# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### Petition No. 28/TT/2014

Coram:

Shri A.K. Singhal, Member Shri A.S. Bakshi, Member Dr. M.K. Iyer, Member

Date of Hearing : 27.10.2015 Date of Order : 08.02.2016

#### In the matter of:

Approval of transmission tariff for Asset-1: Loop out of 220 kV Jalandhar-Hamirpur line at Hamirpur (to be used as LILO of 1<sup>st</sup> Ckt. of 220 kV Hamirpur-Jalandhar T/L) (COD: 1.1.2014) under "Strengthening Scheme in Northern Region" in Northern Region for tariff block 2009-14 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:

Power Grid Corporation of India Limited, "Saudamini", Plot No.2, Sector-29, Gurgaon -122 001

.....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
- 4. 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
- 13. North Delhi Power Limited,
  Power Trading & Load Dispatch Group,
  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

.....Respondents



For petitioner Shri S.K. Venkatesan, PGCIL

> Shri M.M. Mondal, PGCIL Ms. Sangeeta Edwards, PGCIL

Shri S.S Raju, PGCIL

For respondent Shri R.B. Sharma, Advocate for BRPL

ORDER

This petition has been filed by Power Grid Corporation of India Limited

(PGCIL) for approval of the transmission charges of Asset-1: Loop out of 220 kV

Jalandhar-Hamirpur line at Hamirpur (to be used as LILO of 1st Ckt. of 220 kV

Hamirpur-Jalandhar T/L) (COD: 1.1.2014) (hereinafter referred to as "transmission

asset") under "Strengthening Scheme in Northern Region" in Northern Region

from the date of commercial operation to 31.3.2014 for tariff block 2009-14 under

Central Electricity Regulatory Commission (Terms and Conditions of Tariff)

Regulations' 2009 (hereinafter referred to as the "2009 Tariff Regulations").

2. The Investment Approval (IA) of the project was accorded by the Board of

Directors of PGCIL vide memorandum ref. C/CP/SS in NR dated 26.10.2012 in the

278<sup>th</sup> meeting held on 14.10.2012 at an estimated cost of ₹10055 lakh including

IDC of ₹489 lakh (based on August, 2012 price level). The project was scheduled

to be commissioned within 24 months from the date of IA by the Board i.e.

14.10.2012 by 13.10.2014 say 1.11.2014. The scope of project broadly includes:-

**Transmission Lines:** 

a) LILO of Jalandhar-Hamirpur 220 kV D/C line at Hamirpur (Powergrid);

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#### **Sub-stations:**

- a) Extension of Kota 400/220 kV Sub-station (Powergrid)-Shifting of 400 kV,
   50 MVAR line reactor from Merta to Kota Sub-station for its use as Bus
   Reactor and 400 kV Bus Reactor bay;
- b) Extension of Dehar 400/220 kV Sub-station (BBMB)-Installation of 400 kV, 2x63 MVAR bus reactor through a single 400 kV hybrid GIS bay and replacement of 250 MVA ICT with 4x105 MVA, 1-phase ICT and retrofitting of associated 400/220 kV bay equipment and protection relays;
- c) Extension of Koteshwar 400/220 kV Sub-station (THDC)-Installation of 400 kV, 125 MVAR bus reactor alongwith associated bay.
- 3. The petitioner was directed vide letter dated 15.4.2014 to file a consolidated petition for the complete LILO of Jalandhar-Hamirpur 220 kV D/C line at Hamirpur (POWERGRID) instead of a separate petition for a small item "LOOP OUT". The petitioner vide affidavit dated 24.4.2014 has submitted that, the LILO of 1st Circuit of 220 kV Jalandhar-Hamirpur at Hamirpur Sub-station is under the commercial operation w.e.f. 1.1.2014 and accordingly its tariff would be governed by the 2009 Tariff Regulations. The LILO of the other circuit (2nd ckt) of Jalandhar-Hamirpur 220 kV D/C line at Hamirpur Sub-station is likely to be commissioned shortly and would be governed by the 2014 Tariff Regulations. The delay in commissioning of LILO of 2nd ckt is due to RoW issues and accordingly it was felt prudent to commission LILO of at least one ckt. The petitioner further requested to approve the tariff as claimed in the instant petition because a consolidated petition for both the "Loop In" and "Loop Out" circuits cannot be filed.

- 4. This order has been issued after considering the petitioner's affidavits dated 24.4.2014, 21.10.2014 and 3.9.2015.
- 5. The transmission charges claimed by the petitioner are as follows:-

	(₹ in lakh)	
Particulars	rs 2013-14	
	(pro-rata)	
Depreciation	9.55	
Interest on Loan	12.40	
Return on Equity	10.64	
Interest on working capital	0.77	
O & M Expenses	0.63	
Total	33.99	

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

	(₹ in lakh)
Particulars	2013-14
	(pro-rata)
Maintenance Spares	0.38
O & M Expenses	0.21
Receivables	22.66
Total	23.25
Rate of Interest	13.20%
Interest	0.77

7. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the Electricity Act, 2003. U.P. Power Corporation Limited (UPPCL), Respondent No. 9, Punjab State Power Corporation Limited (PSPCL), on behalf of Punjab State Electricity Board, Respondent No. 6 and BSES Rajdhani Power Limited (BRPL), Respondent No. 12 have filed replies vide affidavits dated 14.3.2014, 13.6.2014 and 21.10.2015 respectively. BRPL has raised issues like cost variation, filing fee and publication of expenses, service tax, levies, duties, cess, or any other statutory taxes and higher O&M Expenses. The petitioner has not filed rejoinder to

the replies of the respondents. The objections raised by the respondents are addressed in the relevant paragraphs of this order.

- 8. Having heard the representatives of the parties and perused the material on record we proceed to dispose of the petition.
- 9. PSPCL has submitted that the STU/HPSEB has not connected/constructed the outgoing lines at Hamirpur Sub-station of the petitioner, the Hamirpur substation of the petitioner has been rendered a stranded asset and this LILO project has no purpose other than to interconnect one sub-station of the petitioner with HPSEB Sub-station. The petitioner, in its affidavit dated 21.10.2014, has submitted that the 400 kV Amritsar-Banala transmission line is LILOed at 400 kV GIS Hamirpur under NRSS-XX and is under commercial operation since 1.1.2014. The 220 kV Jalandhar-Hamirpur (HPSEB) line is also LILOed at 220 kV GIS Hamirpur under System Strengthening in Northern Region. This asset was commissioned alongwith ICT I and ICT II at Hamirpur and is under since commercial operation. The petitioner has further submitted that the instant asset is utilized since its commissioning and the power is flowing since its commissioning on 1.1.2014. The petitioner has also submitted that power exchange from Banala and Amritsar Substation at 400 kV level and Jalandhar and Hamirpur (HPSEB) at 220 kV level is carried out through 400/220 kV Hamirpur Sub-station. We have considered the submissions of PSPCL and the petitioner. As the instant asset has been put to use since its commissioning on 1.1.2014, the transmission charges are allowed in the instant petition.

#### **Capital Cost**

10. 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) 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.

(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."

11. The details of apportioned approved cost, capital cost as on the date of commercial operation and estimated additional capital expenditure incurred or projected to be incurred during 2014-15 and 2015-16 along with estimated completion cost for the instant asset considered for the purpose of computation of tariff are as under:-

(₹ in lakh)

					(
Approved	Expenditure	Additional capital expenditure			Estimated
apportioned	upto COD	COD to	2014-15	2015-16	completion
cost		31.3.2014			cost
1636.99	722.41	2.05	212.43	318.65	1255.54



The additional capital expenditure projected to be incurred during 2014-15 and 2015-16 has not been considered in this order for tariff purpose as it falls under the 2014-19 tariff period.

12. The details of liability are not given in Form-9A submitted alongwith the petition. However, in Form-9 (i.e. "Statement of Additional Capitalization after COD") the petitioner has submitted that the additional capital expenditure is on account of balance and retention payments. It is further observed from the "Statement of Discharge of IDC", that the amount of IDC claimed is not discharged as on COD and some portion of the IDC has been discharged during 2014-15. As such, there is a mismatch between Form-9A, Form-9 and the "Statement of Discharge of IDC" regarding liability. Hence, it is not possible to determine the capital cost as on COD on cash basis and the nature of additional capital expenditure so as to establish whether these are just discharge of liability or are to be considered as addition to gross block. Due to mismatch in liability and non-availability of capital cost on cash basis, final tariff has been determined based on available information, instead of truing up.

#### Cost over-run/cost variation

13. The apportioned approved cost of the instant asset is ₹1636.99 lakh and the total estimated completion cost is ₹1527.36 lakh and hence there is no cost over-run. BRPL has submitted that though there is no cost over-run there is cost variation in case of some elements. BRPL has further submitted that there is cost over estimation in the instant case by the petitioner and the reasons given for cost variation are very casual.

- 14. We have considered the submissions made by the petitioner and BRPL. As pointed out BRPL, the cost estimate of the instant asset is on a higher side. The cost estimates of the petitioner are not realistic not only in this petition but also in other similar petitions. In our view, the petitioner should adopt a prudent procedure to make cost estimates of different elements of the transmission projects more realistic.
- 15. As per the investment approval dated 14.10.2012, the instant asset was to be commissioned in 24 months and accordingly the schedule COD works out to 13.10.2014. The instant asset was commissioned on 1.1.2014. Thus, there is no time over-run in the case of instant asset.

## **Treatment of IDC/IEDC**

- 16. The petitioner was directed to submit the details of IDC on cash basis. The petitioner vide affidavit dated 3.9.2015 has submitted that out of the claimed Interest During Construction (IDC) of ₹19.52 lakh for the instant asset, the IDC on cash basis is ₹18.58 lakh and ₹0.94 lakh has been discharged in 2014-15 and this amount of ₹0.94 lakh is not included in the additional capitalisation of the asset. Thus, IDC on cash basis up to the actual date of commercial operation i.e. 1.1.2014, in respect of the instant asset has been worked out and considered as ₹18.45 lakh. The balance of ₹0.94 lakh would be considered in the additional capitalisation of 2014-15 in the 2014-19 tariff period subject to prudence check.
- 17. The petitioner has claimed ₹19.50 lakh as Incidental Expenditure During Construction (IEDC) as on COD in respect of the instant asset. The petitioner has not submitted any supporting documents in relation to its claim for IEDC. However, the IEDC amount claimed is within the percentage of 10.75% of the Hard Cost as

submitted in the Abstract Cost Estimate and the amount claimed on account of IEDC is lower than the percentage on Hard Cost. Thus, the amount of ₹19.50 lakh claimed has been allowed for the instant asset for the purpose of tariff in this order. However, the petitioner is directed to submit the details of year-wise actual IEDC paid till COD of the instant asset at the time of truing-up.

## **Initial Spares**

18. The petitioner has claimed an amount of ₹11.37 lakh as the cost of the initial spares for the instant asset. However, the petitioner has also submitted year wise details of liability discharged pertaining to initial spares in the affidavit dated 3.9.2015 as under:-

(₹ in lakh)

Initial spares					
Claimed up to actual cut-off date	Claimed up to COD	Claimed from COD to 31.3.2014	Allowable, as per estimated capital cost up to actual cut-off date	Allowed up to COD	Allowed from COD to 31.3.2014
11.37	-	-	9.39	-	-

19. Therefore, the details of capital cost as on the date of commercial operation after taking into account the capitalization of IDC, IEDC and cost of initial spares and considered for the purpose of Tariff as per Regulation 7(1) of the 2009 Tariff Regulations is as given under:-

(₹ in lakh)

Capital cost as per CA	Less: IDC &	Allow	ved		ares as on OD	Capital cost as on
certificate dated 18.8.2015	IEDC claimed	Add: IDC on cash basis	Add: IEDC	Less: claimed	Add: allowed	COD considered for tariff
722.41	39.02	18.45	19.50	-	-	721.34



## **Projected Additional Capital Expenditure**

20. Clause (1) of Regulation 9 of the 2009 Tariff Regulations provides as follows:-

"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:"
- 20. Clause (11) of Regulation 3 of the 2009 Tariff Regulations defines "cut-off" date as under:-

"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 in case 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".

- 21. Therefore, the cut-off date for the instant asset is 31.3.2017.
- 22. The petitioner has submitted that the admissibility of additional capital expenditure incurred after the date of commercial operation is to be dealt in accordance with the provisions of Regulation 9 (1) of the 2009 Tariff Regulations. The additional capital expenditure incurred and projected to be incurred for the instant transmission asset claimed during 2013-14 is of ₹2.05 lakh. The add-cap claimed is within the cut-off date and is on account of Balance/Retention payments. Thus, the amount of additional capitalisation considered and allowed is ₹2.05 lakh.



#### Capital cost as on 31.3.2014

23. Accordingly, the details of the capital cost deemed to be claimed by the petitioner on cash basis, as on 31.3.2014, for the purpose of Transmission Tariff in the instant petition, after scrutiny of IDC/IEDC, initial spares and additional capitalisation is as below:-

(₹ in lakh)

S. No.	Particulars	Amount
(i)	Capital Cost claimed as on COD	722.41
(ii)	(+) Additional capital expenditure claimed-	
(11)	(2013-14)	2.05
(iii)	(-) IDC & IEDC claimed on Accrual Basis	39.02
(iv)	(+) IDC allowed on Cash Basis	18.45
(v)	(+) IEDC allowed on Cash Basis	19.50
(vi)	(-) Initial Spares claimed on Accrual Basis	-
(vii)	(+) Initial Spares discharged up to COD	-
(viii)	(+) Initial Spares discharged during 2013-14	-
(iv)	Total Capital cost deemed to be claimed	
(ix)	on cash basis as on 31.3.2014	723.39

## **Debt- Equity Ratio**

- 24. 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."
- 25. The petitioner has claimed debt-equity as on date of commercial operation of the asset and additional capital expenditure in the ratio of 70:30, which is in accordance with the above said Regulation. The debt-equity ratio of 70:30 has been considered for the purpose of calculation of tariff. The debt-equity as on COD and 31.3.2014 is as given hereunder:-

Particulars	As on COD		As on 31.3.2014		
	Amount % age		Amount	% age	
	(₹ in lakh)		(₹ in lakh)		
Debt	504.94	70.00	506.38	70.00	
Equity	216.40	30.00	217.01	30.00	
Total	721.34	100.00	723.39	100.00	

#### **Return on Equity**

- 26. 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".

27. The petitioner has requested to allow to recover the shortfall or refund the excess Annual Fixed Charges, 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. We would like to clarify that the RoE has been computed @ 19.610% p.a based on the tax rate (MAT) for the year 2013-14 on average equity as per Regulation 15(5) of the 2009 Tariff Regulations. The details are as under:-

	(₹ in lakh)
Particulars	2013-14
	(pro-rata)
Opening Equity	216.40
Addition due to Additional Capitalization	0.62
Closing Equity	217.01
Average Equity	216.71
Return on Equity (Base Rate)	15.50%
Tax rate for the year 2013-14 (MAT)	20.961%
Rate of Return on Equity (Pre Tax)	19.610%
Return on Equity (Pre Tax)	10.62

#### **Interest on Loan**

28. 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."

29. In keeping with the provisions of Regulation 16 of the 2009 Tariff Regulations, the petitioner's entitlement to interest on loan has been calculated on the following basis:-



- (a) 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;
- (b) The repayment for the tariff period 2009-14 has been considered to be equal to the depreciation allowed for that period; and
- (c) Weighted average rate of interest on actual average loan worked out as per (a) above is applied on the notional average loan during the year to arrive at the interest on loan.
- 30. Bond XLV has been allowed in the actual loan's opening gross block for the calculation of the weighted average rate of interest, even when the date of drawl of this loan is after the COD of the asset i.e. the date is drawl of the loan is 28.2.2014 as against the COD of 1.1.2014 of the instant asset. Hence, the allocation of the loans allowed in the instant petition will be reviewed at the time of truing-up on the submission of correct allocation of the loans by the petitioner, if any.
- 31. The petitioner has submitted that the interest on loan has been considered on the basis of rate prevailing as on 1.1.2009 and the change in interest due to floating rate of interest applicable, if any, for the project needs to be claimed/adjusted over the tariff block 2009-14 directly from the beneficiaries. 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.
- 32. Detailed calculations in support of the weighted average rates of interest have been given in the Annexure.



33. Based on the above, interest on loan has been calculated as given hereunder:-

(`in lakh) **Particulars** 2013-14 (pro-rata) Gross Normative Loan 504.94 Cumulative Repayment upto Previous Yr Net Loan-Opening 504.94 Addition due to Additional Capitalisation 1.44 Repayment during the year 9.54 Net Loan-Closing 496.84 Average Loan 500.89 Weighted Avg. Rate of Interest on Loan 9.88% Interest 12.38

## **Depreciation**

- 34. Regulation 17 of the 2009 Tariff Regulations provides as follows:-
  - "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."



35. The petitioner has claimed actual depreciation as a component of Annual Fixed Charges. The instant transmission asset was put under commercial operation during 2013-14. Accordingly, the instant asset will complete 12 years beyond 2013-14. Thus, depreciation has been calculated annually based on Straight Line Method and at rates specified in Appendix-III of the 2009 Tariff Regulations, as per the following details:-

(`in lakh)

Particulars	2013-14
	(pro-rata)
Opening Gross Block	721.34
Additional Capital Expenditure	2.05
Closing Gross Block	723.39
Average Gross Block	722.37
Rate of Depreciation	5.2800%
Depreciable Value	650.13
Remaining Depreciable Value	650.13
Depreciation	9.54

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

36. Clause (g) of regulation 19 of the 2009 Tariff Regulations specifies the norms for O & M expenses based on the type of sub-station and line. Norms specified in respect of the elements covered in the instant petition are as under:-

Elements	2012-13	2013-14
D/C single conductor T/L (₹ lakh/km)	0.318	0.336

37. The elements covered in the instant asset claimed by the petitioner are as under:-

Element	COD	length of line
Loop out of 220 kV Jalandhar-	1.1.2014	
Hamirpur line at Hamirpur	1.1.2014	7.503 km



38. Accordingly, O&M Expenses allowed in respect of the instant asset covered in this petition are as under:-

(₹	₹ in lakh)
Element	2013-14
	(pro-rata)
7.503 km D/C single conductor T/L	0.63

- 39. The petitioner has submitted that O & M Expenses for the period 2009-14 were arrived at on the basis of normalized actual O & M Expenses during the period 2003-04 to 2007-08. The wage hike of 50% on account of pay revision of the employees of public sector undertaking has also been considered while calculating the O & M Expenses for the tariff period 2009-14. The petitioner has further submitted that it would approach the Commission for additional manpower cost on account of wage revision (if any) during the tariff block 2009-14 for claiming in the tariff. The petitioner has also submitted that the claim for transmission tariff is exclusive of any statutory taxes, levies, duties, cess or any other kind of impositions etc.
- 40. BRPL has submitted that a higher O&M charges than specified in tariff regulations has been requested for which should be taken care of by the petitioner by improvement in its productivity levels so that the beneficiaries are not burdened over and above the provisions made in the 2009 Tariff Regulations. BRPL has also submitted that as regards the claim on account of any statutory taxes, levies, duties, cess or any other kind of impositions etc. are concerned, there are no provisions in the 2009 Tariff Regulations, as such kinds of payments are generally included in the O & M Expenses. We would like to clarify that while specifying the norms for the O & M Expenses, the Commission has in the 2009 Tariff

Regulations, given effect to impact of pay revision by factoring 50% on account of pay revision of the employees of PSUs after extensive consultations with the stakeholders, as one time compensation for employee cost. We do not see any reason why the admissible amount is inadequate to meet the requirement of the employee cost. In this order, we have allowed O&M Expenses as per the existing norms.

## **Interest on Working Capital**

41. The petitioner is entitled to claim interest on working capital as per the 2009 Tariff Regulations. The components of the working capital and the petitioner's entitlement to interest thereon are discussed hereunder:-

## (i) Receivables

As per Regulation 18(1) (c) (i) of the 2009 Tariff Regulations, receivables as a component of working capital will be equivalent to two months of fixed cost. The petitioner has claimed the receivables on the basis of 2 months of annual 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 in the working capital. The



petitioner has claimed O&M Expenses for 1 month of the respective year as claimed in the petition. This has been considered in the working capital.

## (iv) Rate of Interest on Working Capital

In accordance with clause (3) of Regulation 18 of the 2009 Tariff Regulations, as amended, rate of interest on working capital shall be on normative basis and shall be equal to State Bank of India Base Rate @ 13.20% (Base rate of 9.70% as on 1.4.2013 and 350 basis points) for the instant asset. The interest on working capital for the asset covered in the instant petition has been worked out accordingly.

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

	(` in lakh)
Particulars	2013-14 (pro-rata)
Maintenance Spares	0.38
O & M Expenses	0.21
Receivables	22.62
Total	23.21
Rate of Interest	13.20%
Interest	0.77

## **Transmission Charges**

43. The transmission charges allowed for the instant asset are as under:-

(`in lakh)

Particulars	2013-14
	(Pro-rata)
Depreciation	9.54
Interest on Loan	12.38
Return on Equity	10.62
Interest on Working Capital	0.77
O & M Expenses	0.63
Total	33.93



## Filing Fee and the Publication Expenses

44. The petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. BRPL has submitted that such expenses can be allowed at the discretion of the Commission. 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

45. 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 has clarified that the licence fee is a new component of cost to the transmission licence under O&M stage of the project and has become incidental to the petitioner only from 2008-09. The petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 42A (1) (b) of the 2009 Tariff Regulations.

#### **Service Tax**

46. The petitioner has made a prayer to be allowed to bill and recover the service tax on transmission charges separately from the respondents, if at any time service tax on transmission charges is withdrawn from negative list at any time in future. BRPL has submitted that as already informed by the petitioner, the transmission of electricity is already exempted from the levy of service tax. We consider petitioner's prayer pre-mature and accordingly this prayer is rejected.

## **Sharing of Transmission Charges**

- 47. 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.
- 48. This order disposes of Petition No. 28/TT/2014.

sd/(Dr. M.K. Iyer) (A.S. Bakshi) (A.K. Singhal)
Member Member Member

# **Annexure**

(₹ in lakh)

CALCULATION OF WEIGHTED AVERAGE RATE OF INTEREST ON LOAN			
	Details of Loan	2013-14	
1	Bond XLV - Add Cap (2013-14)		
	Gross loan opening	0.00	
	Cumulative Repayment upto DOCO/previous year	0.00	
	Net Loan-Opening	0.00	
	Additions during the year	1.44	
	Repayment during the year	0.00	
	Net Loan-Closing	1.44	
	Average Loan	0.72	
	Rate of Interest	9.65%	
	Interest	0.07	
	Rep Schedule	12 annual instalments from 28.02.2018	
2	Bond XLV		
	Gross loan opening	210.69	
	Cumulative Repayment upto DOCO/previous year	0.00	
	Net Loan-Opening	210.69	
	Additions during the year	0.00	
	Repayment during the year	0.00	
	Net Loan-Closing	210.69	
	Average Loan	210.69	
	Rate of Interest	9.65%	
	Interest	20.33	
	Rep Schedule	12 annual instalments from 28.2.2018	
3	Bond XLIII		
	Gross loan opening	25.00	
	Cumulative Repayment upto DOCO/previous year	0.00	
	Net Loan-Opening	25.00	
	Additions during the year	0.00	
	Repayment during the year	0.00	
	Net Loan-Closing	25.00	
	Average Loan	25.00	
	Rate of Interest	7.93%	
	Interest	1.98	
	Rep Schedule	12 annual instalments from 20.05.2017	
4	SBI (21.03.2012)		
•	Gross loan opening	270.00	
	Cumulative Repayment upto DOCO/previous year	0.00	
	Net Loan-Opening	270.00	
	Additions during the year	0.00	
	Repayment during the year	0.00	
	Net Loan-Closing	270.00	
	Average Loan	270.00	
	Rate of Interest	10.25%	
	Interest	27.68	
	Interest	21.0	



	from 31.08.2016
Total Loan	
Gross loan opening	505.69
Cumulative Repayment upto DOCO/previous year	0.00
Net Loan-Opening	505.69
Additions during the year	1.44
Repayment during the year	0.00
Net Loan-Closing	507.13
Average Loan	506.41
Rate of Interest	9.885%
Interest	50.06

