# CENTRAL ELECTRICITY REGULATORY COMMISSION

#### **NEW DELHI**

### Petition No. 297/TT/2013

#### Coram:

Shri Gireesh B. Pradhan, Chairperson Shri A.K. Singhal, Member Shri A.S. Bakshi, Member

Date of Hearing : 26.03.2015 Date of Order : 15.01.2016

#### In the matter of:

Approval of transmission tariff for section of 400 kV (Quad) S/C Parbati-II-Koldam Transmission Line (CKT-II) starting from LILO Point of Parbati-III HEP to LILO Point of Parbati Pooling Station (COD-1.8.2013) in Northern Region for Tariff block 2009-14 period under Regulation-86 of Central Electricity Regulatory Commission (Conduct of business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009.

### And in the matter of:

Parbati Koldam Transmission Company Limited, B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110 016

....Petitioner

### Vs

- Rajasthan Rajya Vidyut Prasaran Nigam Limited, Vidyut Bhawan, Vidyut Marg, Jaipur- 302 005
- Ajmer Vidyut Vitran Nigam Limited, 400 kV GSS Building (Ground Floor), Ajmer Road, Heerapura, Jaipur
- Jaipur Vidyut Vitran Nigam Limited, 400 kV GSS Building (Ground Floor), Ajmer Road, Heerapura, Jaipur
- Jodhpur Vidyut Vitran Nigam Limited, 400 kV GSS Building (Ground Floor), Ajmer Road, Heerapura, Jaipur

- Himachal Pradesh State Electricity Board, Vidyut Bhawan, Kumar House Complex Building II, Shimla-171 004
- 6. Punjab State Electricity Board, The Mall, Patiala-147 001
- 7. Haryana Power Purchase Centre, Shakti Bhawan, Sector-6, Panchkula, (Haryana)-134 109
- 8. Power Development Department, Govt. of Jammu and Kashmir, Mini Secretariat, Jammu
- Uttar Pradesh Power Corporation Limited, (Formerly Uttar Pradesh State Electricity Board), Shakti Bhawan, 14, Ashok Marg, Lucknow-226 001
- 10. Delhi Transco Limited, Shakti Sadan, Kotla Road, New Delhi-110 002
- 11. BSES Yamuna Power Limited, Shakti Kiran Building, Karkardooma, Delhi-110 092
- 12. BSES Rajdhani Power Limited, BSES Bhawan, Nehru Place, New Delhi
- Tata Power Delhi Distribution Limited, Cennet Building, Adjacent to 66/11kV Pitampura-3, Grid Building, Near PP Jewellers, Pitampura, New Delhi-110 034
- 14. Chandigarh Administration, Sector-9, Chandigarh
- 15. Uttarakhand Power Corporation Limited, Urja Bhawan, Kanwali Road, Dehradun
- 16. North Central Railway, Allahabad
- 17. New Delhi Municipal Council, Palika Kendra, Sansad Marg, New Delhi-110 002

- Northern Region Electricity Board, 18-A, Shaheed Jeet Singh Marg, Katwaria Sarai, New Delhi – 110016
- Power Grid Corporation of India Limited, Saudamini, Plot No.2, Sector-29 Gurgaon-122001 (Haryana)

....Respondents

For Petitioner : Shri Aman Trivedi, PKTCL Shri Lokendra Singh, PKTCL Shri Anil Raawal, PKTCL

For Respondents : None

#### <u>ORDER</u>

The instant petition has been filed by Parbati Koldam Transmission Company Limited (PKTCL), a joint venture company of Reliance Infrastructure Limited (RIL) (74%) and Power Grid Corporation of India Limited (PGCIL) (26%), incorporated under the Companies Act, 1956, seeking approval of transmission tariff for (3.518 km) section of 400 kV (Quad) S/C Parbati-II Koldam Transmission Line (Ckt-II) starting from LILO point of Parbati-III HEP to LILO point of Parbati Pooling Station (hereinafter referred to as "transmission asset") under Central Electricity Regulation Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations").

2. The administrative approval and expenditure sanction to the transmission project was accorded by the Board of Directors of the (PGCIL), the JV partner company vide Memorandum No. C/CP/Parbati-II dated 26.12.2005 for ₹35842 lakh including IDC of ₹2905 lakh (based on 2<sup>nd</sup>Quarter, 2005 price level).

Subsequently, the Revised Cost Estimate of the transmission project was approved by the lenders of the project and also admitted by the Board of Directors of PKTCL vide meeting held on 15.7.2009 for ₹110169 lakh including an IDC of ₹17267 lakh. The details of the project cost are as follows:-

- a. Transmission system associated with Parbati-II HEP-₹61761 lakh including IDC of ₹9680 lakh.
- b. Transmission system associated with Koldam HEP-₹48408 lakh including IDC of ₹7587 lakh.
- 3. The scope of work covered under the project is as follows:-

## Transmission Lines

- i) Parbati-II-Koldam 400 kV (Quad) S/C transmission line-I: 61km.
- ii) Parbati-II-Koldam 400 kV (Quad) S/C transmission line-II: 68km.
- iii) 400 kV (Quad) D/C portions (envisaged for forest areas, river crossing etc): 20 km,
- iv) Realignment works at Koldam: 3 km of transmission line i.e. One Ckt. Of Koldam-Nalagarh double Circuit (D/C) line (covered under Transmission system associated with Koldam HEP is to be opened from Koldam end and to be connected to one Ckt. Of Parbati-II-Koldam line so as to create a direct Single Circuit (S/C) link between Parbati-II and Nalagarh.

## Sub-stations:

NIL\*

\*At Parbati-II, the switchyard would be provided by National Hydro-Electric Power Corporation (NHPC) while at Koldam, the Sub-station bay vacated at Koldam Switchyard due to realignment of transmission line at Koldam end shall be used to terminate other Ckt. of Parbati-II-Koldam line.



### Background

4. An Implementation Agreement between PGCIL and PKTCL was executed to construct and maintain 400 kV (Quad Moose Conductor) 2xS/C alongwith D/C transmission line on "Build Own and Operate" basis on 23.11.2007 and transmission license to PKTCL was granted by the Commission vide order dated 15.9.2008. Subsequently, Bulk Power Transmission agreements (BPTA) were executed between PKTCL and Northern Region beneficiaries towards supply of power from Parbati-II HEP, as the transmission system for evacuation of power of Parbati-II HEP was entrusted to PKTCL and that of Parbati-III HEP was entrusted to PGCIL. However, the evacuation system of Parbati-III HEP uses a small stretch of 3.518 km line of Parbati-II evacuation system. PKTCL was approached by PGCIL to provide and keep ready this portion of transmission line also, which connects two LILO points i.e. the point at which LILO shall touch transmission line and carry the power to the point where LILO is connected to Panarsa Pooling Point and accordingly the Implementation Agreement between PGCIL and PKTCL was amended vide Amendment No. 2 dated 27.8.2009. The proposal was also deliberated and agreed in the 29<sup>th</sup> Standing Committee meeting on Transmission System Planning of Northern Region and Long Term Access meeting held on 29.12.2010. Thereafter, in the 30<sup>th</sup> Standing Committee meeting of NR held on 19.12.2011, it was decided that to facilitate the evacuation of power from Parbati-III HEP, PKTCL would make all efforts to complete a section of 400 kV Quad S/C Parbati-II to Koldam line by July, 2012 in line with scheduled commissioning of Parbati-III HEP. The PKTCL section of line from Parbati-II alongwith PGCIL transmission system associated with Parbati-III HEP used for evacuation of power from Parbati-III HEP were declared under commercial operation on 1.8.2013.

5. The instant petition covers 3.518 km section of 400 kV (Quad) S/C Parbati-II Koldam Transmission Line (Ckt-II) starting from LILO point of Parbati-III HEP to LILO point of Parbati Pooling Station, which was included in the original scope of work of Parbati-II transmission system entrusted to PKTCL. As per the original investment approval, the instant transmission asset as transmission system for Parbati-II was scheduled to be commissioned within 36 months from the date of investment approval, i.e. by 1.1.2009 and the instant asset was commissioned on 1.8.2013. Thus, there is a delay of 55 months in the commissioning of the instant asset. However, this delay is on account of the delay in the commissioning of Parbati-II HEP.

6. Provisional tariff in respect of the instant asset was approved by the Commission vide its order dated 3.12.2013, subject to adjustment as per Regulation 5 (3) of the 2009 Tariff Regulations.

7. This order has been issued after considering PKTCL affidavits dated 10.9.2014, 15.9.2014 and 24.4.2015.

8. The petitioner, during the hearing on 26.3.2015, was directed to submit additional information for the purpose of truing-up as per the 2009 Tariff Regulations. Accordingly, the petitioner vide affidavit dated 24.4.2015 submitted the information and requested to consider the revised tariff forms for fixation of transmission tariff. However, the information submitted by the petitioner is not sufficient for working out the truing-up tariff. Accordingly, final tariff has been allowed for the instant asset on the basis of the information submitted by the petitioner. The petitioner is directed to submit a single true-up petition covering all the assets in its scope of the project. Further, the tariff allowed herein shall be revised at the time of truing-up subject to the petitioner filing the information as under:-

a. Audited figures of initial spares claimed and discharged;

b. Form-14-draw down schedule for calculation of IDC and financing charges covering-date of drawl, drawl amount and interest rate from drawl date to COD for both the loans covered in the petition i.e. PFC and REC loans;

c. Form-9A-capital expenditure as on COD on cash basis along with liability flow statement;

d. Form-13-Actual repayment of loan for the purpose of Weighted Average Rate of Interest;

e. Form-14A-Quarter-wise fund deployment and actual cash paid to contractors; and

f. Year-wise details of Incidental Expenditure discharged during the year.

9. The petitioner has claimed the transmission charges for the instant asset as under:-

(₹ in lakh)

	· ·
Particulars	2013-14
	(pro-rata)
Depreciation	44.76
Interest on Loan	76.13
Return on Equity	49.88
Interest on working capital	3.93
O & M Expenses	1.57
Total	176.27

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

	(₹ in lakh)
Particulars	2013-14 (pro-rata)
Maintenance Spares	0.35
O & M Expenses	0.20
Receivables	44.07
Total	44.62
Rate of Interest	13.20%
Interest	3.93

11. 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. Uttar Pradesh Power Corporation Ltd. (UPPCL), Respondent No. 9, has filed reply vide affidavit dated 30.9.2014. UPPCL has raised issues of additional capitalisation, pretax rate of return on equity, service tax and claim of O & M cost. The petitioner has not filed any rejoinder to the reply of the respondent. The objections raised by the respondent are addressed in the relevant paragraphs of this order.

12. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

## Capital cost

- 13. Regulation 7 of the 2009 Tariff Regulations provides as follows:-
  - "(1) Capital cost for a project shall include:
    - (a) The expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan – (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the fund deployed, - up



to the date of commercial operation of the project, as admitted by the Commission, after prudence check.

- (b) capitalized initial spares subject to the ceiling rates specified in regulation 8; and
- (c) Additional capital expenditure determined under regulation 9.

Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost.

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

Provided that in case of the thermal generating station and the transmission system, prudence check of capital cost may be carried out based on the benchmark norms to be specified by the Commission from time to time:

Provided further that in cases where benchmark norms have not been specified, prudence check may include scrutiny of the reasonableness of the capital expenditure, financing plan, interest during construction, use of efficient technology, cost over-run and time over-run, and such other matters as may be considered appropriate by the Commission for determination of tariff."

14. The petitioner has claimed the following capital cost for the instant

transmission asset:-

				(₹ in lakh)
Source of information	Nature of Capital cost	Cost as on	Additiona expen	•
		COD	2013-14	2014-15
Form-9A	Gross Block as per book of account.	1206.27	130.77	141.20
Auditors'				
Certificate	Certified as Payments made	1206.27	130.76	141.20
Form-5B	Mentioned as Expenditure	1206.27	130.77	141.20
	Additional capital expenditure			
Form-9	towards final/retention payment.	-	130.77	141.20

15. It is observed that the cost as per books of account as mentioned in Form-9A and the cost claimed as per Auditors Certificate are the same. The Auditors Certificate does not clearly state whether the certified cost are on accrual basis or on cash basis but only certifies that the payment has been made. Hence, it is assumed that the amount certified by Auditors is on cash basis. Accordingly, it is assumed that the entire amount has been discharged as on COD. Further, the additional capital expenditure (ACE) has been claimed towards the final/retention payment which implies that the ACE claims are towards the undischarged liability. Further, it is not possible to identify the capital cost on cash basis and the undischarged liabilities as on COD and the discharge of liability as ACE, due to the mismatch in the information submitted by the petitioner. However, for the purpose of tariff, the capital cost mentioned as per the Auditors Certificate have been considered, which is subject to true-up. Accordingly, the petitioner is directed to submit Auditor certified details of capital cost on cash basis as on COD along with liability flow statement duly reconciled with the capital cost as per books of account, at the time of truing-up.

16. The details of capital cost based on Auditors' Certificate, as on actual COD and total estimated completion cost, submitted by the petitioner vide affidavit dated 10.9.2014 are summarized below:-

				(₹ in lakh)
Apportioned approved	Capital cost as	Projected additional capital expenditure		Total estimated
cost	on COD	From COD 2014-15		completion
		to 31.3.2014		cost
1478.23	1206.27	130.76	141.20	1478.23

## Time Over-run:

17. As per Investment Approval, the asset was scheduled to be commissioned within 36 months from the date of IA. Thus, the instant asset was scheduled to be commissioned by 1.1.2009, against which the asset has been

commissioned on 1.8.2013. Thus, there is a delay of 55 months in the commissioning of the instant asset and as discussed at para-5, according to the petitioner the delay is on account of the delay in the commissioning of Parbati-II HEP. In this regard, the petitioner had filed Petition No. 135/MP/2011 for freezing the COD of Parbati-II and Koldam as the transmission system entrusted to it was being affected by the delay in the commissioning of both these projects. The Commission has disposed of the Petition No. 135/MP/2011 vide order dated 11.10.2012. However, as per para-6 of the order dated 11.10.2012 in Petition No. 135/MP/2011, CEA vide letter dated 18.5.2011 has intimated the revised schedule of commissioning of Koldam HEP as March, 2013 onwards and that of Parbati-II HEP as 2014-15.

18. The petitioner was directed to submit the reason for the delay. The petitioner vide affidavit dated 10.9.2014 has submitted the completion schedule /COD of LILO of 3.518 km line which connects two LILO points as given hereunder:-

Events	Anticipated COD	Actual COD	Delay	Remarks
As per amendment in implementation agreement between PGCIL and PKTCL dated 27.8.2009	November, 2010	1.8.2013	33 months	To match with Transmission system of Parbati-III HEP
30 <sup>th</sup> Standing Committee Meeting held on 19.12.2011	July, 2012	1.8.2013	12 months	To match with the commissioning of Transmission system for Parbati-III HEP on 1.8.2013.



19. The petitioner has further submitted that out of 3.518 km line length, 2.845 km of line length was falling in the forest land, for which stage-II forest clearance was accorded on 30.11.2012 and as the commissioning of Parbati-II HEP was delayed but Parbati-III HEP was to be commissioned before Parbati-II HEP, as per 30<sup>th</sup> SCM, the petitioner was instructed that the schedule commissioning of Parbati-II HEP transmission system, the portion of 3.518 km of the line which earlier was July, 2012, be completed to match with the commissioning of transmission system for Parbati-III HEP. The Parbati-III HEP has been commissioned on 1.8.2013. Accordingly, matching with commissioning of Parbati-III, HEP, the PKTCL section of line alongwith PGCIL portion of transmission system for Parbati-III HEP was also declared under commercial operation on 1.8.2013 to evacuate the power from Parbati-III HEP.

20. The time over-run of 55 months as per Investment Approval and time over-run of 12 months as per 30<sup>th</sup> Standing Committee meeting, in the commissioning of PKTCL portion is due to delay in commissioning of PGCIL transmission system associated with Parbati-III HEP. Thus, the total delay of 55 months is beyond the control of petitioner as its portion also was to be completed matching with commissioning of transmission system for Parbati-III HEP and we are therefore inclined to condone the delay of 55 months.

### **Treatment of IDC and IEDC**

21. The petitioner has claimed Interest during Construction (IDC) of ₹138.08 lakh and IEDC of ₹43.67 lakh for the asset. In the absence of requisite information (i.e. Form-14-draw down schedule for calculation of IDC and Financing charges covering-Date of drawl, drawl amount and interest rate from drawl date to COD for both the loans covered in the petition i.e. PFC and REC loans) IDC has not been worked out on cash basis. However, for the purpose of tariff, the claimed IDC of ₹138.08 lakh has been considered which is subject to true-up. Further, the petitioner is directed to submit (at the time of filing the true-up petition), the duly filled Form-14 based on quarter wise allocated loan amount to the asset covered in the instant petition and Form-14A based on actual cash expenditure made for the asset covered in the instant petition for all the quarters starting from first fund infusion to actual COD.

22. The petitioner has claimed IEDC of ₹43.67 lakh for the instant asset. The same has been considered for the purpose of tariff which is subject to trueup.

23. Regulation 9 of the 2009 Tariff Regulations provides for the treatment of undischarged liabilities after the same are discharged. The petitioner has not submitted the required information with regard to the IDC/IEDC actually discharged for this portion of line i.e. 3.518 km. The amount of IDC/IEDC for this portion, as claimed by the petitioner has been allowed in this order for the purpose of final tariff. However, the petitioner is directed to submit the amount of IDC/IEDC paid specific to the transmission asset considered in the instant petition upto the date of commercial operation and balance IDC/IEDC discharged after date of commercial operation at the time of truing-up. The IDC/IEDC allowed will be reviewed at the time of truing-up in light of aforesaid information.

## Treatment of Initial Spares

24. Regulation 8 of 2009 Tariff Regulations provides that initial spares shall be capitalised as a percentage of the original project cost, subject to following ceiling norms:-

0.75%
2.5%
3.5%

25. Initial spares initially claimed were not mentioned in CA certificate submitted vide affidavit dated 10.9.2014. However, as per affidavit dated 24.4.2015, the revised claim for initial spares submitted by the petitioner is for an amount of ₹10.16 lakh pertaining to the transmission line as per details below:-

	(₹ in lakh)
Period	Initial Spare Liability discharged
As on COD	9.92
2013-14	0.22
2014-15	0.02
Total	10.16

26. The initial spares claimed are within the normative limits of 0.75% as specified in the 2009 Tariff Regulations and based on the estimated capital cost as on the cut-off date and the ceiling limit of initial spares as defined in clause 8 of the 2009 Tariff Regulations, the allowable claim has been worked out as ₹11.09 lakh. As the initial spares claimed by the petitioner are within the ceiling limit, an amount of ₹10.14 lakh (i.e. ₹9.92 lakh+₹0.22 lakh) has been allowed as cost towards initial spares for 2009-14 tariff period. The claim of initial spares for 2014-15 being in the tariff period 2014-19 has not been considered. However,

the actual entitlement of initial spare as per actual completion cost as on the cut-off date shall be allowed at the time of tariff determination of 2014-19 period and the variance, if any, shall be adjusted in the year in which the cut-off date falls. The petitioner is directed to submit the audited cost for initial spares at the time of truing-up petition.

### Capital cost as on COD

27. The detail of capital cost considered as on COD after adjusting the claim of initial spares is as below:-

Capital cost claimed as on COD	Un-discharged Initial Spare as on COD	Capital cost as on COD after adjusting initial spares
1206.27	0.24	1206.03

(F in lakh)

### Projected additional capital expenditure

28. Clause (1) of Regulation 9 of the 2009 Tariff Regulations provides as

under:-

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

- (i) Undischarged liabilities;
- (ii) Works deferred for execution;
- (iii) Procurement of initial capital Spares within the original scope of work, subject to the provisions of Regulation 8;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and
- (v) Change in Law:"
- 29. Further, the 2009 Tariff Regulations defines cut-off date as follows:-



"cut-off date means 31<sup>st</sup> march of the year closing after 2 years of the year of commercial operation of the project, and incase of the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31<sup>st</sup> March of the year closing after 3 years of the year of commercial operation".

30. Therefore, the cut-off date for the instant asset is 31.3.2015 i.e. tariff period 2014-19.

31. The petitioner has claimed amounts of ₹130.76 lakh and ₹141.20 lakh towards additional capital expenditure for 2013-14 and 2014-15 respectively and has submitted that the additional capital expenditure claimed is for balance and retention payments. UPPCL has submitted that the petitioner has not submitted the details of balance and retention payments. Although, add-cap for 2014-15 is within cut-off date but falls beyond the tariff period 2009-14 and accordingly has not been considered. Further, the petitioner has claimed ₹7.30 lakh towards IDC and ₹1.75 lakh towards IEDC in add-cap during 2013-14 i.e. beyond COD. In the absence of details of IDC and IEDC discharged, the claim of IDC and IEDC after COD has also not been considered for the purpose of tariff. However, the same shall be considered at the time of true-up, subject to availability of requisite information and prudence check. In addition, as per the affidavit dated 24.4.2015 for revised claim of initial spares, an amount of ₹0.22 lakh has been discharged during financial year 2013-14 and the same has been allowed as additional capital expenditure for 2013-14. Accordingly, add-cap allowed for 2013-14 is ₹121.93 lakh i.e. {(₹130.76 lakh+₹0.22 lakh)-(₹1.75 lakh+₹7.30 lakh)}.

32. In view of above, the total estimated cost allowed from COD to 31.03.2014 for the purpose of tariff is summarized as under:-

#### (₹ in lakh)

Capital cost considered as on COD	Additional capital expenditure 2013-14	Total capital cost as on 31.3.2014
1206.27	121.93	1327.96

### Debt-Equity Ratio

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

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

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

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."

34. The petitioner has claimed debt: equity ratio of 70.01:29.99 as on the

date of commercial operation of the instant asset. The details of debt-equity in

respect of the instant asset covered in this petition as on date of commercial operation and as on 31.3.2014 respectively are as follows:-

Particulars	Capital cost as on COD		Capital cos 31.3.20	
	Amount		Amount	
	(₹ in lakh)	%	(₹ in lakh)	%
Debt	844.39	70.01	929.74	70.01
Equity	361.64	29.99	398.22	29.99
Total	1206.03	100.00	1327.96	100.00

35. The above stated debt-equity ratio has been applied for the purpose of tariff calculation in this order.

### Return on Equity

36. Regulation 15 of the 2009 Tariff 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% for thermal generating stations, transmission system and run of the river generating station, and 16.5% for the storage type generating stations including pumped storage hydro generating stations and run of river generating station with pondage and shall 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".

37. UPPCL has submitted that the petitioner may be directed to submit documents duly certified for having made actual payment of the Income Tax at the rate claimed. The petitioner has submitted that it may be allowed to recover the shortfall or refund the excess Annual Fixed Charges, on account of return on equity due to change in applicable Minimum Alternate Tax/Corporate Income Tax rate as per the Income Tax Act, 1961 of the respective financial year directly without making any application before the Commission. We wish to clarify that in respect of the instant asset pre-tax ROE of 20.96% p.a has been considered for the year 2013-14 on average equity as per Regulation 15 of the 2009 Tariff Regulations in this order itself.

	(₹ in lakh)
Particulars	2013-14
	(pro-rata)
Opening Equity	361.64
Addition due to Additional Capitalisation	36.58
Closing Equity	398.22
Average Equity	379.93
Return on Equity (Base Rate)	15.50%
Tax rate for the year 2013-14 (MAT)	20.96%
Rate of Return on Equity (Pre Tax)	19.610%
Return on Equity (Pre Tax)	49.67

38. The Details of return on equity calculated are as given under:-

. . . .

#### Interest on loan

39. Regulation 16 of the 2009 Tariff Regulations provides as under:-

"16. **Interest on loan capital**(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 refinancing of loan."



40. In these calculations, interest on loan has been worked out as hereinafter:-

(i) Gross amount of loan, repayment of instalments & rate of interest on loan have been considered as per affidavit dated 10.9.2014;

(ii) The repayment for the tariff period 2009-14 has been considered to be equal to the depreciation allowed for that period;

(iii) Weighted average rate of interest on actual loan portfolio has been worked out and is applied on the normative average loan during the year to arrive at the interest on loan; and

(iv) In Form-13 petitioner has shown proposed addition during 2013-14 in PFC and REC loans, which has not been allowed while working out weighted average rate of interest.

41. The petitioner has submitted that it be allowed to bill and adjust impact on Interest on Loan due to change in interest due to floating rate of interest applicable, if any, from the respondents. We would like to clarify that the interest on loan has been calculated on the basis of rate prevailing as on the date of commercial operation. Any change in rate of interest subsequent to the date of commercial operation will be considered at the time of truing up.

42. Detailed calculation of the weighted average rate of interest has been given at Annexure to this order.

43. Based on above, details of Interest on Loan calculated are as overleaf:-

	(₹ in lakh)
Particulars	2013-14
	(pro-rata)
Gross Normative Loan	844.39
Cumulative Repayment upto Previous Year	-
Net Loan-Opening	844.39
Addition due to Additional Capitalisation	85.35
Repayment during the year	44.60
Net Loan-Closing	885.14
Average Loan	864.77
Weighted Average Rate of Interest on Loan	13.1592%
Interest	75.86

### **Depreciation**

44. Regulation 17 of the 2009 Tariff Regulations provides for computation of

depreciation in the following manner, namely:-

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

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

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

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

(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."

45. Date of commercial operation of the instant asset covered in the petition falls in the year 2013-14. Accordingly, the instant asset 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 of the 2009 Tariff Regulations.

	(₹ in lakh
Particulars	2013-14
	(pro-rata)
Opening Gross Block	1206.03
Additional Capital expenditure	121.93
Closing Gross Block	1327.96
Average Gross Block	1267.00
Rate of Depreciation	5.2800%
Depreciable Value	1140.30
Depreciation	44.60
Cumulative depreciation	44.60

46. Details of the depreciation allowed are as under:-

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

47. The norms for O&M Expenses for the transmission system based on the type of sub-station and the transmission line are prescribed vide clause (g) of Regulation 19 of the 2009 Tariff Regulations. The norms for the instant asset covered in this petition are as hereunder:-

Eler	nent	2012-13	2013-14
400 kV Quad S/C	line (₹ lakh/km)	0.635	0.671



48. Accordingly, as per norms specified in the 2009 Tariff Regulations, O&M Expenses have been allowed and they are as follows:-

	(` in lakh)
Element	2013-14 (pro-rata)
3.518 km, S/C Quad line (LILO point of Parbati- III HEP to LILO point of Parbati Pooling Station	
of Parbati-II to Koldam Transmission Line (Ckt-II)	1.57

49. The petitioner has submitted that the claim for transmission tariff is exclusive of any late payment surcharge, statutory taxes, levies, duties, cess or any other kind of impositions etc. Such kinds of payments are generally included in the O & M Expenses. While specifying the norms for the O & M Expenses, the Commission has in the 2009 Tariff Regulations, given effect to the impact of such charges/levies after extensive consultations with the stakeholders as one time compensation for O&M cost. We do not see any reason why the admissible amount is inadequate to meet the requirement of the O&M cost. In this order, we have allowed O&M Expenses as per the existing norms.

# Interest on working capital

50. The petitioner is entitled to claim interest on working capital as per the 2009 Tariff Regulations. 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 Tariff Regulations, receivables will be equivalent to two months average billing calculated on target availability level. 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 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 as part of the working capital 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 O&M Expenses for one month to be included as a component of working capital. The petitioner has claimed O&M Expenses for 1 month of the respective year. This has been considered in the working capital.

## (iv) Rate of interest on working capital

As provided under 18(3) of the 2009 Tariff Regulations, SBI Base rate of 9.70% as on 1.4.2013 plus 350 BPS i.e. 13.20% has been considered for the purpose of working out the interest on working capital.

51. Necessary computations in support of interest on working capital are as below:-

	(₹ in lakh)
Particulars	2013-14
	(pro-rata)
Maintenance Spares	0.35
O & M expenses	0.20
Receivables	43.90
Total	44.45
Rate of Interest	13.20%
Interest	3.91



# Transmission charges

52. The transmission charges being allowed for the instant asset are summarized hereunder:-

	(₹ in lakh)
Particulars	2013-14
	(pro-rata)
Depreciation	44.60
Interest on Loan	75.86
Return on equity	49.67
Interest on Working Capital	3.91
O & M Expenses	1.57
Total	175.61

# Filing fee and the publication expenses

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

# Licence fee

54. The petitioner has submitted that in O&M 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 petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42 A (1) (b) of the 2009 Tariff Regulations.

# Service tax

55. 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

withdrawn from the negative list at any time in future. The petitioner has also submitted that any taxes and duties imposed by any statutory/ Government/Municipal authorities shall be allowed to be recovered from the beneficiaries. UPPCL has submitted that the service tax on transmission is presently in the negative list and therefore the prayer of the petitioner is infructuous. We consider petitioner's prayer pre-mature.

## Sharing of Transmission Charges

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

57. This order disposes of Petition No. 297/TT/2013.

sd/-(A.S. Bakshi) Member sd/-(A.K. Singhal) Member sd/-(Gireesh B. Pradhan) Chairperson



#### Annexure

<b></b>	(₹ in lakh)			
(	CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN Details of Loan 2013-14			
1	PFC Loan	2013-14		
-	Gross loan opening	492.72		
	Cumulative Repayment upto DOCO/previous year	0.00		
	Net Loan-Opening	492.72		
	Additions during the year	0.00		
	Repayment during the year	0.00		
	Net Loan-Closing	492.72		
	Average Loan	492.72		
	Rate of Interest	13.18%		
	Interest	64.94		
		46 quarterly instalments		
	Rep Schedule	from 15.07.2009		
2	REC Loan	1011 10:07:2000		
	Gross loan opening	351.67		
	Cumulative Repayment upto DOCO/previous year	0.00		
	Net Loan-Opening	351.67		
-	Additions during the year	0.00		
	Repayment during the year	0.00		
	Net Loan-Closing	351.67		
	Average Loan	351.67		
-	Rate of Interest	13.13%		
	Interest	46.17		
		46 quarterly instalments		
	Rep Schedule	from 31.07.2009		
	Gross loan opening	844.39		
	Cumulative Repayment upto DOCO/previous year	0.00		
	Net Loan-Opening	844.39		
	Additions during the year	0.00		
	Repayment during the year	0.00		
	Net Loan-Closing	844.39		
	Average Loan	844.39		
	Rate of Interest	13.1592%		
	Interest	111.11		

