

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 94/TT/2011

Coram:-

Dr. Pramod Deo, Chairperson

Shri V.S. Verma, Member

Shri M. Deena Dayalan, Member

Date of Hearing: 3.05.2012

Date of Order : 2.01.2013

In the matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 for determination of transmission tariff for 400kV S/C Chamera-II pooling station transmission line, 400/220 kV 315 MVA ICT-I & ICT-II and 80 MVAR bus reactor at pooling point under establishment of 400/220 kV GIS pooling station near Chamera-II HEP for tariff block 2009-14 period in Northern Region.

And

In the matter of:

Power Grid Corporation of India Ltd., Gurgaon**Petitioner**

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited
2. Ajmer 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
8. Power Development Department, Jammu
9. Uttar Pradesh Power Corporation Ltd., Lucknow
10. Delhi Transco Limited, New Delhi
11. BSES Yamuna Power Limited, New Delhi
12. BSES Rajdhani Power limited, New Delhi
13. North Delhi Power Limited, New Delhi
14. Chandigarh Administration, Chandigarh



15. Uttarakhand Power Corporation Ltd., Dehradun
16. North Central Railway, Allahabad
17. New Delhi Municipal Council, New Delhi
18. Lanco Green Power Pvt. Ltd., Hyderabad
19. PTC India Ltd., New Delhi

.....Respondents

The following were present:-

1. Shri S.S. Raju, PGCIL
2. Shri M.M. Mondal, PGCIL
3. Shri Prashant Sharma, PGCIL
4. Shri Mukesh Khanna, PGCIL
5. Shri Rajeev Gupta, PGCIL
6. Shri T.P.S. Bawa, PSPCL

ORDER

This petition has been filed by Power Grid Corporation of India Limited (PGCIL) for determination of transmission tariff for 400kV S/C Chamera-II pooling station transmission line, 400/220 kV 315 MVA ICT-I & ICT-II and 80 MVAR bus reactor at pooling point under establishment of 400/220 kV GIS pooling station near Chamera-II HEP for the period 1.4.2009 to 31.3.2014 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2009 (hereinafter referred to as "2009 Tariff Regulations").

2. The administrative approval and expenditure sanction to the transmission project was accorded by Board of Directors of POWERGRID vide C/CP/GIS near Chamera –II dated 7.9.2007 for ` 26210 lakh including IDC of `1656 lakh based on 1st Quarter, 2007 price level.



3. The details of scope of work are given hereunder:-

A. Budhil time frame (Part-I)

Transmission Lines:

(i) Chamera Pooling station -Chamera- II HEP 400 kV S/C Line- 1 Kms

Sub Stations:

(i) New 400/220 kV GIS Pooling Station near Chamera –II Hep -2 X 315 MVA

(a) 2 no. of 220 kV line bays for lines from Bhudil;*

(b) 2 no. of 400/220 kV, 2X315 MVA transformer alongwith associated bays;

(c) 400kV line bay for Chamera Pooling Station –Chamera II HEP line;

(d) 220kV bus coupler/transfer bays;

* to be carried out on work depository basis on behalf of project Promoter (M/s Lanco) and cost has not been included in the Feasibility Report.

(ii) Extension of 400 kV Chamera –II HEP Switchyard (NHPC)**

** Work associated with bay is to be executed by NHPC on work deposit basis. Cost estimates for the work is tentative and has been included in the estimated cost and actual cost incurred after the completion of job to be paid to NHPC.

B. Chamera-III Time Frame Part-II

Sub-station:-

Extension of 400/220 kV GIS Pooling Station near Chamera-II HEP created under Budhil time frame (Part-I)

(a) 2 nos. of 400 kV line bays for Pooling Station-Jallandhar 400 kV D/C

line

- (b) 80 MVAR Bus Reactor
- (c) Bus Reactor bay
- (d) 2 nos. of 220 kV line bays for lines from Chamera-III HEP
- (e) 4 nos. of 220 kV line bays for lines for HPSEB

4. Provisional tariff in respect of the above mentioned assets was approved by the Commission vide its order dated 30.6.2011. This was subject to adjustment as per Regulation 5 (4) of the 2009 Tariff Regulations.

5. The details of the assets covered in the instant petition are given below. The date of commercial operation of all these assets is 1.11.2011.

Sr. No.	Transmission Line:
1	400 kV S/C twin conductor, Chamera Pooling Station – Chamera-II, T/L
	400 kV Chamera Pooling Station Chamera) sub-station
1	400 kV Chamera-II, HEP bay
2	400 kV ICT-I, bay
3	400 kV ICT,-II bay
4	400 kV Bus Reactor bay
	220 kV Chamera Pooling Station (Chamera) , sub-station
1	220 kV Chamera-III HEP Line-II bay
2	220 kV ICT-, bay
3	220 kV ICT-II, bay
4	400 kV Jalandhar-I, bay
5	400 kV Jalandhar-II, bay
	400 kV Chamera-II HEP (NHPC) GIS
1	400 kV Chamera Pooling Station (Chamera) bay
	220 kV Chamera Pooling Station-II S/S
1	220 kV Chamera-III HEP bay

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

(` in lakh)

Particulars	2011-12	2012-13	2013-14
Depreciation	381.02	968.10	984.68
Interest on Loan	458.53	1141.74	1111.61
Return on equity	390.07	1021.69	1070.19
Interest on Working Capital	36.03	91.65	94.01
O & M Expenses	239.23	606.96	641.67
Total	1504.88	3830.14	3902.16

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

(` in lakh)

Particulars	2011-12	2012-13	2013-14
Maintenance Spares	86.12	91.04	96.25
O & M expenses	47.85	50.58	53.47
Receivables	601.95	638.36	650.36
Total	735.92	779.68	800.08
Interest	36.03	91.65	94.01
Rate of Interest	11.75%	11.75%	11.75%

8. The petitioner has initially submitted that the anticipated date of commercial operation is 1.7.2011. Subsequently, vide affidavit dated 21.6.2011, petitioner has submitted that the anticipated date of commercial operation of the assets covered under Part I i.e. Budhil HEP portion and part-II i.e. Chamera-II HEP portion has been shifted to 1.8.2011 and 1.1.2012 respectively. The petitioner, vide affidavit dated on 29.12.2011, has further submitted that actual date of commercial operation

of assets covered in instant petition is 1.11.2011. The petitioner has also submitted the management certificate for capital expenditure up to 31.10.2011 and projected capital expenditure from 1.11.2011 to 31.3.2013 along with revised tariff forms.

9. The details of apportioned approved cost, capital expenditure as on the date of commercial operation and additional capital expenditure projected to be incurred from date of commercial operation to 31.3.2013, for the assets covered in petition are given hereunder:-

(` in lakh)

Apportioned approved cost	Actual cost incurred as on the date of commercial operation	Projected expenditure		Total estimated completion cost
		2011-12	2012-13	
24006.44	17144.52	1412.05	1849.56	20406.14

The completion cost is Inclusive of initial spares amounting to `516.39 lakh pertaining to sub-station.

10. 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 have been filed by Respondent No. 2-Ajmer Vidyut Vitran Nigam Limited, Respondent No.3-Jaipur Vidyut Vitran Nigam Limited, Respondent No. 4-Jodhpur Vidyut Vitran Nigam limited, Respondent No.6-Punjab State Electricity Board and Respondent No.9-Uttar Pradesh Power Corporation Limited (UPPCL). The petitioner has filed the rejoinder, dated 15.6.2012, to the reply filed by PSPCL. The objections raised by the respondents and the clarifications submitted by the petitioner have been dealt with in relevant paragraph of this order.

11. Having heard the representatives of the parties and perused the material on records, we proceed to dispose of the petition.

Capital cost:-

12. As regards capital cost, Regulation 7(1) (a) of the 2009 Tariff Regulations provides that:-

“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.”

Time over-run

13. As per investment approval dated 7.9.2007, the approved completion schedule was 30 months from the date of investment approval for sub-station package for Part-I i.e. Budhil HEP time frame portion and 36 months for sub-station package for Part-II i.e. Chamera-III time frame portion. In the investment approval it was also stated that efforts shall be made to complete Part-I of the project in the time frame of Budhil HEP. The assets covered in the instant petition were put under commercial operation as under:-

	Scheduled date of commercial operation	Actual date of commercial operation	Delay
Part-I	1.4.2010	1.11.2011	19 months
Part-II	1.10.2010	1.11.2011	13 months

14. The petitioner, vide affidavit dated 27.3.2012, has submitted that the main reasons for delay were land acquisition and hindrance on account of inhabitants. The process of land acquisition was initiated by the petitioner in February 2006 and notification under Section 4 was issued in June 2007 and work commenced in June 2008. The land levelling work was awarded to M/s Sanjeev Sharma in September 2007, but they could not start the work till June 2008 due to the hindrance created by local people. M/s ABB was allotted turnkey package for construction of GIS pooling station with scheduled commencement of work in December 2007. However, M/s ABB expressed inability to start the work due to local hindrances. M/s ABB could commence construction work only in October 2008. The work was again stopped by the local people during September and October 2009. The petitioner has further submitted that GIS Chamera pooling station has three connectivities i.e. 400kV S/C to Chamera-II (NHPC), 220 kV D/C to Chamera-III (NHPC) and 400 kV D/C to Jalandhar (Powergrid). For commissioning of the transmission assets at least two connectivities were required. The line to Jalandhar was delayed due to delay in forest approval, resulting in further delay. The NHPC bays were not ready and hence the works of GIS station were slowed down to match the commissioning of NHPC project. However, due to contractual obligation, further delay in commissioning was not possible and hence the system was charged after connecting to Chamera-II and Chamera-III projects with date of commercial operation of 1.11.2011. The petitioner has also submitted that Budhil and Chamera-III projects have not been declared operational and hence the commissioning of the transmission project was delayed. However, the system was charged nevertheless

due to contractual obligations on 1.11.2011. The petitioner has also submitted the details of activities and reasons for delay, alongwith the affidavit dated 21.6.2011. The petitioner reiterated that reasons for delay were land acquisition, hindrance created by local people and non-commissioning of related lines/bays.

15. The respondents, Jd.VVNL, AVNNL, JVVNL and PSPCL have raised the issue of time over-run in their respective replies. The petitioner, in its rejoinder to PSPCL's reply dated 15.6.2012, has clarified that AC transmission elements are such that once successfully test charged the elements are immediately available for transmission of power @100% of its rated capacity. Power flow through any AC element is dependent on grid condition and demand and supply situation of the grid, which is beyond the control of petitioner. In a transmission system, generally the transmission elements are static while in service and no rotating is involved. Unlike generating stations where one unit is connected with the grid at a certain mode and with further additional input the load is increased to its rated capacity, whereas in case of AC transmission elements no additional input is required for transmission of power at rated capacity. All the relevant test /checks are carried out before charging and once successfully test charged the transmission elements are available for regular service @ 100% of its rated capacity. The 2009 Tariff Regulations do not define trial run in case of transmission elements and therefore successful test charging is considered as completion of trial run.

16. We have considered the submissions of the respondents and the petitioner regarding time over-run. As regards the delay due to non availability of connectivity for GIS Chamera Pooling station, it is observed that this was due to delay in

commissioning of concerned transmission lines and the delay in construction of bays by NHPC. As regards the Pooling point- Jalandhar 400 kV D/C transmission line it has been submitted that the delay was due to delay in forest clearance. The delay in commissioning of pooling station was due to land acquisition and hindrance by local people and due to non-commissioning of connected transmission line on account of forest clearance. We are of the view that the reasons for delay is beyond the control of the petitioner. Therefore, the delay in commissioning of the subject assets is condoned.

Cost over run

17. As regards the cost over-run, the petitioner has submitted, vide affidavit dated 21.6.2011, that the cost of land has increased (by about 286%) due to actual increase in rates of land for acquisition by State Administration. The petitioner has submitted that the cost of tower steel has increased (by about 205%) due to use of 3 no. D type towers and also the FR/ Estimate is based on 2007 1st Qtr price level whereas actual cost is based on awarded cost plus PV upto 2011. Similarly, the cost variation in Control Room and Office Building (increased by 34%), township and Colony (increased by 60%), transformers (by 18%), foundations (by 76%), structures (by 58%), switchgear (by 4%), outdoor lighting plus cables (by 27%) occurred as the estimates were based on 2007 price level whereas actual cost is based on competitively awarded cost plus PV upto 2011. The petitioner has also submitted that the estimates are prepared by the petitioner as per well defined procedures for cost estimate. The cost estimate is broad indicative cost worked out generally on the basis of average unit rates of recently awarded contracts. For procurement, open

competitive bidding route is followed and by providing equal opportunity to all eligible firms, lowest possible market prices for required product/ services is obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The cost variation, as indicated in Form 5-B is due to the variation in estimated and the awarded price plus price variation.

18. The respondent, PSPCL has requested in its reply to direct the petitioner to clarify the abnormal cost escalation. During the hearing on 3.5.2012, the petitioner was directed to file its response to the issues raised by PSPCL. The petitioner in its rejoinder clarified that almost 90% of the land for construction of 400/220 kV GIS pooling sub-station, Chamba was acquired from NHPC. Therefore, the cost of land increased due to actual payment to NHPC. Regarding other items like tower steel, control room, etc, it was submitted that the cost has increased due to use of 3 no. D type towers and also due to reason that the FR/ Estimate was based on 2007 1st Qtr price level whereas actual cost is based on awarded cost plus PV upto 2011 under competitive bidding, on which the petitioner does not have any control.

19. We have considered the submissions of the petitioner. It is observed that the variation in cost of certain items is mainly due to difference in awarded and estimated rates. The reasons given by the petitioner for cost over-run appear to be justified and hence the increase in the cost is allowed.

Treatment of initial spares

20. The petitioner has claimed Initial Spares of ₹516.39 lakh and it exceeds the ceiling norms specified under Regulation 8 of Tariff Regulations 2009 by `9.32 lakh.

Details of the same are given hereunder:-

Calculation of Initial Spares					
Particulars	Project cost as on cut-off date*	Initial spares claimed	Ceiling limits as per Regulation 8 of 2009 Tariff Regulations	Initial spares worked out	Excess initial spares claimed
	(a)	(b)	(c)	$(d) = \frac{(a) - (b) * (c)}{100\% - (c)}$	$(e) = (d) - (b)$
Sub-station	20292.14	516.39	2.50%	507.07	9.32

* Cost pertaining to sub-station is inclusive of land, building, civil works and PLCC

Excess initial spares has been deducted proportionately from the cost of components of sub-station to arrive capital cost as on the date of commercial operation.

21. Petitioner has claimed capital cost of ₹17144.52 lakh, as on the date of commercial operation i.e.1.11.2011, vide management certificate dated 8.12.2011. However, capital cost of ₹17135.20 lakh as on the date of commercial operation, excluding excess initial spares claimed by the petitioner, has been considered for the purpose of tariff calculation.

Projected additional capital expenditure:-

22. As per Regulation 9 (1) of 2009 Tariff Regulations-

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

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

23. As per 2009 Tariff Regulations-

“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”.

Therefore, cut-off date for the above mentioned assets is 31.3.2014.

24. Details of proposed additional capital expenditure are as follows:-

(` in lakh)

Year	Work/ Equipment proposed to be added after date of commercial operation upto cut off date	Amount Capitalised or proposed	Justification
2011-12	Building & Civil Works	25.63	(Balance/ Retention payments and Freight & Insurance Payments)
	Sub-station	1378.37	
	PLCC	8.05	
	Total	1412.05	
2012-13	Freehold Land	1136.50	
	Building & Civil Works	235.52	
	Transmission Line	29.39	
	Sub-station	440.10	
	PLCC	8.05	
	Total	1849.56	

Additional capital expenditure claimed by the petitioner falls within the cut-off date.

Hence, the same has been considered for the purpose of tariff calculation.

Debt- equity ratio

25. Regulation 12 of the 2009 Tariff Regulations provides that,-

“12. **Debt-Equity Ratio.** (1) For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff:

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

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

(2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered.

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

26. The details of opening debt-equity considered for the purpose of tariff calculation is as follows:-

(` in lakh)

Particulars	Approved		Cost as on date of commercial operation	
	Amount	%	Amount	%
Debt	16804.51	70.00	11994.64	70.00
Equity	7201.93	30.00	5140.56	30.00
Total	24006.44	100.00	17135.20	100.00

27. The details of debt-equity ratio for the transmission system as on 31.3.2014 are given overleaf:-

(` in lakh)

Particulars	Cost as on 31.3.2014	
	Amount	%
Debt	14277.77	70.00
Equity	6119.04	30.00
Total	20396.81	100.00

28. Details of debt-equity for projected additional capital expenditure are as follows:-

(` in lakh)

Particulars	Additional capital expenditure for 2011-12		Additional capital expenditure for 2012-13	
	Amount	%	Amount	%
Debt	988.44	70.00	1294.69	70.00
Equity	423.62	30.00	554.87	30.00
Total	1412.05	100.00	1849.56	100.00

Return on equity

29. Regulation 15 of the 2009 Tariff Regulations provides that:-

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

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

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

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

(3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be:

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

Rate of pre-tax return on equity = Base rate / (1-t)

Where t is the applicable tax rate in accordance with clause (3) of this regulation.

(5) The generating company or the transmission licensee as the case may be, shall recover the shortfall or refund the excess Annual Fixed charge on account of Return on Equity due to change in applicable Minimum Alternate/ Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission.

Provided further that Annual Fixed charge with respect to the tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective financial year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations"

30. Petitioner's prayer to allow grossing up the base rate of return with applicable tax rate as per relevant Finance Act, shall be settled in accordance with the provisions of Regulation 15 of 2009 Tariff Regulations.

31. The following amount of equity has been considered for calculation of return of equity:-

(` in lakh)

Equity on date of commercial operation/ notional date of commercial operation	Notional equity due to ACE for the period 2011-12	Total equity considered for tariff calculations for the period 2011-12	Notional equity due to ACE for the period 2012-13	Total equity considered for tariff calculations for the period 2012-13	Notional equity due to ACE for the period 2013-14	Total equity considered for tariff calculations for the period 2013-14
5140.56	423.62	5352.37	554.87	5841.61	0.00	6119.04

32. The following amount of equity has been allowed for calculation of return of equity:-

(` in lakh)

Particulars	2011-12 (pro-rata)	2012-13	2013-14
Opening Equity	5140.56	5564.18	6119.04
Addition due to Additional capital expenditure	423.62	554.87	0.00
Closing Equity	5564.18	6119.04	6119.04
Average Equity	5352.37	5841.61	6119.04
Return on Equity (Base Rate)	15.50%	15.50%	15.50%
Tax rate for the year 2008-09 (MAT)	11.330%	11.330%	11.330%
Rate of Return on Equity (Pre Tax)	17.481%	17.481%	17.481%
Return on Equity (Pre Tax)	389.85	1021.17	1069.67

Interest on loan

33. Regulation 16 of the 2009 Tariff 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.”

34. In the calculations, the interest on loan has been worked out as detailed below:-

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

(ii) Tariff is worked out considering normative loan and normative repayments. Depreciation allowed has been taken as normative repayment for the tariff period 2009-14;

(iii) Notwithstanding 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 and

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

35. The petitioner has prayed to be allowed to bill and adjust impact on interest on loan, if any, due to change in interest rate on account of floating rate of interest applicable during 2009-14 period. UPPCL has submitted that the existing financial package do not have any provision for floating rate of interest. However, 2009 Tariff Regulations provides for swapping of loans in the interest of consumers only. UPPCL has submitted that the prayer of the petitioner is not tenable. It is noted that the project has been funded only through bonds of fixed rate of interest. The petitioner seems to have made a prayer for floating rate of interest inadvertently. Hence, the issue of floating rate of interest does not arise.

36. Detailed calculations of the weighted revised average rate of interest are given in Annexure to this order.

37. Details of the interest on loan worked out on the above basis are given overleaf:-

(` in lakh)

Particulars	2011-12 (pro-rata)	2012-13	2013-14
Gross Normative Loan	11994.64	12983.08	14277.77
Cumulative Repayment upto Previous Year	0.00	380.82	1348.44
Net Loan-Opening	11994.64	12602.26	12929.33
Addition due to Additional capital expenditure	988.44	1294.69	0.00
Repayment during the year	380.82	967.62	984.20
Net Loan-Closing	12602.26	12929.33	11945.13
Average Loan	12298.45	12765.79	12437.23
Weighted Average Rate of Interest on Loan	8.9436%	8.9396%	8.9339%
Interest	458.30	1141.21	1111.13

Depreciation

38. Regulation 17 (4) of the 2009 Tariff Regulations provides as under:-

"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 31th 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 asset".

39. Details of the depreciation worked out are given below:-

(` in lakh)

Particulars	2011-12 (pro-rata)	2012-13	2013-14
Opening gross block as on date of commercial operation	17135.20	18547.25	20396.81
Addition during 2009-14 due to Projected additional Capital expenditure	1412.05	1849.56	0.00
Closing Gross Block	18547.25	20396.81	20396.81
Average Gross Block	17841.23	19472.03	20396.81
Rate of Depreciation	5.12%	4.97%	4.82%
Depreciable Value	15809.74	16766.04	17086.91
Remaining Depreciable Value	15809.74	16385.22	15738.48
Depreciation	380.82	967.62	984.20
Cumulative Depreciation/Advance against Depreciation	380.82	1348.44	2332.64

Operation & maintenance expenses

40. Clause (g) of Regulation 19 of the 2009 Tariff Regulations prescribes the norms for operation and maintenance expenses based on the type of sub-station and line. Norms prescribed in respect of the elements covered in the instant petition are as under:-

(` in lakh)			
Element	2011-12	2012-13	2013-14
400 kV S/C twin conductor, T/Line (` lakh/ kms)	0.701	0.741	0.783
400 kV Bays (` lakh/ bay.)	58.57	61.92	65.46
220 kV Bays (` lakh/ bay)	41.00	43.34	45.82

41. As per the existing norms of 2009 Tariff Regulations, allowable O&M expenses for the assets covered in this petition are as under:-

(` in lakh)			
Asset	2011-12 (pro-rata)	2012-13	2013-14
0.375 Km, 400 kV S/C twin conductor, Chamera Pooling Station – Chamera- II T/L	0.06	0.16	0.17
7 Nos. 400 kV bays	170.83	433.44	458.22
4 Nos. 220 kV bays	68.33	173.36	183.28
Total O&M allowable	239.23	606.96	641.67

42. The petitioner has submitted that the O&M expenses for 2009-14 tariff block had been arrived on the basis of normalized actual O&M expenses of the petitioner during the year 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking was also considered while

calculating the O&M expenses for tariff period 2009-14. The petitioner has also submitted that it would approach Commission for suitable revision in the norms for O&M expenses in case the impact of wage hike with effect from 1.1.2007 is more than 50%. The respondents Jd.VVNL, AVVNL and JVVNL have submitted that O&M expenses may be allowed as per 2009 Tariff Regulations. We would like to clarify that the O&M expenses have been allowed as per the norms of 2009 Tariff Regulations. If any application is filed by the petitioner for revision of O&M norms on account of impact of pay revision, it will be dealt in accordance with law

Interest on working capital

43. The components of the working capital and the interest thereon are as under:-

(i) Receivables:-

As per Regulation 18 (1) (c) (i) of the 2009 Tariff Regulations, receivables will be equivalent to two months of fixed cost. The petitioner has claimed the receivables on the basis of 2 months transmission charges. In the tariff being allowed, receivables have been worked out on the basis of 2 months transmission charges.

(ii) Maintenance spares:-

Regulation 18(1)(c)(ii) of the 2009 Tariff Regulations provides for maintenance spares @ 15% per annum of the O & M expenses from 1.4.2009. The value of maintenance spares has accordingly been worked out.

(iii) O & M expenses:-

Regulation 18(1) (c) (iii) of the 2009 Tariff 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 the respective year as claimed in the petition. This has been considered in the working capital.

(iv) Rate of interest on working capital:-

SBI Base Rate of 8.25% Plus 350 Bps i.e. 11.75%, as on 1.4.2011 has been considered as the rate of interest on working capital.

44. Necessary computations in support of interest on working capital are given hereunder:-

Particulars	(` in lakh)		
	2011-12 (pro-rata)	2012-13	2013-14
Maintenance Spares	86.12	91.04	96.25
O & M expenses	47.85	50.58	53.47
Receivables	601.69	638.10	650.11
Total	735.66	779.72	799.83
Interest	36.02	91.62	93.98

Transmission charges

45. The transmission charges being allowed for the transmission lines are given overleaf:-

(` in lakh)			
Particulars	2011-12 (pro-rata)	2012-13	2013-14
Depreciation	380.82	967.62	984.20
Interest on Loan	458.30	1141.21	1111.13
Return on Equity	389.85	1021.17	1069.67
Interest on Working Capital	36.02	91.62	93.98
O & M Expenses	239.23	606.96	641.67
Total	1504.22	3828.58	3900.65

Filing fee and the publication expenses

46. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The respondent, UPPCL has submitted that the filing fee shall be governed as per the Commission's orders. In accordance with the Commission's order dated 11.1.2010 in Petition No. 109/2009 applicable for the tariff period 2009-14, the petitioner shall be entitled to recover the filing fee directly from the beneficiaries on *pro-rata* basis. The petitioner shall also be entitled for reimbursement of the publication expenses in connection with the present petition, directly from the beneficiaries on *pro-rata* basis.

Licence fee

47. The petitioner has submitted that in O&M expenses norms for tariff block 2009-14 the cost associated with license fees had not been captured and the license fee may be allowed to be recovered separately from the respondents. The respondent, UPPCL has submitted that the petitioner's request for reimbursement for licence fee should be rejected as license fee is the eligibility fee of a licence holder and it is the onus of the petitioner. The petitioner's prayer for reimbursement of licence fee shall be

dealt with in accordance with our order dated 25.10.2011 in Petition No. 21/2011 and 22/2011.

Service tax

48. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if it is subjected to such service tax in future. The respondent, UPPCL has submitted that the petitioner's request for recovery of service tax is premature. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

Sharing of transmission charges

49. The petitioner has submitted that the transmission charges for the assets covered under Part-I, shall be borne by PTC/LANCO till it becomes part of the regional system, in line with the BPTA dated 18.10.2007 entered into by PTC/LANCO and the petitioner. PSPCL has submitted that the transmission charges should be borne by LANCO/ PTC till the transmission system becomes a part of the Regional System. UPPCL has submitted that transmission charges for 400 kV line from pooling station to Jalandhar line and the proportionate transmission tariff of the pooling station will be borne by the constituents of Northern Region. The balance transmission tariff of pooling station shall be shared by HPSEB/ LANCO and PTC.

50. In the light of the submissions of the petitioner, we direct that the transmission charges for the transmission assets covered under Part-I shall be shared by the PTC/ LANCO in line with the BPTA dated 18.10.2007 signed between PTC/LANCO and the petitioner, till these assets becomes part of the regional system i.e till the commissioning of Chamera –III HEP. After the asset becomes part of regional system, all the constituents of the Northern Region shall share the tariff in accordance with Central Electricity Regulatory Commission (sharing of inter-state transmission charges and losses) Regulations, 2010.

51. The transmission charges for the assets already commissioned under Part-II shall be shared by the respondents in accordance with Regulation 33 of the 2009 Tariff Regulations upto 30.6.2011. With effect from 1.7.2011, the billing, collection & disbursement of the transmission charges shall be governed by the provision of Central Electricity Regulatory Commission (sharing of inter-state transmission charges and losses) Regulations, 2010 as amended from time to time.

52. This order disposes of Petition No. 94/TT/2011.

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	2011-12	2012-13	2013-14
1	Bond XXXIV			
	Gross loan opening	2075.00	2075.00	2075.00
	Cumulative Repayment upto DATE OF COMMERCIAL OPERATION/ previous year	0.00	0.00	0.00
	Net Loan-Opening	2075.00	2075.00	2075.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	2075.00	2075.00	2075.00
	Average Loan	2075.00	2075.00	2075.00
	Rate of Interest	8.84%	8.84%	8.84%
	Interest	183.43	183.43	183.43
	Rep Schedule	12 Annual instalments from 21.10.2014		
2	Bond XXXIII			
	Gross loan opening	427.00	427.00	427.00
	Cumulative Repayment upto DATE OF COMMERCIAL OPERATION/ previous year	0.00	0.00	0.00
	Net Loan-Opening	427.00	427.00	427.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	0.00
	Net Loan-Closing	427.00	427.00	427.00
	Average Loan	427.00	427.00	427.00
	Rate of Interest	8.64%	8.64%	8.64%
	Interest	36.89	36.89	36.89
	Rep Schedule	12 Annual instalments from 8.7.2014		
3	Bond XXIX			
	Gross loan opening	2227.00	2227.00	2227.00
	Cumulative Repayment upto DATE OF COMMERCIAL OPERATION/ previous year	0.00	0.00	185.58
	Net Loan-Opening	2227.00	2227.00	2041.42
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	185.58	185.58
	Net Loan-Closing	2227.00	2041.42	1855.83
	Average Loan	2227.00	2134.21	1948.63
	Rate of Interest	9.20%	9.20%	9.20%
	Interest	204.88	196.35	179.27



	Rep Schedule	12 Annual instalments from 12.3.2013		
4	Bond XXVIII			
	Gross loan opening	1475.00	1475.00	1475.00
	Cumulative Repayment upto DATE OF COMMERCIAL OPERATION/ previous year	0.00	0.00	122.92
	Net Loan-Opening	1475.00	1475.00	1352.08
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	122.92	122.92
	Net Loan-Closing	1475.00	1352.08	1229.17
	Average Loan	1475.00	1413.54	1290.63
	Rate of Interest	9.33%	9.33%	9.33%
	Interest	137.62	131.88	120.42
	Rep Schedule	12 Annual instalments from 15.12.2012		
5	Bond XXXI			
	Gross loan opening	359.00	359.00	359.00
	Cumulative Repayment upto DATE OF COMMERCIAL OPERATION/ previous year	0.00	0.00	0.00
	Net Loan-Opening	359.00	359.00	359.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	29.92
	Net Loan-Closing	359.00	359.00	329.08
	Average Loan	359.00	359.00	344.04
	Rate of Interest	8.90%	8.90%	8.90%
	Interest	31.95	31.95	30.62
	Rep Schedule	12 Annual instalments from 25.2.2014		
6	Bond XXX			
	Gross loan opening	5438.00	5438.00	5438.00
	Cumulative Repayment upto DATE OF COMMERCIAL OPERATION/ previous year	0.00	0.00	0.00
	Net Loan-Opening	5438.00	5438.00	5438.00
	Additions during the year	0.00	0.00	0.00
	Repayment during the year	0.00	0.00	453.17
	Net Loan-Closing	5438.00	5438.00	4984.83
	Average Loan	5438.00	5438.00	5211.42
	Rate of Interest	8.80%	8.80%	8.80%
	Interest	478.54	478.54	458.60
	Rep Schedule	12 Annual instalments from 29.9.2013		
	Total Loan			
	Gross loan opening	12001.00	12001.00	12001.00
	Cumulative Repayment upto DATE OF COMMERCIAL OPERATION/previous year	0.00	0.00	308.50



Net Loan-Opening	12001.00	12001.00	11692.50
Additions during the year	0.00	0.00	0.00
Repayment during the year	0.00	308.50	791.58
Net Loan-Closing	12001.00	11692.50	10900.92
Average Loan	12001.00	11846.75	11296.71
Weighted Average Rate of Interest	8.94%	8.94%	8.93%
Interest	1073.32	1059.05	1009.24

