CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 71/TT/2016

Coram:

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

Date of Order : 23.12.2016

In the matter of:

Truing up of transmission tariff of 2009-14 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 and determination of transmission tariff for 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for a 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 in Northern Region.

And in the matter of:

Parbati Koldam Transmission Company Ltd.
B-9, Qutab Institutional Area
Katwaria Sarai, New Delhi-110016 **………Petitioner**

Versus

1. Rajasthan Rajya Vidyut Prasarn Nigam Limited
   Vidyut Bhawan, Vidyut Marg,
   Jaipur - 302005

2. Ajmer Vidyut Vitran Nigam Limited
   400 kV GSS Building (Ground Floor),
   Ajmer Road, Heerapura, Jaipur

3. Jaipur Vidyut Vitran Nigam Limited
   400 kV GSS Building (Ground Floor),
   Ajmer Road, Heerapura, Jaipur.

4. Jodhpur Vidyut Vitran Nigam Limited
400 kV GSS Building (Ground Floor),
Ajmer Road, Heerapura, Jaipur

5. Himachal Pradesh State Electricity Board
Vidyut Bhawan
Kumar House Complex Building II
Shimla-171004

6. Punjab State Power Corporation Limited
Thermal Shed TIA,
Near 22 Phatak, Patiala-147001

7. Haryana Power Purchase Centre
Shakti Bhawan, Sector-6
Panchkula (Haryana) 134 109

8. Power Development Deptt.
Government of Jammu & Kashmir
Mini Secretariat, Jammu

9. Uttar Pradesh Power Corporation Limited
(Formarly Uttar Pradesh State Electricity Board)
Shakti Bhawan, 14, Ashok Marg
Lucknow - 226 001

10. Delhi Transco Ltd.
Shakti Sadan, Kotla Road,
New Delhi-110002

11. BSES Yamuna Power Ltd.
BSES Bhawan, Nehru Place,
New Delhi.

12. BSES Rajdhani Power Ltd.
BSES Bhawan, Nehru Place,
New Delhi

13. Tata Power Delhi Distribution Ltd.
Cennet Building, Adjacent to 66/11 kV Pitampura-3
Grid Building, Near PP Jewellers
Pitampura, New Delhi-110 034.

14. Chandigarh Administration
Sector -9, Chandigarh.

15. Uttarakhand Power Corporation Ltd.
Urja Bhawan, Kanwali Road,
Dehradun.

16. North Central Railway,
Allahabad.

17. New Delhi Municipal Council
Palika Kendra, Sansad Marg,
New Delhi-110002

18. Northern Region Electricity Board
18-A, Shaheed Jeet Singh Marg,
Katwaria Sarai, New Delhi-110016.

19. Power Grid Corporation of India Ltd.
Saudamini, Plot No.-2, Sector-29
Guragaon-122001.

20. National Hydro Power Corporation Ltd.
NHPC Office Complex, Sector-33
Faridabad, Haryada-121003.

21. SAINJ (HEP)
HPPCL
Sarbhai, Bhunter
Dist. Kullu, Himachal Pradesh-175125. ………**Respondents**

For Petitioner : Shri Anial Rawal, PKTCL
Shri Vikas Gupta, PKTCL
Shri Lokendra Singh, PKTCL

For Respondents : None

ORDER

Parbati Koldam Transmission Company Limited ("the petitioner") has filed the instant petition for truing up of capital expenditure of 2009-14 tariff period of a section of 400 kV (Quad) S/C Parbati-Koldam transmission line (Ckt-II) starting from LILO point of Parbati-III HEP to LILO point of Parbati Pooling Station in

Northern Region (hereinafter referred to as "asset") under Regulation 6 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as "the 2009 Tariff Regulations") based on actual capital expenditure for the period from COD, i.e. 1.8.2013 to 31.3.2014 and for determination of tariff of 2014-19 tariff block under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations").

2. The petitioner has served the petition to the respondents. None of the respondents have filed any reply to the petition. The hearing in this matter was held on 5.7.2016. Having heard the representatives of the petitioner and perused the material on record, we proceed to dispose of the petition.

3. The petitioner is a joint venture company of Reliance Infrastructure Ltd and Power Grid Corporation of India Ltd (PGCIL). An implementation agreement between the petitioner and PGCIL was executed to construct and maintain 400 kV (Quad Moose Conductor) 2xS/C alongwith D/C transmission line on "Build Own and Operate" basis and the 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. The petitioner 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. Accordingly, the implementation agreement between PGCIL and PKTCL was amended vide Amendment No. 2 dated 27.8.2009.

4. The investment approval (IA) for the transmission project was accorded by Board of Director of the petitioner, 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 2nd Quarter of 2005 price level. Subsequently, Revised Cost Estimates (RCE) was approved by the lenders of the project and it was also admitted by the Board of Directors of the PKTCL in its meeting held on 15.7.2009, at an estimated cost of ₹110169 lakh including IDC of ₹17267 lakh at December, 2012 price level. 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.

5. 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.

6. The instant petition covers single asset i.e. 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 (3.518 km).

7. The tariff was allowed vide order dated 15.1.2016 in Petition No. 297/TT/2013 for the 2009-14 tariff period. The approved capital cost of the instant assets was ₹1206.03 lakh as on COD.

8. The tariff allowed for the 2009-14 tariff period is as under:-

(₹ 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**

9. The petitioner has submitted the actual capital expenditure incurred for the asset during period 2009-14, vide Auditor's Certificate dated 5.4.2016 for the purpose of truing-up. The petitioner has also submitted the estimated capital costs for period 2014-16 in the same Auditor's Certificate.

Truing Up of Annual Fixed Charges For 2009-14 Tariff Period

10. Clause (3) of the Regulation 6 of the 2009 Tariff Regulations provides as under:-

> "(3) The generating company or the transmission licensee, as the case may be, shall submit for the purpose of truing up, details of capital expenditure and additional capital expenditure incurred for the period from 1.4.2009 to 31.3.2014, duly audited and certified by the auditors".

Capital Cost

11. Regulation 7(1) 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 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 capital cost as on COD and the additional capital expenditure incurred during 2009-14 and during 2014-19 periods, as given in Auditor's Certificate dated 5.4.2016, are as follows:-

(₹ in lakh)

Apportioned approved cost	Revised cost estimate (RCE)#	Expenditure incurred up to COD	Additional capital expenditure			Total estimated completion cost
			2013-14	2014-15*	2015-16	
733.14	1478.23/ 1504.24	1206.27	130.76	20.19	67.98	1425.20

*The capital costs have been verified from the audited financial statement of PKTCL up to 31.3.2015.
#The petitioner mentioned RCE of the asset as ₹1478.23 lakh vide affidavit dated 10.9.2014 in Petition No. 297/TT/2013 and ₹1504.24 lakh vide affidavit dated 5.4.2016 in the instant petition.

13. The petitioner indicated two (2) different RCE for the instant asset. The petitioner is directed to clarify for the mismatch and to re-submit Form-5B as per 2014 Tariff Regulation at the time of truing-up for period 2014-19.

14. However, the capital cost (till 31.3.2014) and estimated completion cost (till 31.3.2016) are within its RCEs. Hence, there is no cost over-run in the instant period.

Time over-run

15. As per IA, accorded on 26.12.2005, the asset was scheduled to be commissioned within 36 months from the date of IA. The scheduled date of commercial operation works out to 1.1.2009, against this, the asset was commissioned on 1.8.2013. Hence, there is a time over-run of 55 months in

commissioning the asset and the same was condoned by the Commission in order dated 15.1.2016 in Petition No. 297/TT/2013.

Interest During Construction (IDC)

16. The petitioner was directed vide order dated 15.1.2016 in Petition No. 297/TT/2013, to submit amount of IEDC and IDC incurred on the instant transmission asset up to the date of commercial operation and balance IDC and IEDC discharged after date of commercial operation at the time of truing up. In response, the petitioner has submitted the following:-

i) As per the conditions stipulated in the Common Loan Agreement (CLA) entered into between PKTCL, PFC and REC, the lenders of the project, the payment schedule is defined as under:-

   a) For PFC, the interest payment is to be made on 15th day of the month, immediately after end of every quarter; and

   b) For REC, the interest is payable on last day of the quarter.

ii) The IDC from 15.7.2013 to 31.7.2013 (COD 1.8.2013) became due on 15.10.2013 in case of PFC and IDC from 30.6.2013 to 31.7.2013 became due on 30.9.2013 in case of REC. The amounts of ₹2.57 lakh payable to PFC and ₹4.73 lakh payable to REC were duly paid on the due dates which fell after COD, despite the fact the payments pertained to period before COD.

iii) The expenses of IEDC payable beyond COD were on account of Performance Linked Incentive for 2012-13 and some small administrative expenditure incurred for the period before COD, which were discharged after COD in 2013-14. The Performance Linked Incentive from 1.4.2013 till COD was ₹0.25 lakh which was also discharged in 2014-15.

iv) The liability flow statement for the period starting from 1.8.2013 to 31.3.2014, for 2014-15 and 2015-16 indicating the expenses done on various heads claimed under additional capital expenditure for the above said period. The details are as follows:-

(₹ in lakh)

Particulars	2013-14 (After COD)	2014-15	2015-16	Remarks
Supply Payment	6.88	1.15	1.46	Towards supply, Retention and PV
Erection Payment	114.84	18.79	66.52	Towards erection, Retention and PV
IEDC	1.75	0.25	0.00	
IDC	7.30	0.00	0.00	
	130.76	20.19	67.98	

On account of reasons explained above the amount of ₹7.30 lakh towards IDC and ₹1.75 lakh towards IEDC has been taken in additional capital expenditure for 2013-14 post COD i.e. 1.8.2013 to 31.3.2014.

The petitioner has also submitted the auditor certificate towards cost taken for initial spares under the instant transmission line.

17. Loan details submitted in Form-13 and Form-14 for period 2009-14 were also perused for the purpose of IDC calculation on cash and accrued basis. IDC for the instant asset has been worked out after condoning all the time over run in the instant asset. Details submitted by the petitioner and allowable/ worked out IDC as on COD, on cash basis is as follows:-

(₹ in lakh)

Interest During Construction (IDC)					
Claimed as on COD as per the Auditor's Certificate	Total IDC worked out on accrual basis as on COD	Discharged up to COD (as claimed)	Allowed/ worked out on cash basis as on COD	IDC discharged during 2013-14 (as claimed)	IDC allowed on cash basis during FY 2013-14
138.08	134.11	130.78	127.66	7.30	6.44

18. The petitioner has submitted that the above mentioned balance IDC as on COD is being discharged in 2013-14, as per Auditor's Certificate dated 5.4.2016. Accordingly, the IDC worked out on accrual basis as on COD, is being discharged as on COD and 2013-14 as mentioned in table above.

19. IDC has been worked out considering Form-14 submitted in the instant petition. In the same Form, the petitioner has submitted the quarter-wise loan disbursed and IDC paid. In the absence of the exact date of drawl of each loan in each quarter, we have assumed the "Mid Date" of the Quarter as the date of drawl of the respective Loan till the COD of the asset. We have also assumed that the date of drawl in case of Quarter-22, mentioned in Form-14, is 1.7.2013. IDC has been worked on the basis of the above assumptions and is being allowed to be discharged as on COD and in 2013-14.

20. There is a difference in the gross loan claimed as on COD (as per Form-13) and the gross loan considered for the IDC calculation (as per Form-14) in respect of the instant asset. Conservative approach has been applied and both the gross loans (as per Form-14 and Form-13) have been considered for the IDC calculation purpose.

Incidental Expenditure During Construction (IEDC)

21. The procedure, as has been followed in other transmission tariff petitions in the recent past, 5.00% of the hard cost is being taken as IEDC limit as per the abstract cost estimate, and the IEDC claimed as on COD, which is lower than 5.00% of the hard cost, is being allowed for the tariff calculation purpose.

22. Total time over-run has been condoned in the instant petition. Hence, no pro-rata IEDC is being deducted in the instant case and the allowable IEDC is as follows:-

(₹ in lakh)

IEDC as on COD	
Claimed	**Allowed**
41.67	41.67

Initial Spares

23. Regulation 8 of the 2009 Tariff Regulations provides that:-

> "Initial spares shall be capitalised as a percentage of the original project cost, subject to following ceiling norms:
>
> (iv) Transmission system
> (a)Transmission line - 0.75%
> (b) Transmission Sub-station - 2.5%
> (c) Series Compensation devices and HVDC Station - 3.5%....."

24. The petitioner has submitted the audited year-wise discharge of the initial spares vide affidavit dated 5.4.2016. The total initial spares claimed upto cut-off date is ₹10.16 lakh which is within its ceiling limit. Hence, the total claimed initial spares have been allowed in the instant petition.

25. The allowable capital cost as on COD after considering the IDC and IEDC on cash basis and removing the excess initial spares, if any is as follows:-

(₹ in lakh)

Capital cost as per CA Certificate as on COD	Less: IDC & IEDC claimed	IDC on cash basis allowed	IEDC allowed	Less: excess Initial Spares	Capital cost as on COD considered for tariff
1206.27	172.45	127.66	41.67	0.00	1203.15

Additional Capital Expenditure

26. The petitioner has claimed additional capital expenditure under Regulation 9(1)(i) of the 2009 Tariff Regulations which provide 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:"

27. The 2009 Tariff Regulations further define "cut-off" date as-

> "cut-off date means 31st March of the year closing after 2 years of the year of commercial operation of the project, and incase 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".

The petitioner has further submitted that at para 30 of above said order, the cut-off date mentioned is 31.3.2015. The petitioner requested to appropriately amend para 30 of the order dated 15.1.2016. As the asset has been declared commissioned on 1.8.2013, the cut-off date as per above clause is 2 years from 31.3.2014 works out to be 31.3.2016. Accordingly, the cut-off date is considered as 31.3.2016

28. The petitioner has claimed additional capital expenditure of ₹130.76 lakh and ₹20.19 lakh for 2013-14 and 2014-15 as respectively. The same is within the cut-off date. However, the additional capital expenditure claimed for 2014-15 has not been considered during 2009-14 period. The revised additional capital expenditure during 2013-14 has been worked out considering cash basis IDC of ₹6.44 lakh instead of ₹7.30 lakh claimed by the petitioner

29. The total estimated completion cost as on 31.3.2016 is worked out as under:-

(₹ in lakh)

Expenditure up to COD	**Revised additional expenditure**	**Estimated completion cost as on 31.3.2014**
	2013-14	
1203.15	129.90	1333.06

Debt: Equity

30. Clause 1 and 3 of 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.”

31. The debt-equity ratio of 70:30 is being claimed by the petitioner as on COD and for additional capital expenditure and the same has been considered. The allowable debt-equity is as follows:-

(₹ in lakh)

Particulars	**%**	**As on COD**	**As on 31.3.2014**
Debt	70.00	842.21	933.14
Equity	30.00	360.95	399.92
Total	100.00	**1203.15**	**1333.06**

32. The allowable debt-equity ratio up to 1.4.2019 is as follows:-

(₹ in lakh)

Particulars	**%**	**As on 1.4.2019**
Debt	70.00	994.86
Equity	30.00	426.37
Total	100.00	1421.23

Return on Equity (“ROE”)

33. Clause (3), (4) and (5) of 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 maybe, 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 year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations."

34. Return on equity has been worked out by considering year wise MAT rate for the period 2009-14 in accordance with Regulation 15 of the 2009 Regulations. The tax rate during the 2009-14 period applicable to the petitioner, as per the Finance Acts of the relevant years, for the purpose of grossing up of ROE has been given hereunder:-

Year	**MAT Rate (in %)**	**Grossed up ROE (Base rate/(1-t) (in %)**
2009-10	16.995	18.674
2010-11	19.931	19.358
2011-12	20.008	19.377

2012-13	20.008	19.377
2013-14	20.9605	19.610

35. The details of return on equity calculated are as follows:-

(₹ in lakh)

Particulars	**2013-14 (pro-rata)**
Opening Equity	360.95
Addition due to additional capitalization	38.97
Closing Equity	399.92
Average Equity	380.43
Return on Equity (Base Rate)	***15.50%***
Tax rate for the year 2013-14 (MAT)	20.9605%
Rate of Return on Equity (Pre-tax)	19.610%
Return on Equity (Pre-tax)	**49.73**

36. 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 from the beneficiaries without making any application before the Commission under Regulation 15(5) of the 2009 Tariff Regulations. We would like to clarify that the petitioner is allowed to recover the shortfall or refund the excess annual transmission charges under Regulation 15(5) of the 2009 Tariff Regulations. Accordingly, RoE has been computed @ 19.610% p.a on average equity as per Regulation 15(5) of the 2009 Tariff Regulations.

Interest on Loan ("IOL")

37. Regulation 16 of the 2009 Tariff Regulations provides the methodology for working out weighted average rate of interest on loan:-

> "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."

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

(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;

(iv) Weighted average rate of interest on actual average loan worked out as per (i) above is applied on the notional average loan during the year to arrive at the interest on loan;

(v) Gross Loans mentioned in both the Forms-13 and 14 have been considered following the conservative approach i.e. Gross Loan of PFC has been considered from Form-14 and Gross Loan of REC has been considered from Form-13, after prudently checking the details submitted; and

(vi) The Loans drawn from COD to 31.3.2014, by the petitioner, has not been considered in the calculation, as Form-13 mentions these loans are proposed loans and not the actual loans.

39. Detailed calculations in support of the weighted average rates of interest have been given in Annexure-I to this order. Based on the above, interest on loan has been calculated as under:-

(₹ in lakh)

Particulars	**2013-14 (pro-rata)**
Gross Normative Loan	842.21
Cumulative Repayment upto previous year	0.00
Net Loan-Opening	842.21
Addition due to Additional Capitalization	90.93
Repayment during the year	44.64
Net Loan-closing	888.50
Average loan	865.36
Weighted average rate of Interest on Loan	13.1577%
Interest	**75.91**

Depreciation

40. Regulation 17 of the 2009 Tariff Regulations provides as under:-

"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."

41. The instant asset has been put under commercial operation as on 1.8.2013 and it will complete its useful life i.e. 25 years beyond the current tariff period and depreciation has been worked out based on Straight Line Method as per 2009 Tariff Regulation. Based on the above, the depreciation has been considered as follows:-

(₹ in lakh)

Particulars	**2013-14 (pro-rata)**
Opening Gross Block	1203.15
Additional Capital Expenditure	129.90
Closing Gross Block	1333.06
Average Gross Block	1268.11
Rate of Depreciation	5.2800%
Depreciable Value	1141.30
Remaining Depreciable Value	1141.30
Depreciation	**44.64**

Interest on Working Capital (IWC)

42. Interest on working capital is worked as provided under Regulation 18 of the 2009 Tariff Regulations as detailed below:-

(i) Maintenance spares have been worked out based on 15% of Operation and Maintenance expenses specified in Regulation 18;

(ii) O&M Expenses have been considered for one month;

(iii) The receivables have been worked out on the basis of 2 months' of annual transmission charges as worked out above;

(iv) Rate of interest on working capital is considered on normative basis in accordance with the 2014 Tariff Regulations. The SBI Base rate of 9.70% as on 1.4.2013 plus 350 Bps i.e. 13.20% has been considered for the asset, as the rate of interest on working capital.

43. The components of the working capital and interest thereon have been worked out as follows:-

(₹ in lakh)

Particulars	**2013-14 (pro-rata)**
Maintenance Spares	0.35
O & M expenses	0.20
Receivables	43.94
Total	**44.49**
Interest (13.20%)	3.92

Operation and Maintenance Expenses (O&M Expenses)

44. The Commission vide order dated 15.1.2016 in Petition No. 297/TT/2013 has allowed ₹1.57 lakh for 2013-14 (pro-rata) and the same is considered for the purpose of truing up of tariff of 2009-14 period.

Transmission charges

45. The trued-up transmission charges allowed for the 2009-14 tariff period for the instant asset is as follows:-

(₹ in lakh)

Particulars	2013-14 (pro-rata)
Depreciation	44.64
Interest on Loan	75.91
Return on equity	49.73
Interest on Working Capital	3.92
O & M Expenses	**1.57**
Total	**175.76**

Annual Fixed Charges For 2014-19 Tariff Period

46. The petitioner has claimed the following transmission charges for the 2014-19 tariff period:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	71.13	73.46	75.25	75.25	75.25
Interest on Loan	112.76	106.46	99.91	90.15	80.40
Return on Equity	79.26	82.24	84.25	84.25	84.25
Interest on Working Capital	6.19	6.18	6.12	5.90	5.68
O&M Expenses	2.49	2.57	2.66	2.74	2.84
Total	**271.83**	**270.91**	**268.18**	**258.30**	**248.41**

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	0.37	0.39	0.40	0.41	0.43
O & M Expenses	0.21	0.21	0.22	0.23	0.24
Receivables	45.30	45.15	44.70	43.05	41.40
Total	**45.89**	**45.75**	**45.32**	**43.69**	**42.06**
Rate of Interest (%)	13.50%	13.50%	13.50%	13.50%	13.50%
Interest	6.19	6.18	6.12	5.90	5.68

Capital Cost

48. Clause (1) and (3) of Regulation 9 of the 2014 Tariff Regulations specify as follows:-

"(1) The Capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of determination of tariff for existing and new projects."

"(3) The Capital cost of an existing project shall include the following:

(a) the capital cost admitted by the Commission prior to 1.4.2014 duly trued up by excluding liability, if any, as on 1.4.2014;

(b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and

(c) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15."

49. Capital cost ₹1333.06 lakh as on 31.3.2014 has been worked out in above paragraph and the same is considered as the opening gross block for working out the final tariff of 2014-19 period.

Additional Capital Expenditure

50. Sub-clause (i) of Clause 1 and sub-clause (ix) of Clause 3 of Regulation 14 of the 2014 Tariff Regulations provides as follows:-

"(1) The capital expenditure in respect of the new project or an existing project 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 recognized to be payable at a future date;

"(3) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:

…..

(ix) 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 due to obsolesce of technology, replacement of switchyard equipment due to increase of fault level, tower strengthening, communication equipment, emergency restoration system, insulators cleaning infrastructure, replacement of porcelain insulator with polymer insulators, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system;

51. The additional capital expenditure allowed for 2014-19 period is mentioned below:-

(₹ in lakh)

Capital cost as on 31.3.2014	Estimated Additional Capital Expenditure		Total estimated completion cost
	2014-15	2015-16	
1333.06	20.19	67.98	1421.23

52. The total completion cost worked out as on 31.3.2019 is ₹1421.23 lakh, which would be reviewed at the time of truing-up of 2014-19 after considering the clarification of the mismatch in the two (2) different RCEs of the instant asset.

53. The petitioner has submitted the Auditor's Certificate for the disbursement of the initial spares. The entire claimed initial spares are within their ceiling limits and hence being allowed as per the year-wise disbursement details submitted. It would be reviewed at the time of truing-up, if any variation in the capital expenditure submitted by the petitioner for the truing-up purpose.

54. Additional capital expenditure claimed by the petitioner for 2014-19 is as follows:-

(₹ in lakh)

2014-15	2015-16	Justification
20.19	67.98	Under Regulation 13 and 14 of 2014 Tariff Regulation for (i) undischarged liabilities recognized to be payable for future date (ii) Works deferred for execution and (iii) procurement of initial spares within the original scope of work.

55. Earlier, the petitioner has claimed estimated additional capital expenditure of ₹141.20 lakh for the year 2014-15 during 2009-14 period in Petition No.

297/TT/2013, which was within the cut-off date but was not considered as it is during the tariff block 2014-19. Later on, the petitioner has claimed additional capital expenditure of ₹20.19 lakh and ₹67.98 lakh for 2014-15 and 2015-16 respectively under Regulation 14(1) of 2014 Tariff Regulations for

(i) undercharged liabilities to be paid in future;

(ii) works deferred for execution and

(iii) procurement of initial spare within the original scope of work.

The additional capital expenditure claimed by the petitioner for 2014-15 and 2015-16 is allowed. The petitioner has not submitted breakup of the additional capital expenditure claimed for different items such as un-discharged liability, work deferred for execution and initial spare procured. Accordingly, the petitioner is directed to provide details of the breakup of these items at the time of true-up of 2014-19. The same shall be dealt by prevailing Regulations.

Debt- equity ratio

56. Clause 1 and 5 of Regulation 19 of the 2014 Tariff Regulations specifies as follows:-

> "(1) For a project declared under commercial operation on or after 1.4.2014, the debt-equity ratio would be considered as 70:30 as on COD. 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:
>
> i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
>
> ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:
>
> iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt : equity ratio.

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, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system."

"(5) Any expenditure incurred or projected to be incurred on or after 1.4.2014 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"

57. Details of debt-equity in respect of the asset as on the date of commercial operation and as on 31.3.2019 are as follows:-

(₹ in lakh)

Particulars	**%**	**As on 1.4.2014**	**As on 31.3.2019**
Debt	70.00	933.14	994.86
Equity	30.00	399.92	426.37
Total	100.00	**1333.06**	**1421.23**

58. Additional capital expenditure has been considered in the debt-equity ratio of 70:30.

<u>Return on Equity ("ROE")</u>

59. Clause (1) and (2) of Regulation 24 and Clause (1) and (2) of Regulation 25 of the 2014 Tariff Regulations specify as follows:-

" **24. Return on Equity**: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:

Provided that:

(i) in case of projects commissioned on or after 1st April, 2014, an additional return of 0.50 % shall be allowed, if such projects are completed within the timeline specified in Appendix-I:

(ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:

(iii) additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:

(iv) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:

(v) as and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC, RoE shall be reduced by 1% for the period for which the deficiency continues:

(vi) additional RoE shall not be admissible for transmission line having length of less than 50 kilometers."

"25. Tax on Return on Equity:

(1) The base rate of return on equity as allowed by the Commission under Regulation 24 shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in the respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax income on other income stream (i.e., income of non-generation or non-transmission business, as the case may be) shall not be considered for the calculation of "effective tax rate".

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

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

Where "t" is the effective tax rate in accordance with Clause (1) of this regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess."

60. The Return on Equity has been worked out in accordance with Regulation 24 and Regulation 25 of the 2014 Tariff Regulations. Accordingly, the MAT rate

of 20.9605% applicable during the 2013-14 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with clause 25 (3) of the 2014 Tariff Regulations.

61. The detailed working for Return on Equity for the project is summarized below:-

(₹ in lakh)

Particulars	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Opening Equity	399.92	405.97	426.37	426.37	426.37
Addition due to Additional Capitalisation	6.06	20.39	0.00	0.00	0.00
Closing Equity	405.97	426.37	426.37	426.37	426.37
Average Equity	402.95	416.17	426.37	426.37	426.37
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
MAT rate applicable for the year 2013-14	20.96%	20.96%	20.96%	20.96%	20.96%
Rate of Return on Equity (Pre Tax)	19.610 %	19.610%	19.610%	19.610%	19.610%
Return on Equity (Pre Tax)	**79.02**	**81.61**	**83.61**	**83.61**	**83.61**

62. The petitioner has computed ROE at the rate of 19.610% after grossing up the ROE with MAT rate as per the above Regulations. The petitioner has submitted that the grossed up ROE is subject to truing up based on the actual tax paid along with any additional tax or interest, duly adjusted for any refund of tax including the interest received from IT authorities, pertaining to the tariff period 2014-19 on actual gross income of any financial year. Any under-recovery or over-recovery of grossed up ROE after truing up shall be recovered or refunded to the beneficiaries on year to year basis.

<u>Interest on Loan ("IOL")</u>

63. Regulation 26 of the 2014 Tariff Regulations with regard to Interest on

Loan specifies as under:-

“(1) The loans arrived at in the manner indicated in regulation 19 shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2014 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2014 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalisation of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of decapitalisation of such asset.

(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 depreciation allowed for the year or part of the year.

5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

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.”

64. The interest on loan has been worked out in accordance with Regulation 26 of the 2014 Regulations:-

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

b) The repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that period;

c) Weighted average rate of interest on actual average loan worked out as per (i) above is applied on the notional average loan during the year to arrive at the interest on loan;

d) There are differences in the Repayment mentioned in Forms-9C by the petitioner and the Repayment worked out by us, for both the assets. Therefore, the worked out Repayment schedule is being allowed in our calculations; and

e) In the absence of the Rate of Interest proof of the PFC and REC Loans, the Rate of Interest considered as 12.96% and 12.97% respectively in our calculations.

The weighted average rate of interest would be reviewed at the time of truing-up of 2014-19 tariff subject to submission of the aforementioned loan details.

65. Interest on loan has been worked out as under**:-**

(₹ in lakh)

Particulars	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Gross Normative Loan	933.14	947.27	994.86	994.86	994.86
Cumulative Repayment upto Previous Year	44.64	115.56	188.80	263.84	338.88
Net Loan-Opening	888.50	831.72	806.06	731.02	655.98
Addition due to Additional Capitalization	14.13	47.59	0.00	0.00	0.00
Repayment during the year	70.92	73.25	75.04	75.04	75.04
Net Loan-Closing	831.72	806.06	731.02	655.98	580.94
Average Loan	860.11	818.89	768.54	693.50	618.46
Weighted Average Rate of Interest on Loan	12.96%	12.96%	12.96%	12.96%	12.96%
Interest	**111.51**	**106.16**	**99.64**	**89.91**	**80.18**

Depreciation

66. Clause (2), (5) and (6) of Regulation 27 of the 2014 Tariff Regulations provide as follows:-

"27. Depreciation:

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of transmission system, weighted average life for the generating station of the transmission system shall be applied. 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"

"(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-IIto 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 the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

(6) In case of the existing projects, the balance depreciable value as on 1.4.2014 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2014 from the gross depreciable value of the assets."

67. Depreciation has been worked out based on Straight Line Method as per Regulation 27 of 2014 Regulations.

68. Based on the above, the depreciation has been considered are as follows:-

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross block	1333.06	1353.25	1421.23	1421.23	1421.23
Additional Capitalization	20.19	67.98	0.00	0.00	0.00
Closing Gross block	1353.25	1421.23	1421.23	1421.23	1421.23
Average Gross block	1343.15	1387.24	1421.23	1421.23	1421.23
Rate of Depreciation(%)	5.280%	5.280%	5.280%	5.280%	5.280%
Depreciable Value	1208.84	1248.51	1279.11	1279.11	1279.11
Remaining Depreciable Value	1164.20	1132.96	1090.30	1015.26	940.22
Depreciation	**70.92**	**73.25**	**75.04**	**75.04**	**75.04**

Operation and Maintenance Expenses

68. The O&M expenses claimed by the petitioner for 2014-19 are given below:-

(₹ in lakh)

Assets	2014-15	2015-16	2016-17	2017-18	2018-19
Section Parbati-Koldam from LILO of Parbati III to LILO of Banala Pooling Station	2.49	2.57	2.66	2.74	2.84

69. As per Regulation 29(4) of 2014 Tariff Regulations, the normative O&M expenses for transmission assets covered in the petition are as under:-

(₹ in lakh)

Assets	2014-15	2015-16	2016-17	2017-18	2018-19
S/C Quad transmission line (₹ lakh/km)	0.606	0.627	0.647	0.669	0.691

70. As per Regulation 29(4) 2014 Tariff Regulations, the allowable O&M expenses for the asset is as under:-

(₹ in lakh)

Assets	2014-15	2015-16	2016-17	2017-18	2018-19
3.518 km S/C Quad T/L	2.13	2.20	2.27	2.35	2.43

71. It is observed that the petitioner while claiming O&M for 2014-15 to 2018-19 has taken normative O&M expenses for single circuit bundled conductor with six or more sub-conductors transmission lines instead of single circuit bundled conductors with four sub-conductors which is the section of line Parbati-Koldam from LILO of Parbati III to LILO of Parbati (Barnala) Pooling station. Hence, the O&M expenses allowed as per Regulation 29(4) of 2014 Tariff Regulations are less than the O&M expenses claimed by the petitioner.

72. The petitioner has submitted that norms for O&M Expenses for the tariff period 2014-19 have been arrived on the basis of normalized actual O&M Expenses during the period 2008-13. The petitioner has further submitted that the wage revision of the employees of the petitioner is due during the 2014-19 tariff period and actual impact of wage hike, which will be effective at a future date, has not been factored in fixation of the normative O&M rate specified for the tariff period 2014-19. The petitioner has prayed to be allowed to approach the Commission for suitable revision in the norms of O&M Expenses for claiming the impact of such increase.

73. The O&M expenses have been worked out as per the norms of O&M expenses specified in the 2014 Tariff Regulations. As regards impact of wage revision, any application filed by the petitioner in this regard will be dealt with in accordance with the appropriate provisions of the 2014 Tariff Regulations.

<u>Interest on Working Capital (IWC)</u>

74. Clause 1 (c) of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specifies as follows:

> "**28. Interest on Working Capital**
>
> (c) (i) Receivables equivalent to two months of fixed cost;
>
> (ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29; and
>
> (iii) Operation and maintenance expenses for one month"
>
> "(5) 'Bank Rate' means the base rate of interest as specified by the State Bank of India from time to time or any replacement thereof for the time being in effect plus 350 basis points;"

75. The interest on working capital is worked out in accordance with Regulation 28 of the 2014 Tariff Regulations.

(i) **Maintenance spares:** Maintenance spares have been worked out based on 15% of Operation and Maintenance expenses specified in Regulation 28.

(ii) **O & M expenses:** O&M expenses have been considered for one month.

(ii) **Receivables:** The receivables have been worked out on the basis of 2 months' of annual transmission charges as worked out above.

(iii) **Rate of interest on working capital:** As per Proviso 3 of Regulation 28 of 2014 Tariff Regulation, SBI Base rate 10.00% as on 1.4.2014 plus 350 Bps i.e. 13.50% has been considered for the asset, as the rate of interest on working capital.

76. The components of the working capital and interest thereon have been worked as follows:-

(₹ in lakh)

Particulars	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Maintenance Spares	0.32	0.33	0.34	0.35	0.36
O & M Expenses	0.18	0.18	0.19	0.20	0.20
Receivables	44.95	44.89	44.44	42.79	41.15
Total	**45.45**	**45.41**	**44.97**	**43.34**	**41.72**
Interest	**6.14**	**6.13**	**6.07**	**5.85**	**5.63**
Rate of Interest (%)	13.50%	13.50%	13.50%	13.50%	13.50%

Annual Transmission Charges for 2014-19

77. The annual transmission charges for the tariff period 2014-19 worked out as under:-

(₹ in lakh)

Particulars	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Depreciation	70.92	73.25	75.04	75.04	75.04
Interest on Loan	111.51	106.16	99.64	89.91	80.18
Return on Equity	79.02	81.61	83.61	83.61	83.61
Interest on Working Capital	6.14	6.13	6.07	5.85	5.63
O & M Expenses	2.13	2.20	2.27	2.35	2.43
Total	**269.71**	**269.35**	**266.63**	**256.76**	**246.89**

Filing Fee and Publication Expenses

78. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses, in terms of Regulation 52 of the 2014 Tariff Regulations. 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 clause (1) of Regulation 52 of the 2014 Tariff Regulations.

Licence Fee and RLDC Fees and Charges

79. The petitioner has requested to allow the petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. The petitioner shall be entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Clause (2) (b) and (2)(a), respectively, of Regulation 52 of the 2014 Tariff Regulations.

Service Tax

80. The petitioner has sought to recover service tax on transmission charges

separately from the respondents, if at any time service tax on transmission is withdrawn from negative list in future. We are of the view that the petitioner's prayer is premature.

Deferred tax liability

81. The petitioner has sought recovery of deferred tax liability before 1.4.2009 from the beneficiaries or long term consumers/ DICs as and when the same gets materialized. However, since, the COD of the asset is in 2013, the claim of the petitioner is not admissible.

Sharing of Transmission Charges

82. Transmission Tariff shall be recovered on monthly basis in accordance with Regulation 43 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and shall be shared by the beneficiaries long term transmission customers as per Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 as amended from time to time.

83. This order disposes of Petition No. 71/TT/2016.

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

ANNEXURE-I

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN FOR TARIFF PERIOD 2009-14

		(₹ in lakh)
	Details of Loan	**2013-14**
1	**PFC Loan**	
	Gross loan opening	**436.50**
	Cumulative Repayment upto COD/previous year	**0.00**
	Net Loan-Opening	436.50
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	436.50
	Average Loan	436.50
	Rate of Interest	13.18%
	Interest	57.53
	Rep Schedule	46 Quarters installments from 15.07.2015
2	**REC Loan**	
	Gross loan opening	**351.67**
	Cumulative Repayment upto COD/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
	Rep Schedule	46 Quarters installments from 30.09.2015
	Gross loan opening	**788.17**
	Cumulative Repayment upto COD/previous year	0.00
	Net Loan-Opening	788.17
	Additions during the year	0.00
	Repayment during the year	0.00
	Net Loan-Closing	788.17
	Average Loan	788.17
	Rate of Interest	**13.1577%**
	Interest	103.70

ANNEXURE-II

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN FOR TARIFF PERIOD 2014-19

(₹ in lakh)

	Details of Loan	2014-15	2015-16	2016-17	2017-18	2018-19
1	**PFC Loan**					
	Gross loan opening	436.50	444.75	472.50	472.50	472.50
	Cumulative Repayment upto COD/previous year	0.00	0.00	28.47	66.42	104.38
	Net Loan-Opening	436.50	444.75	444.03	406.08	368.12
	Additions during the year	8.25	27.75	0.00	0.00	0.00
	Repayment during the year	0.00	28.47	37.96	37.96	37.96
	Net Loan-Closing	444.75	444.03	406.08	368.12	330.16
	Average Loan	440.63	444.39	425.05	387.10	349.14
	Rate of Interest	12.96%	12.96%	12.96%	12.96%	12.96%
	Interest	57.11	57.59	55.09	50.17	45.25
	Rep Schedule	46 Quarters installments from 15.07.2015				
2	**REC Loan**					
	Gross loan opening	351.67	357.56	377.37	377.37	377.37
	Cumulative Repayment upto COD/previous year	0.00	0.00	22.93	53.51	84.09
	Net Loan-Opening	351.67	357.56	354.44	323.86	293.28
	Additions during the year	5.89	19.81	0.00	0.00	0.00
	Repayment during the year	0.00	22.93	30.58	30.58	30.58
	Net Loan-Closing	357.56	354.44	323.86	293.28	262.70
	Average Loan	354.62	356.00	339.15	308.57	277.99
	Rate of Interest	12.97%	12.97%	12.97%	12.97%	12.97%
	Interest	45.99	46.17	43.99	40.02	36.05
	Rep Schedule	46 Quarters installments from 30.09.2015				
	Total Loan					
	Gross loan opening	788.17	802.31	849.87	849.87	849.87
	Cumulative Repayment upto COD/previous year	0.00	0.00	51.40	119.94	188.48
	Net Loan-Opening	788.17	802.31	798.47	729.93	661.39
	Additions during the year	14.14	47.56	0.00	0.00	0.00
	Repayment during the year	0.00	51.40	68.54	68.54	68.54
	Net Loan-Closing	802.31	798.47	729.93	661.39	592.86
	Average Loan	795.24	800.39	764.20	695.66	627.13
	Rate of Interest	12.9645%	12.9644%	12.9644%	12.9644%	12.9644%
	Interest	103.10	103.77	99.07	90.19	81.30