

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 04/TT/2018

Coram:

**Shri P. K. Pujari, Chairperson
Shri A.K. Singhal, Member
Shri A.S. Bakshi, Member
Dr. M. K. Iyer, Member**

Date of Order : 19.07.2018

In the matter of:

Approval of transmission tariff from COD to 31.3.2019 for Asset 1: 2 No. 400 kV line bays at Samba Sub-station and 2 No. 400 kV line bays at Jalandhar Sub-station and Asset 2 : 2 No. 400 kV line bays at Samba Sub-station and 2 No. 50 MVAR line reactor at Samba Sub-station under "Northern Region System Strengthening Scheme-XXIX (NRSS-XXIX)" in Northern Region under Regulation-86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

And in the matter of:

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

.....Petitioner

Vs

1. Rajasthan Rajya Vidyut Prasaran 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 Electricity Board
Thermal Shed TIA
Near 22 Phatak
Patiala-147001
7. Haryana Power Purchase Centre
Shakti Bhawan, Sector-6
Panchkula (Haryana) 134 109
8. Power Development Department
Government of Jammu & Kashmir
Mini Secretariat, Jammu
9. Uttar Pradesh Power Corporation Limited
(Formerly 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. North Delhi Power Ltd.
Power Trading and Load Dispatch Group
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.
UrjaBhawan, Kanwali Road,
Dehradun.
16. North Central Railway,
Allahabad.
17. New Delhi Municipal Council
Palika Kendra, Sansad Marg,
New Delhi-110002.
18. The Sterlite Company
F-1 the Mira Corporate Suits
1 and 2 Ishwar Nagar
Mathura Road, New Delhi-110065.

.....Respondents

For petitioner : Shri Vivek Kumar Singh, PGCIL
Shri S. K. Venkatesan, PGCIL
Shri S. S. Raju, PGCIL
Shri A. Choudhary, PGCIL
Shri Rakesh Prasad, PGCIL
Shri V.P. Rastogi, PGCIL

For respondents : Shri R.B. Sharma, Advocate, BRPL

ORDER

Power Grid Corporation of India Limited (PGCIL) has filed the instant petition for determination of transmission tariff from COD to 31.3.2019 for Asset 1: 2 No. 400 kV



line bays at Samba Sub-station and 2 No. 400 kV line bays at Jalandhar Sub-station and Asset 2 : 2 No. 400 kV line bays at Samba Sub-station and 2 No. 50 MVAR line reactor at Samba Sub-station under “Northern Region System Strengthening Scheme-XXIX (NRSS-XXIX)” in Northern Region in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”).

2. The Investment Approval (IA) and expenditure sanction for the transmission system was accorded by the Board of Directors of the petitioner vide letter dated 14th January, 2016 with an estimated cost of ₹5740 lakh including IDC of ₹307 lakh based on August, 2015 price level. Assets 1 and 2 were scheduled to be put under commercial operation within 18 months and 34 months respectively from the date of IA. Therefore, the scheduled COD of Assets 1 and 2 was 13.7.2017 and 13.11.2018 respectively.

3. The scope of work covered under the transmission system is broadly as follows:-

Sub-station:

(i) Jalandhar 400/220 kV Sub-station
400 kV - Line bays – 2 Nos.

(ii) Samba 400/220 kV Substation
400 kV -Line Bays – 4 Nos.

2 Nos. of 50 MVAR line Reactors at Samba end of Samba – Amargarh 400 kV Line Bays)



4. The details of the transmission charges claimed by the petitioner for instant assets are as under:-

(₹ in lakh)

Particulars	Asset-1			Asset-2
	2016-17 (pro-rata)	2017-18	2018-19	2018-19 (pro-rata)
Depreciation	10.64	66.31	90.08	100.34
Interest on Loan	10.46	63.19	81.00	98.30
Return on Equity	11.56	72.00	97.82	111.16
Interest on working capital	4.84	18.31	20.24	11.55
O & M Expenses	78.91	266.04	274.84	91.61
Total	116.41	485.85	563.98	412.96

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

(₹ in lakh)

Particulars	Asset-1			Asset-2
	2016-17 (pro-rata)	2017-18	2018-19	2018-19 (pro-rata)
O & M Expenses	21.46	22.17	22.90	11.45
Maintenance Spares	38.62	39.91	41.23	20.61
Receivables	63.31	80.97	94.00	103.24
Total	123.39	143.05	158.13	135.30
Rate of Interest	12.80%	12.80%	12.80%	12.80%
Interest on working Capital	15.79	18.31	20.24	17.32
Interest (pro-rata)	4.84	18.31	20.24	11.55

6. No comments or suggestions have been received from the general public in response to the notices published by the petitioner under Section 64 of the Electricity Act. None of the respondents have filed any reply.

7. Annual Fixed Charges was allowed for Asset 1 vide order dated 22.3.2018 under the first proviso to Regulation 7(7) of the 2014 Tariff Regulations, subject to adjustment



at the time of truing up as per the said Regulation.

8. Having heard the representatives of the parties and perused the material available on record we proceed to dispose of the petition.

Date of commercial operation

9. Clause (3) of Regulation 4 of the 2014 Tariff Regulations provides as follows:-

“4. Date of Commercial Operation: The date of commercial operation of a generating station or unit or block thereof or a transmission system or element thereof shall be determined as under:

xxx

(3) Date of commercial operation in relation to a transmission system shall mean the date declared by the transmission licensee from 0000 hour of which an element of the transmission system is in regular service after successful trial operation for transmitting electricity and communication signal from sending end to receiving end:

xxx”

10. The petitioner has claimed the COD of Asset 1 as 1.12.2016 and vide affidavit dated 8.6.2018 submitted that Asset 2 is anticipated to be put under commercial operation on 1.8.2018. The petitioner in support of the COD of the Asset 1 has submitted COD certificate, RLDC charging certificate on load and CEA clearance certificate. However, in case of Asset 2, the petitioner has submitted the Management Certificate and Revised Tariff forms based on the anticipated COD.

11. The petitioner was directed, vide order dated 22.3.2018, to submit system studies for interim arrangement done for Samba-Jalandhar line and CEA Certificate regarding early commissioning of TBCB lines. In response, the petitioner, vide affidavit dated



28.3.2018, has submitted that the schedule COD of 400 kV D/C Samba-Jalandhar (PG) line under TBCB route was in June, 2017. However, Sterlite pre-poned the commissioning of line through an interim arrangement. As per this interim arrangement, Sterlite would inter-connect 400 kV D/C Jalandhar-Samba line by opening of one circuit of Jalandhar- Moga 400 kV line at Jalandhar end and connecting it with one circuit of Samba-Jalandhar line. Thus, forming Moga-Samba 400 kV S/C line and opening of one circuit of Samba-Kishenpur 400 kV D/C line at Samba end and connecting it with open circuit of Samba-Jalandhar line, thus forming Kishenpur-Jalandhar 400 kV S/C line. Due to the above mentioned interim arrangement, the 400 kV D/C Jalandhar-Samba line (in the scope of Sterlite) was reconfigured and commissioned as 400 kV S/C Moga-Samba Line and 400 kV S/C Kishenpur-Jalandhar line. Re-orientation/interim arrangement proposal was agreed in 38th Standing Committee meeting of Power System Planning of Northern Region held on 30.5.2016. The interim arrangement was carried out and line was charged by Sterlite. The petitioner further submitted that the System Studies was discussed in the CEA meeting held on 6.4.2016 and quoted the minutes of the meeting. It was observed in the meeting that after the system studies, it was found that there are no constraints in the system and the reorientation resulted in the loss reduction of about 4-5 MW. Further, after the commissioning of the associated two 400 kV line bays at Jalandhar and Samba Sub-station, line was reconfigured back as per original planning.

12. As regards Asset 2, the petitioner has submitted that the scheduled commissioning



of associated TBCB line i.e. 400 kV D/C Samba-Amargarh transmission line was October, 2018 (under the scope of Sterlite). However, it was discussed in 39th standing committee that 400 kV D/C Samba-Amargarh line would be commissioned by July, 2017 instead of scheduled COD of October, 2018. Hence, to match with the line, Samba bays were to be ready early.

13. In order to match with the revised timeline provided for the TBCB line, the construction activity of bays was started in full swing and bays were anticipated to be put into commercial operation by November, 2017 matching with TBCB line. However, as discussed in 39th SCM, the line could not come by July, 2017. The petitioner has prayed that as the work at its end is about to be completed, it would not be possible to further delay the commissioning of bays at its end due to contractual implication. Accordingly, petitioner has prayed that the anticipated COD of the Asset-2 may be considered as 1.8.2018.

14. We have considered the submission of the petitioner and perused the documents available on record. The petitioner has submitted COD Certificate, RLDC charging certificate, CEA clearance certificate and also CMD certificate in support of COD of Asset-1. Accordingly, the date of commercial operation for Asset-1 is approved as 11.12.2016 and the tariff for the instant asset is worked out from 11.12.2016 (COD) to 31.3.2019. As regards Asset-2, the petitioner has claimed the revised anticipated COD of Asset-2 as 1.8.2018. The capital cost and other details submitted by the Petitioner was with reference to the anticipated COD of 1.10.2017. The anticipated COD has been



revised to 1.8.2018. Therefore, there will be a variation in the capital cost which will have impact on tariff. We therefore grant liberty to the petitioner to approach the Commission separately through a fresh petition for determination of tariff of Asset-2. Consequently, tariff is being determined only for 2 No. 400 kV line bays at Samba Sub-station and 2 No. 400 kV line bays at Jalandhar Sub-station in this order.

Capital cost

15. Clause (1) and (2) of Regulation 9 of the 2014 Tariff Regulations provides 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.”

(2) The Capital Cost of a new project shall include the following:

(a) the expenditure incurred or projected to be incurred up to the date of commercial operation of the project;

(b) Interest during construction and financing charges, on the loans (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;

(c) Increase in cost in contract packages as approved by the Commission;

(d) Interest during construction and incidental expenditure during construction as computed in accordance with Regulation 11 of these regulations;

(e) capitalised Initial spares subject to the ceiling rates specified in Regulation 13 of these regulations;

(f) expenditure on account of additional capitalization and de-capitalisation determined in accordance with Regulation 14 of these regulations;39

(g) adjustment of revenue due to sale of infirm power in excess of fuel cost prior to



the COD as specified under Regulation 18 of these regulations;and

(h) adjustment of any revenue earned by the transmission licensee by using the assets before COD.

16. The details of approved apportioned cost, capital cost as on COD and projected additional capital expenditure claimed by the petitioner are summarized below:-

(₹ in lakh)

Approved cost	Expenditure up to COD	Add Cap 2016-17	Add Cap 2017-18	Add Cap 2018-19	Total Estimated Cost
2184.87	459.67	372.37	788.45	84.43	1704.92

17. The total estimated completion cost of the project is within the FR approved cost. Hence, there is no cost over-run.

18. As per the Investment Approval dated 14.1.2016, the SCOD of the instant asset was 13.7.2017. Against this, the asset was put into commercial operation on 11.12.2016. Thus, there is no time over-run.

Treatment of IDC

19. The petitioner vide affidavit dated 11.10.2017 has submitted Auditor's certificate dated 18.8.2017 with respect to the capital cost. As per the certificate, IDC claimed till COD is ₹4.91 lakh.

20. Based on the details with respect to loan drawls, rate of interest, amounts and due dates of the interest payment, the interest accrued till COD has been calculated. It is noticed that no interest has been discharged till COD. Accordingly, no IDC on cash



basis has been allowed as on COD. The IDC accrued as on COD but not discharged has been allowed to be discharged in the subsequent years as claimed by the petitioner on projected basis.

21. Accordingly, the IDC allowed is as follows:-

(₹ in lakh)		
IDC allowed as on COD on cash basis	Accrued IDC projected to be discharged during 2016-17	Balance Accrued IDC as on COD to be discharged during 2017-18
0.00	0.00	4.91

Treatment of IEDC

22. The petitioner has claimed IEDC of ₹11.53 lakh and has submitted that the entire IEDC claimed was discharged as on COD. Usually, while granting transmission tariff, the IEDC limit mentioned in the “Abstract Cost Estimate” is considered for allowing the IEDC. In the instant case, the “IEDC limit” has been mentioned in the “Abstract Cost Estimate” as 10.75% of the Hard Cost. The IEDC claimed by the petitioner as on COD is lower than 10.75% of the hard cost, and, hence the IEDC claimed by the petitioner is allowed.

Initial Spares

23. Regulation 13(d) of the 2014 Tariff Regulations provides that initial spares shall be capitalised as a percentage of plant and machinery cost upto cut-off date, subject to following ceiling norms:-

“(d) Transmission System Transmission line: 1.00%



Transmission sub-station (Green Field): 4.00%
Transmission sub-station (Brown Field): 6.00%”

24. The petitioner has claimed ₹39.15 lakh of initial spares and it is within the norms specified with above said regulation. The details of the initial spares claimed and allowed given in table below:-

(₹ in lakh)

Plant & Machinery Cost as on cut-off date	Total capital after IDC and IEDC deduction	Spares claimed	Proportionate Spares claimed	Ceiling limit	Spares worked out	Excess claimed
a	b	c	d=b*c/a	e	f=((b-d)*e) / (100-e)%	
1688.48	1688.48	39.51	39.51	6%	105.25	0.00

25. The following capital cost as on COD after taking into consideration the allowable IDC, IEDC and initial spares is considered for the computation of tariff for the instant assets :-

(₹ in lakh)

Claimed as on COD	Less: IDC and IEDC disallowed	Less: Initial Spare disallowed	Less : Cash IDC to be discharged after COD	Net capital cost upto COD
459.67	-	0.00	4.91*	454.76

Additional capital expenditure

26. Clause (1) of Regulation 14 of the 2014 Tariff Regulations provides as under:-

“(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 recognised to be payable at a future date;



(ii) Works deferred for execution;

(iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;

(iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and

(v) Change in Law or compliance of any existing law:

Provided that the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the application for determination of tariff."

27. Clause (13) of Regulation 3 of the 2014 Tariff Regulations defines "cut-off" date as under:-

"cut-off date" means 31st March of the year closing after two years of the year of commercial operation of whole or part of the project, and in case the whole or part of the project is declared under commercial operation in the last quarter of the year, the cut-off date shall be 31st March of the year closing after three years of the year of commercial operation."

28. The cut-off date in the instant case is 31.3.2019.

29. The petitioner has submitted that the additional capital expenditure incurred/projected to be incurred is on account of Balance and Retention Payments. We have considered the submission of the petitioner. The additional capital expenditure incurred/projected to be incurred is on account of Balance/Retention Payments and are within "cut-off date" and is covered under Regulation 14(1)(i) of the 2014 Tariff Regulations and accordingly it is allowed. The details of additional capital expenditure claimed by the



petitioner and the add cap allowed after IDC and IEDC adjustment (Cash basis) are as follows:-

(₹ in lakh)				
	Estimated add-cap 2016-17	Estimated add-cap 2017-18	Estimated add-cap 2018-19	Total estimated Add-Cap
Claimed	372.37	788.45+ 4.91*	84.43	1250.16
Allowed	372.37	793.36	84.43	1250.16

*IDC discharged during 2017-18

30. The total estimated completion cost of the instant assets as on 31.3.2019 is given below:-

(₹ in lakh)					
FR approved apportioned cost	Capital cost as on COD	Estimated expenditure			Total estimated completion cost
		2016-17	2017-18	2018-19	
2184.87	454.76	372.37	793.36	84.43	1704.92

Debt-Equity Ratio

31. 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.”

32. The petitioner has claimed debt:equity ratio of 70:30 as on the date of commercial operation. Debt:equity ratio of 70:30 is considered as provided in Regulation 19 of the 2014 Tariff Regulations. The details of debt:equity ratio in respect of the instant assets as on the date of commercial operation and as on 31.3.2019 are as under:-

(₹ in lakh)

Particulars	as on COD		as on 31.3.2019	
	Amount	%	Amount	%
Debt	318.33	70.00	1193.44	70.00
Equity	136.43	30.00	511.48	30.00
Total	454.76	100.00	1704.92	100.00

Return on Equity

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

“**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:

$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

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.”

34. The petitioner has submitted that it is liable to pay income tax at MAT rate, the RoE has been calculated @ 19.610% after grossing up the RoE with MAT rate of 20.961%, as provided under Regulation 25(2)(i) of the 2014 Tariff Regulations. As per Regulation 25(3) of the 2014 Tariff Regulations, the grossed up rate of RoE at the end of the financial year shall be trued up based on actual tax paid together with any additional tax demand including interest thereon duly adjusted for any refund of tax including interest received from the IT authorities pertaining to the 2014-19 period 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. The petitioner has further submitted that adjustment due to any additional tax demand including interest duly adjusted for any refund of the tax including interest received from IT authorities shall be recoverable/adjustable after completion of income tax assessment of the financial year.

35. We have considered the submissions made by the petitioner. Regulation 24 read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of return on equity with the effective tax rate for the purpose of return on equity. It further provides that in case the generating company or transmission licensee is paying Minimum Alternative Tax (MAT), the MAT rate including surcharge and cess will be considered for the grossing up of return on equity. Accordingly, the MAT rate applicable during 2013-



14 has been considered for the purpose of return on equity, which shall be trued up with actual tax rate in accordance with Regulation 25 (3) of the 2014 Tariff Regulations.

Accordingly, the RoE allowed is as follows:-

Particulars	(₹ in lakh)		
	2016-17 (pro-rata)	2017-18	2018-19
Opening Equity	136.43	248.14	486.15
Addition due to Additional Capitalisation	111.71	238.01	25.33
Closing Equity	248.14	486.15	511.48
Average Equity	192.28	367.14	498.81
Return on Equity (Base Rate)	15.50%	15.50%	15.50%
Tax rate for the year 2013-14 (MAT)	20.961%	20.961%	20.961%
Rate of Return on Equity (Pre-tax)	19.610%	19.610%	19.610%
Return on Equity (Pre-tax)	11.47	72.00	97.82

Interest on Loan (IoL)

36. Regulation 26 of the 2014 Tariff Regulations are provides asunder:-

“(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 decapitalization 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 theyear.



(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.”

37. Interest on Loan has been worked out as below:-

(i) Gross amount of loan, repayment of installments & 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 2014-19 has been considered to be equal to the depreciation allowed for that period; and

(iii) 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.

38. The petitioner has submitted that it be allowed to bill and adjust impact on Interest on Loan due to change in interest due to floating rate of interest applicable, if any, from the respondents. The interest on loan has been calculated on the basis of rate prevailing as on the tariff date of commercial operation. Any change in rate of interest



subsequent to the tariff date of commercial operation will be considered at the time of truing-up.

39. Detailed calculation of the weighted average rate of interest has been given in **Annexure** to this order.

40. Based on above, details of Interest on Loan calculated are as follows:-

Particulars	(₹ in lakh)		
	2016-17 (pro-rata)	2017-18	2018-19
Gross Normative Loan	318.33	578.99	1134.34
Cumulative Repayment upto Previous Year	0.00	10.56	76.86
Net Loan-Opening	318.33	568.43	1057.48
Addition due to Additional Capitalisation	260.66	555.35	59.10
Repayment during the year	10.56	66.30	90.08
Net Loan-Closing	568.43	1057.48	1026.50
Average Loan	443.38	812.95	1041.99
Weighted Average Rate of Interest on Loan	7.6997%	7.7740%	7.7743%
Interest	10.38	63.20	81.01

41. The IOL is allowed considering all the loans submitted in Form-9C. The petitioner is directed to reconcile the total Gross Loan for the calculation of weighted average Rate of Interest and for the calculation of IDC, which would be reviewed at the time of truing-up.

Depreciation

42. Regulation 27 of the 2014 Tariff Regulations with regard to depreciation provides



as follows:-

"27. Depreciation:

(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system including communication system or element thereof. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units or elements thereof.

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

(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-ratabasis.

(3) 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 station, the salvage value shall be as provided in the agreement signed by the developers with the State Government for development of the Plant:

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

Provided also that any depreciation disallowed on account of lower availability of the generating station or generating unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life and the extended life.

4) 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.

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-II** 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 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.”

43. The petitioner has claimed actual depreciation as a component of annual fixed charges. Depreciation has been allowed in accordance with Regulation 27 of the 2014 Tariff Regulations. The instant asset was put under commercial operation during 2016-17. Accordingly, it will complete 12 years after 2019. As such, depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-II to the 2014 Tariff Regulations.

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

Particulars	(₹ in lakh)		
	2016-17 (pro-rata)	2017-18	2018-19
Opening Gross Block	454.76	827.13	1620.49
Additional Capital expenditure	372.37	793.36	84.43
Closing Gross Block	827.13	1620.49	1704.92
Average Gross Block	640.95	1223.81	1662.71
Rate of Depreciation	5.42%	5.42%	5.42%
Depreciable Value	576.85	1101.43	1496.43
Remaining Depreciable Value	576.85	1090.87	1419.57
Depreciation	10.56	66.30	90.08

Operation & Maintenance Expenses (O & M Expenses)

45. 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 2008-09 to 2012-13. The petitioner has further submitted that the wage revision of the employees of the petitioner Company 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.

46. We have considered the submissions of the petitioner. 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.

47. The O&M Expenses claimed by the petitioner are as follows:-

(₹ in lakh)		
2016-17	2017-18	2018-19
78.91	266.04	274.84

48. The O&M Expenses norms specified in Regulation 29(3)(a) of the 2014 Tariff Regulations for the instant asset are as follows:-

(₹ in lakh)		
2016-17	2017-18	2018-19
64.37	66.51	68.71



49. Accordingly, the O&M Expenses allowed for the instant assets are as follows:-

(₹ in lakh)

2016-17	2017-18	2018-19
78.30	266.04	274.84

Interest on Working Capital (IWC)

50. Clause 1(c) and clause (3) of Regulation 28 and Clause 5 of Regulation 3 of the 2014 Tariff Regulations specify as follows:-

“28. Interest on Working Capital

(1) The working capital shall cover:

(c) Hydro generating station including pumped storage hydro electric generating station and transmission system including communication system:

(i) Receivables equivalent to two months of fixedcost;

(ii) Maintenance spares @ 15% of operation and maintenance expenses specified in regulation 29;and

(iii) Operation and maintenance expenses for onemonth”

(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2014 or as on 1st April of the year during the tariff period 2014-15 to 2018-19 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later.

“(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;”

51. The petitioner is entitled to claim interest on working capital as per the 2014 Tariff Regulations. The components of the working capital and the petitioner’s entitlement to interest thereon are discussed hereunder:-



(i) Maintenance spares

Regulation 28 of the 2014 Tariff Regulations provides for maintenance spares @ 15% per annum of the O&M Expenses. The value of maintenance spares has accordingly been worked out.

(ii) O & M Expenses

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

(iii) Receivables

Receivables as a component of working capital will be equivalent to two months fixed cost. The petitioner has claimed the receivables on the basis of 2 months' annual transmission charges. In the tariff being allowed, receivables have been worked out on the basis of 2 months' transmission charges.

(iv) Rate of interest on working capital

As per proviso 3 of Regulation 28 of the 2014 Tariff Regulations, SBI Base rate 9.30% as on 1.4.2016 plus 350 Bps i.e. 12.80% has been considered for the asset, as the rate of interest on working capital.

52. The interest on working capital as determined is shown in the table given below:-



(₹ in lakh)

Particulars	2016-17 (pro-rata)	2017-18	2018-19
O & M Expenses	38.62	39.91	41.23
Maintenance Spares	21.46	22.17	22.90
Receivables	63.31	80.98	94.00
Total	123.38	143.05	158.13
Interest on Working Capital	4.80	18.31	20.24

Transmission charges

53. The transmission charges allowed for the instant assets are summarized hereunder:-

(₹ in lakh)

Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Depreciation	10.56	66.30	90.08
Interest on Loan	10.38	63.20	81.01
Return on Equity	11.47	72.00	97.82
Interest on Working Capital	4.80	18.31	20.24
O & M Expenses	78.30	266.04	274.84
Total	115.51	485.85	563.99

Filing Fee and Publication Expenses

54. 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

55. 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

56. 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 have considered the submission of the petitioner. Service tax is not levied on transmission. Further, service tax is subsumed by GST and hence petitioner's prayer has become infructuous.

Goods and Services Tax

57. The petitioner has prayed for reimbursement of tax, if any, on account of proposed implementation of GST. GST is not levied on transmission at present and we are of the view that petitioner's prayer is premature.

Sharing of Transmission Charges

58. We have considered the submissions of the petitioner. 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.

59. This order disposes of Petition No. 04/TT/2018.

sd/-
(Dr. M. K. Iyer)
Member

sd/-
(A. S. Bakshi)
Member

sd/-
(A. K. Singhal)
Member

sd/-
(P. K. Pujari)
Chairperson



ANNEXURE

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

(₹ in lakh)

Summary	2016-17	2017-18	2018-19
Gross Opening Loan	318.33	578.99	582.43
Cumulative Repayments of Loans upto Previous Year	0.00	0.00	0.00
Net Loans Opening	318.33	578.99	582.43
Add: Draw(s) during the Year	260.66	3.44	0.00
Less: Repayments of Loan during the year	0.00	0.00	0.00
Net Closing Loan	578.99	582.43	582.43
Average Net Loan	448.66	580.71	582.43
Rate of Interest on Loan (%)	7.6997%	7.7740%	7.7743%
Interest on Loan	34.55	45.14	45.28

