CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 241/TT/2018

Coram :
Shri P.K. Pujari, Chairperson
Dr. M. K. Iyer, Member
Shri I.S. Jha, Member

Date of Order: 02.07.2019

In the matter of

Approval of transmission tariff from COD to 31.3.2019 for 765 kV, 2x330 MVAR Switchable Line Reactors to be charged as Bus Reactor at Dharamjaygarh end in both ckt. of Jharsuguda-Dharamjaygarh 765 kV D/C Line under "Common System Associated with East Coast Energy Private Limited and NCC Power Projects Limited LTOA Generation Projects in Srikakulam Area-B" in Western Region

And in the matter of

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

Versus

1. Madhya Pradesh Power Management Company Limited,
Shakti Bhawan, Rampur,
Jabalpur-482 008.

2. Madhya Pradesh Power Transmission Company Ltd.
Shakti Bhawan, Rampur,
Jabalpur - 482 008.

3. Madhya Pradesh Audyogik Kendra,
Vikas Nigam (Indore) Ltd.,
3/54, Press Complex,
Agra-Bombay Road,
Indore-452 008

4. Maharashtra State Electricity Distribution Company Limited
Hongkong Bank Building, 3rd Floor
M.G. Road, Fort, Mumbai-400 001.

5. Maharashtra State Electricity Transmission Co. Ltd.

Prakashganga, 6th Floor, Plot No. C-19, E-Block,
Bandra Kurla Complex, Bandra (East)
Mumbai-400 051.

6. Gujarat Urja Vikas Nigam Limited,
Sardar Patel Vidyut Bhawan,
Race Course Road,
Vadodara-390 007.

7. Gujarat Energy Transmission Corporation Limited,
Sardar Patel Vidyut Bhawan,
Race Course Road, Vadodara-390 007

8. Electricity Department,
Government of Goa,
Vidyut Bhawan, Panaji,
Near Mandvi Hotel, Goa-403 001.

9. Electricity Department,
Administration of Daman and Diu,
Daman-396 210.

10. Electricity Department,
Administration of Dadra Nagar Haveli,
U.T., Silvassa-396 230.

11. Chhattisgarh State Electricity Board,
P.O. Sunder Nagar, Dangania, Raipur
Chhattisgarh-492 013.

12. Chhattisgarh State Power Transmission Co. Ltd.,
State Load Despatch Building,
Dangania, Raipur – 492 013

13. Chhattisgarh State Power Distribution Co. Ltd.,
P.O. Sunder Nagar, Dangania, Raipur,
Chhattisgarh-492 013 **...Respondents**

Parties Present: Shri S. K. Venkatesan, PGCIL
Shri S. S. Raju, PGCIL
Shri Pankaj Sharma, PGCIL
Shri B. Dash, PGCIL
Shri Anshul Garg, PGCIL
Shri Zafrul Hasan, PGCIL

ORDER

The petitioner, Power Grid Corporation of India Limited (PGCIL), has filed the instant petition for determination of transmission tariff from COD to 31.3.2019 of 765 kV, 2x330 MVAR Switchable Line Reactors to be charged as Bus Reactor at Dharamjaygarh end in both ckt. of Jharsuguda-Dharamjaygarh 765 kV D/C Line under “Common System Associated with East Coast Energy Private Limited and NCC Power Projects Limited LTOA Generation Projects in Srikakulam Area-B” in Western Region in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (in short "the 2014 Tariff Regulations”).

2. The petitioner has made the following prayers:-

i) Approve the Transmission Tariff for the tariff block 2014-19 block for the asset covered under this petition.

ii) Admit the capital cost as claimed in the Petition and approve the Additional Capitalisation incurred / projected to be incurred.

iii) Tariff may be allowed on the estimated completion cost, since few elements of the project are yet to be completed, the completion cost for the asset covered under instant Petition are within the overall project cost.

iv) Allow the petitioner 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 as provided under Clause 25 of the Tariff regulations, 2014.

v) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 52 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014, and other expenditure (if any) in relation to the filing of petition.

vi) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 52 of Central Electricity

Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014.

vii) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2014- 19 period, if any, from the respondents.

viii) Allow the Petitioner to bill and recover GST tax on Transmission Charges separately from the respondents, if at any time service tax on transmission is withdrawn from negative list at any time in future. Further, any taxes and duties including cess etc. imposed by any statutory/ Govt./ Municipal Authorities shall be allowed to be recovered from the beneficiaries.

ix) Allow 90% of the Annual Fixed Charges as tariff in accordance with clause 7 (i) of Regulation 7 Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 for purpose of inclusion in the PoC charges.

x) Allow the petitioner to bill Tariff from actual DOCO and also the petitioner may be allowed to submit revised Management Certificate and tariff Forms (as per the Relevant Regulation) based on actual DOCO.

Background:

3. The Scheme was discussed and agreed by SR constituents in 30th meeting of Standing Committee held on 13.4.2010. The subject scheme has been granted Regulatory approval vide Order dated 31.5.2010 in Petition No. 233/2009. Further, with the WR constituents the scheme was discussed and agreed in the 31st meeting of Standing Committee held on 27.12.2010. The scheme was also discussed and agreed in SCM of ER held on 28.12.2010 and special meeting of WR held on 5.1.2011. The scheme has also been discussed and agreed in 42nd meeting of SCM of WR held on 17.11.2017.

4. The investment approval of the project was accorded by Board of Directors of Powergrid in its 285th meeting held on 28.3.2013 (communicated vide the Memorandum No. C/CP/Srikakulam-Part-B dated 5.4.2013) with an estimated cost of ₹ 251488 lakh including Interest During Construction of ₹ 15665 lakh based on

February, 2013 price level. Subsequently, petitioner vide affidavit dated 12.12.2018 has submitted revised cost estimate (RCE) of the project as ₹ 319027 lakh including IDC of ₹ 40909 lakh.

5. As per the approval of the petitioner's Board of Directors dated 28.3.2013, the instant asset was scheduled to be put into commercial operation by 27.12.2015. The petitioner has submitted that the asset was put into commercial operation on 21.9.2017. Thus, there is time over-run of 20 months and 24 days (633 days).

6. The scope of work covered under for "Common System Associated with East Coast Energy Private Limited and NCC Power Projects Limited LTOA Generation Projects in Srikakulam Area – B" is as follows:

Transmission Lines

a) 765 kV Angul – Jharsuguda 2nd D/C line (1st D/C line is covered under Orissa IPPs) – 245 kms.
b) 765 kV Jharsuguda – Dharamjaigarh 2nd D/C line (1st D/C line is covered under Orissa IPPs) – 156 kms.

Substations

a) **Extension of Angul Substation**
   i. 2 number 765 kV line bays for termination of Angul – Jharsuguda 765 kV D/C.

b) **Extension of Jharsuguda Substation**
   i. 2 number 765 kV line bays for termination of Angul – Jharsuguda 765 kV D/c.
   ii. 2 number 765 kV line bays for termination of Jharsuguda – Dharamjaigarh 765 kV D/C.

c) **Extension of Dharamjaigarh Substation**
   i. 2 number 765 kV line bays for termination of Jharsuguda – Dharamjaigarh 765 kV D/C.

Reactive Compensation

Line Reactors (765 kV)

ii. 240 MVAR line reactors with 800 ohms NGR at each end of both circuits of Angul – Jharsuguda 765kV D/c line (switchable line reactor at Angul end).

iii. 330 MVAR switchable line reactors at Dharamjaigarh end of both circuits of Jharsuguda – Dharamjaigarh 765kV D/C line.

Assets covered under instant petition:

7. The details of assets covered under the instant petition are as under:

Asset
Asset-1: 765kV, 2 x 330 MVAR Switchable Line Reactors to be charged as Bus Reactor at Dharamjaigarh end in both ckt. of Jharsuguda- Dharamjaigarh 765 kV D/C Line.

8. The Commission vide RoP for hearing dated 19.2.2019, directed petitioner to submit the status of other assets covered in the approved scheme. The petitioner in affidavit dated 13.3.2019 has submitted the status as under:

S.No.	Name of Asset	Actual COD	Remarks
1	Asset-I: Angul – Jharsuguda (Sundargarh) 765kV 02nd D/C line with line reactors (switchable) & termination bays at Angul S/S and line reactors at Jharsuguda S/S	1.12.18 (Actual)	Covered under petition No. 360/TT/2018
2	Asset-II: Jharsuguda (Sundargarh) – Dharamjaygarh 765kV 02nd D/C line with termination bays at Jharsuguda S/S.	3.11.18 (Actual)	
3	765kV, 02x330 MVAR Switchable Line Reactors charged as Bus Reactors at Dharamjaygarh S/s (for both Ckt.s of Jharsuguda (Sundargarh) Dharamjaygarh 765kV 02nd D/C line)	21.9.2017 (actual)	Covered under instant petition

9. The Commission vide Order dated 31.12.2018 allowed Provisional Annual Transmission Charges (ATC) in terms of proviso (i) of Regulation 7(7) of the 2014 Tariff Regulations for inclusion in the PoC charges in respect of the instant asset as under:

(₹ in Lakh)

2017-18 (Pro-rata)	2018-19
559.19	1119.70

10. The details of the transmission charges claimed by the petitioner are as under:

(₹ in Lakh)

Particulars	Asset-I	
	2017-18	2018-19
Depreciation	174.92	358.27
Interest on Loan	191.02	371.60
Return on Equity	201.37	415.15
Interest on Working Capital	22.65	45.09
O&M expenses	196.57	384.80
Total	786.53	1574.91

11. The petitioner has claimed the Interest on Working Capital as follows:

(₹ in Lakh)

Particulars	2017-18	2018-19
Maintenance Spares	55.87	57.72
O&M Expenses	31.04	32.07
Receivables	248.38	262.49
Total	335.28	352.27
Interest	22.65	45.09
Rate of Interest	12.80%	12.80%

12. 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. Reply to the petition has been filed by Madhya Pradesh Power

Management Company Limited (hereinafter referred to as "MPPMCL") vide its affidavit dated 13.8.2018 and the petitioner vide affidavit dated 6.12.2018 filed its rejoinder and additional information filed vide affidavits dated 12.12.2018, 15.1.2019 and 13.3.2019 in the matter.

13. The Petition was heard on 12.2.2019 and the Commission reserved the order in the Petition.

14. Based on the documents available on record and after considering the submissions made by the petitioner and the respondent(s), we dispose of the claim of the petitioner in the instant Petition in terms of the provisions of the 2014 Tariff Regulations, as stated in the subsequent paragraphs.

Analysis and Decision

Date of Commercial Operation (COD):

15. The date of Commercial operation (COD) claimed by petitioner for instant petition is as follows:

Asset	Actual COD
Asset-1: 765kV, 2 x 330 MVAR Switchable Line Reactors to be charged as Bus Reactor at Dharamjaigarh end in both ckt of Jharsuguda- Dharamjaigarh 765 kV D/C Line	21.9.2017

16. The Petitioner has claimed date of Commercial operation based on actual commissioning date, i.e., 21.9.2017. Petitioner in support of COD has submitted CEA certificate dated 7.8.2017 under Regulation 43 of CEA (measures related to safety and electric supply) Regulations, 2010, RLDC certificate dated 3.11.2017,Self-declaration COD letter dated 23.1.2018 and CMD Certificate as required under grid code. Accordingly, taking into consideration these certificates,

the COD of the asset is approved as 21.9.2017 and has been considered for the purpose of tariff computation from COD till 31.3.2019.

Capital cost:

17. 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."*

18. The details of approved apportioned cost (FR), revised apportioned approved cost (RCE), capital cost as on COD and additional capital expenditures incurred or projected to be incurred during periods 2017-18, 2018-19 and 2019-20 along with estimated completion cost for the asset as claimed by the petitioner for the purpose of computation of tariff are indicated in the table below. The expenditure up to COD is based on Auditor's Certificate dated 21.3.2018.

(₹ in Lakh)

Apportioned Approved Cost (FR)	Revised cost estimate (RCE-1)	Est. Exp. Up to COD	Projected Exp. for FY			Estimated Completion Cost
			2017-18	2018-19	2019-20	
6466.97	7527.44	6257.92	649.62	345.06	24.14	7276.74

<u>Cost Over-run</u>

19. The Petitioner has submitted that the estimated completion cost of the instant asset is within the RCE apportioned cost and submitted the details of capital cost as under:

(₹ in Lakh)

Apportioned Approved Cost (FR)	Revised Cost Estimate (RCE)	Estimated Completion Cost
6466.97	7527.44	7276.74

20. We have examined the submissions of Petitioner and respondents and noted that against the revised apportioned approved cost (RCE) of assets covered in the instant petition as mentioned in Table above, the estimated completion cost as on 31.3.2019 including additional capitalization is within the revised apportioned approved cost. Therefore, there is no cost overrun.

<u>Time overrun:</u>

21. The scheduled completion date of the instant asset is 4.1.2016, i.e., within 33 months from the date of Investment Approval (5.4.2013) whereas the asset has been declared under commercial operation w.e.f. 21.9.2017, i.e., with a delay of 20 months 18 days.

22. The petitioner has submitted the reasons and justification along with the supportive documents for delay of 20 months 18 days in commissioning of the asset.

23. We have perused the material placed on record, sequence of events and submissions made by the petitioner. Based on the above, the total time overrun incurred due to various factors such as survey, forest and wildlife clearance, right of way issues is of 46 months 18 days, while there has been delay of 20 months 18 days in commissioning of the instant asset. Based on the reasons and justification with the supportive documents, we are of the considered view that the time overrun was beyond the control of the petitioner. Accordingly, the time overrun of 20 months 18 days is condoned.

Treatment of IDC and IEDC

24. The Petitioner has claimed IDC of ₹613.75 lakh. Further, the Petitioner has submitted the statement showing discharge of IDC liability as on COD and thereafter is as follows:

(₹ In lakh)

IDC claimed as per certificate	IDC allowed as on COD	IDC discharged Up to COD	IDC discharged In 2017-18	IDC discharged in 2018-19
613.75	613.75	465.70	101.44	46.61

25. The IDC on cash basis up to allowable dates has been worked out on the basis of the loan details given in Form-9C. It is submitted that Petitioner has not made any default in the payment of interest. Therefore, the IDC being considered

for tariff computation is minimum of the worked out IDC and IDC claimed by the Petitioner.

<u>Incidental Expenditure During Construction (IEDC)</u>

26. The Petitioner has claimed IEDC of ₹ 119.36 lakh. The Petitioner has claimed IEDC as on COD, which is within the percentage of hard cost as indicated in the abstract cost estimate. Further, the Petitioner submitted that entire IEDC claimed in Auditor Certificate is on cash basis and is paid up to COD of the assets. Hence, the entire amount of IEDC has been allowed.

<u>Treatment of Initial Spares</u>

27. Regulation 13(d) of the 2014 Tariff Regulations provides that initial spares shall be capitalized as a percentage of plant and machinery cost up to 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%"

28. The petitioner vide affidavit dated 28.3.2018 and Auditor Certificate dated 21.3.2018 has claimed the Initial spares for the subject Asset as under:

(₹ in Lakhs)

Components of the Asset	Cost for calculation of initial spares*	Initial spares being claimed	Ceiling Limit (%)	Initial Spares Allowed
Transmission Sub-station	5811.80	275.41	6.00	275.41

*Excluding IDC, IEDC, Land cost and cost of civil works for the purpose of initial spares.

29. We have considered the submissions of the petitioner. The initial spares claimed by the Petitioner for the subject Asset are within the permissible limits and the same is allowed.

Capital Cost as on COD

30. The details of the capital cost considered as on COD after adjustment of IDC, IEDC, cost over-run and initial spares is as under:

(₹ in Lakh)

Asset	Capital Cost claimed as on COD (A)	Un-discharged IDC (B)	Capital Cost allowed as on COD (C=A-B)
Asset-1	6257.92	148.05	6109.87

Additional Capital Expenditure (ACE):

31. The additional capital expenditure claimed by petitioner vide auditor certificate dated 21.3.2018 in affidavit dated 28.3.2018 is as follows:

(₹ in Lakh)

Asset	Estimated additional capital expenditure for FY			Total ACE Claimed by petitioner
	2017-18	2018-19	2019-20	
Asset-1	649.62	345.06	24.14	1018.82

32. The Respondent No.1, MPPMCL vide affidavit dated 13.8.2018 has submitted that petitioner has not provided details in Form-7 with petition for the assets and in response the petitioner has stated that such details and justification shall be provided at the time of true-up when it comes actual. The petitioner vide rejoinder dated 6.12.2018 has made submissions that the claimed add-cap for assets under the instant petition has been claimed as per Regulation 14(1)(i) of

CERC Regulations, 2014 on account of balance & retention payments and details have been submitted in Fomr-7 and further, the element –wise break-up of cost of the asset under instant petition has already been submitted in Form-5 of the main petition.

33. 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) Un-discharged liabilities recognized 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."*

34. 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."*

35. The date of commercial operation for Asset-1 has been considered as 21.9.2017 and accordingly, the cut-off date for Assets-1 comes to 31.3.2020.

36. We have considered the submissions made by petitioner and the respondent, MPPMCL. The petitioner has claimed additional capital expenditure (ACE) of ₹

649.62 lakh for FY 2017-18, ₹ 345.06 lakh for FY 2018-19 and ₹ 24.14 lakh for FY 2019-20, totalling to an amount of ₹1018.82 lakh on account of balance and retention payment covered under Regulation 14(1) of the 2014 Tariff Regulations. We have considered the submissions made by petitioner and, we are of the view that the Petitioner has claimed ACE as per as per Clause (1) of Regulation 14 of the 2014 Tariff Regulations based on the cost certified by the Auditors. The additional capital expenditure claimed by the Petitioner for Asset-1 of ₹ 649.62 lakh for FY 2017-18 and ₹345.06 lakh for FY 2018-19 is allowed on account of balance and retention payments under Regulation 14(1) (i) of the 2014 Tariff Regulations. Further, the additional capital expenditure of ₹ 24.14 lakh for FY 2019-20 is not being considered as the tariff control period is ending on 31.3.2019 and same will be considered in tariff period 2019-24 in terms of prevailing Regulation at that time. The Additional Capital Expenditure allowed is summarised below subject to true up:

(₹ in Lakh)

Particulars	2017-18	2018-19
Discharge towards balance and retention payments	649.62	345.06
IDC discharged	101.44	46.61
Total Allowed Add-Cap.	751.06	391.67

<u>Capital Cost for the tariff period 2014-19</u>

37. Accordingly, the capital cost considered for the tariff period 2014-19, subject to truing up, is as follows:-

(₹ in lakh)

Asset	Capital cost allowed as on COD	Add Cap for 2017-18	Add Cap for 2018-19	Total Estimated Completion Cost up to 31.3.2019
Asset-I	6109.87	751.06	391.67	7252.60

Debt-Equity Ratio

38. 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."*

39. 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)

Particular	Capital cost as on COD		Capital cost as on 31.3.2019	
	Amount	**%**	**Amount**	**%**
Debt	4276.91	70	5076.82	70
Equity	1832.96	30	2175.78	30
Total	**6109.87**	**100**	**7252.60**	**100**

Return on Equity

40. 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:*
>
> *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:*
>
> *(iv) 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:*

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

"25. Tax on Return on Equity:

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".

(1) 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."

41. 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.

42. We have considered the submission made by the Petitioner. Regulation 24

read with Regulation 25 of the 2014 Tariff Regulations provides for grossing up of RoE with the effective tax rate for the purpose of RoE.

43. 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:-

(₹ In lakh)

Particulars	**2017-18 Pro-Rata**	**2018-19**
Opening Equity	1832.96	2058.28
Addition due to Additional Capitalization	225.32	117.50
Closing Equity	2058.28	2175.78
Average Equity	1945.62	2117.03
Return on Equity (Base Rate)	15.50%	15.50%
MAT rate for the respective financial year	20.960%	20.960%
Rate of Return on Equity (Pre-tax)	19.610%	19.610%
Return on Equity (Pre-tax)	200.70	415.15

<u>Interest on loan (IOL)</u>

44. Regulation 26 of the 2014 Tariff Regulations provides 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 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 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."

45. Accordingly, Interest on Loan has been worked out as under:-

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

(ii) *The yearly repayment for the tariff period 2014-19 has been considered to be equal to the depreciation allowed for that year; 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.

46. Based on above, details of Interest on Loan considered and allowed for the subject Asset are as follows:-

(₹ in lakh)

Particulars	Asset-I	
	2017-18 (pro-rata)	**2018-19**
Gross Normative Loan	4276.91	4802.65
Cumulative Repayment upto previous Year	0.00	174.34
Net Loan-Opening	4276.91	4628.31
Addition due to Additional Capitalization	525.74	274.17
Repayment during the year	174.34	358.27
Net Loan-Closing	4628.31	4544.21
Average Loan	4452.61	4586.26
Weighted Average Rate of Interest on Loan	8.1293%	8.1034%
Interest on Loan	190.40	371.64

Depreciation

47. Regulation 27 of the 2014 Tariff Regulations with regard to depreciation specifies as below:-

"27. Depreciation:

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.

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 shallbe 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.

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.

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.

*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.

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."

48. The instant transmission asset was put under commercial operation on 21.9.2017. As such, depreciation has been calculated annually based on Straight Line Method at the rates specified in Appendix-II to the 2014 Tariff Regulations.

49. In accordance with Regulation 27, the depreciation with respect to the subject Asset is as follows:-

(₹ in lakh)

Particulars	Asset-I	
	2017-18 (pro-rata)	2018-19
Opening Gross Block	6109.87	6860.93
Additional Capital expenditure	751.06	391.67
Closing Gross Block	6860.93	7252.60
Average Gross Block	6485.40	7056.77
Rate of Depreciation	5.1103%	5.0770%
Depreciable Value	5836.86	6351.09
Remaining Depreciable Value	5836.86	6176.75
Depreciation	174.34	358.27

Operation and Maintenance Expenses (O&M Expenses)

50. Regulation 29(4) (a) of the 2014 tariff regulations specifies the norms for O&M expenses for the transmission system based on the type of sub-station and the transmission line. Norms specified in respect of the elements covered in the instant asset are as under:

(₹ in Lakh)

Element	2017-18	2018-19
765 kV sub-Station	93.11	96.20

51. The O&M Expenses claimed by the petitioner's are as below:

(₹ in Lakh)

Particulars	2017-18	2018-19
O&M Expenses	196.57	384.80

52. The petitioner has submitted that O&M Expenses for the tariff period 2014-19 had been arrived at 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 is due during 2014-19 and actual impact of wage hike effective from a future date has not been factored in fixation of the normative O&M rates specified for the tariff block 2014-19. The petitioner has submitted that it would approach the Commission for suitable revision in norms for O&M Expenses for claiming the impact of wage hike during 2014-19, if any.

53. Respondent no.1, MPPMCL in its reply vide affidavit dated 13.8.2018 has submitted that the increase in the employees' cost, if any, due to wage revision must be taken care by improvement in their productivity levels by the petitioner company so that the beneficiaries are not unduly burdened over and above the provisions made in the 2014 Tariff Regulations. In response, the petitioner filed its rejoinder dated 6.12.2018 and submitted that the wage revision of the employees of the petitioner is due w.e.f. 1.1.2017 and actual impact of wage hike which will be effective from a future date has also not been factored in fixation of the normative O&M rates prescribed for the tariff block 2014-19. The scheme of wage revision applicable to CPSUs is binding on the petitioner and hence it would approach the Commission for suitable revision in the norms for O&M Expenses for claiming the impact of wage hike from 1.1.2017 onwards.

54. We have considered the submissions of petitioner and MPPMCL. The O&M Expenses have been worked out as per the norms specified in the 2014 Tariff Regulations. As regards the 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. The total allowable O&M Expenses for subject asset are as follows:

(₹ in Lakh)

Particulars	2017-18 (Pro-rata)	2018-19
O&M Expenses calculated	195.91	384.80
O&M Expenses claimed by petitioner	196.57	384.80
O&M Expenses allowed in the instant petition.	**195.91**	**384.80**

Interest on Working Capital (IWC)

55. 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 fixed cost;

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

(iii) Operation and maintenance expenses for one month"

(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;"

56. As per 2014 Tariff Regulations the components of the working capital and the

interest thereon is mentioned below:-

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.

O & M expenses:

Operation and maintenance 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.

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.

Rate of interest on working capital:

As per proviso 3 of Regulation 28 of the 2014 Tariff Regulation, SBI Base Rate Plus 350 bps as on 1.04.2017 (i.e.12.60%) for the Asset covered in the petition has been considered for the instant assets, as the rate of interest on working capital.

57. Accordingly, the interest on working capital is summarized as under:-

(₹ in lakh)

Particulars	**Asset-I**	
	2017-18 (pro-rata)	**2018-19**
Maintenance Spares	55.86	57.72
O & M expenses	31.04	32.07
Receivables	248.38	262.49
Total	335.28	352.28
Interest	**22.57**	**45.09**

Annual Transmission Charges

58. In view of the above, the annual transmission charges being allowed for the instant asset is summarized hereunder:-

(₹ In Lakh)

Particulars	**Asset-I**	
	2017-18 (pro-rata)	**2018-19**
Depreciation	174.34	358.27
Interest on Loan	190.40	371.64
Return on Equity	200.70	415.15
Interest on Working Capital	22.57	45.09
O&M Expenses	195.91	384.80
Total	**783.92**	**1574.96**

Filing Fee and Publication Expenses

59. 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

60. The petitioner has requested to allow it 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.

Goods and Services Tax

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

Sharing of Transmission Charges

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

63. This order disposes of Petition No. 241/TT/2018.

Sd/-	Sd/-	Sd/-
(I.S. Jha)	**(Dr. M.K. Iyer)**	**(P.K. Pujari)**
Member	**Member**	**Chairperson**