10	2010-11	2011-12	2012-13	2013-14
132 kV, S/C, Single conductor transmission line (109.73 ckt/km)	11.46	20.74	21.95	23.26	24.58
132 kV (2 bays)	30.57	55.40	58.56	61.82	65.46
Total	42.02	76.14	80.51	85.18	90.04



36. The petitioner has submitted that it would approach the Commission for suitable revision in the norms of O & M expenses in case the impact of wage hike w.e.f. 1.1.2007 is more than 50%. Both UPPCL and HPPC have opposed the contention of the petitioner on the ground that the 2009 regulations provide for O & M expenses on normative basis and the sanctity of the regulations should be maintained. With reference to the submission of the petitioner, it is clarified that if any such application is made for revision of O & M expenses, the same will be dealt with in accordance with law.

INTEREST ON WORKING CAPITAL

37. 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.

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

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

38. 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	6.30	11.42	12.08	12.78	13.51
O & M expenses	6.00	6.35	6.71	7.10	7.50
Receivables	155.66	164.55	165.99	162.01	158.11
Total	167.97	182.31	184.77	181.89	179.12
Rate of Interest	12.25%	12.25%	12.25%	12.25%	12.25%
Interest	12.00	22.33	22.63	22.28	21.94

TRANSMISSION CHARGES

39. The transmission charges for the transmission assets are summarised below:

(₹ in lakh)

	2009-10	2010-11	2011-12	2012-13	2013-14
Depreciation	151.39	280.38	290.06	290.06	290.06
Interest on Loan	188.75	329.31	313.89	285.76	257.82
Return on Equity	150.66	279.12	288.81	288.81	288.81
Interest on Working Capital	12.00	22.33	22.63	22.28	21.94
O & M Expenses	42.02	76.14	80.51	85.18	90.04
Total	544.83	987.28	995.91	972.09	948.67

Application fee and the publication expenses

40. The petitioner has sought approval for the reimbursement of filing fee paid for determination of transmission tariff of the transmission assets.

Regulation 42 of the 209 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.”

41. UPPCL has submitted that the filing fee should be governed by the 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 at the discretion 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 on pro-rata basis. The petitioner shall also be entitled for reimbursement from the beneficiaries on pro-rata basis the publication expenses for issuing public notices in connection with the present petition under section 64 of the Act.

Service Tax

42. The prayer of the petitioner for reimbursement of service tax if it is subjected such tax in future. We have already decided in our order dated 23.9.2010 in Petition No. 62/2009 that the petitioner 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 in connection with service tax, the same will be dealt with in accordance with law.

Licence fee

43. The petitioner has claimed reimbursement of licence fee on the ground that the same has not been taken into account while fixing the O & M norms in 2009 regulations and it has created an extra burden on the petitioner. UPPCL has submitted that licence fee is the onus of the licensee and therefore, it should not be passed on to the consumers. The petitioner has raised this issue in a number of petitions. The matter is under consideration and any decision on the issue as and when taken will be applicable to this petition.

44. 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.

45. This order disposes of Petition No.73/2010.

Sd/-
(M.Deena Dayalan)
Member

Sd/-
(V.S.Verma)
Member

Sd/-
(Dr Pramod Deo)
Chairperson



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
1	Bond XXIV					
	Gross loan opening	1650.00	1650.00	1650.00	1650.00	1650.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00	137.50	275.00	412.50
	Net Loan-Opening	1650.00	1650.00	1512.50	1375.00	1237.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	137.50	137.50	137.50	137.50
	Net Loan-Closing	1650.00	1512.50	1375.00	1237.50	1100.00
	Average Loan	1650.00	1581.25	1443.75	1306.25	1168.75
	Rate of Interest	9.95%	9.95%	9.95%	9.95%	9.95%
	Interest	164.18	157.33	143.65	129.97	116.29
	Rep Schedule	12 annual installments from 26.3.2011				
2	BOND XXVII					
	Gross loan opening	660.00	660.00	660.00	660.00	660.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00	0.00	55.00	110.00
	Net Loan-Opening	660.00	660.00	660.00	605.00	550.00
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	55.00	55.00	55.00
	Net Loan-Closing	660.00	660.00	605.00	550.00	495.00
	Average Loan	660.00	660.00	632.50	577.50	522.50
	Rate of Interest	9.47%	9.47%	9.47%	9.47%	9.47%
	Interest	62.50	62.50	59.90	54.69	49.48
	Rep Schedule	12 annual installments from 31.3.2012				
3	BOND XXVIII					
	Gross loan opening	570.00	570.00	570.00	570.00	570.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00	0.00	0.00	47.50
	Net Loan-Opening	570.00	570.00	570.00	570.00	522.50
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	47.50	47.50
	Net Loan-Closing	570.00	570.00	570.00	522.50	475.00
	Average Loan	570.00	570.00	570.00	546.25	498.75
	Rate of Interest	9.33%	9.33%	9.33%	9.33%	9.33%
	Interest	53.18	53.18	53.18	50.97	46.53
	Rep Schedule	12 annual installments from 15.12.2012				
4	Bond XXIX					
	Gross loan opening	230.00	230.00	230.00	230.00	230.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00	0.00	0.00	19.17
	Net Loan-Opening	230.00	230.00	230.00	230.00	210.83



	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00	19.17	19.17
	Net Loan-Closing	230.00	230.00	230.00	210.83	191.67
	Average Loan	230.00	230.00	230.00	220.42	201.25
	Rate of Interest	9.20%	9.20%	9.20%	9.20%	9.20%
	Interest	21.16	21.16	21.16	20.28	18.52
	Rep Schedule	12 annual installments from 12.3.2013				
5	Bond XXX					
	Gross loan opening	321.00	321.00	321.00	321.00	321.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00	0.00	0.00	0.00
	Net Loan-Opening	321.00	321.00	321.00	321.00	321.00
	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	26.75
	Net Loan-Closing	321.00	321.00	321.00	321.00	294.25
	Average Loan	321.00	321.00	321.00	321.00	307.63
	Rate of Interest	8.80%	8.80%	8.80%	8.80%	8.80%
	Interest	28.25	28.25	28.25	28.25	27.07
	Rep Schedule	12 annual installments from 29.9.2013				
	Total Loan					
	Gross loan opening	3431.00	3431.00	3431.00	3431.00	3431.00
	Cumulative Repayment up to the date of commercial operation /previous year	0.00	0.00	137.50	330.00	589.17
	Net Loan-Opening	3431.00	3431.00	3293.50	3101.00	2841.83
	Additions during the year	0.00	0.00	0.00	0.00	0.00
	Repayment during the year	0.00	137.50	192.50	259.17	285.92
	Net Loan-Closing	3431.00	3293.50	3101.00	2841.83	2555.92
	Average Loan	3431.00	3362.25	3197.25	2971.42	2698.88
	Rate of Interest	9.5968%	9.5896%	9.5751%	9.5629%	9.5555%
	Interest	329.27	322.43	306.14	284.15	257.89