CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 171/TT/2018

Coram:

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

Date of Order: 30.09.2019

In the matter of:

Approval 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 for determination of Transmission Tariff from DOCO to 31.3.2019 for **Asset**: Replacement of 1 No. of 1 x 315 MVA, 400/220 kV ICT with 1 x 500 MVA, 400/220 kV ICT (2nd) at 400 kV Maithon Sub-station under Transmission System for "Eastern Region System Strengthening Scheme-IX" in Eastern Region.

And in the matter of:

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

Vs

1. Bihar State Electricity Board,
   Vidyut Bhawan, Bailey Road, Patna – 800 001.

2. West Bengal State Electricity Distribution Company Ltd.,
   Bidyut Bhawan, Bidhan Nagar, Block DJ, Sector-II,
   Salt Lake City, Culcatta – 700 091.

3. Grid Corporation of Orissa Ltd.,
   Shahid Nagar, Bhubaneswar – 751 007.

4. Damodar Valley Corporation,
   DVC Tower, Maniktala, Civic Centre, VIP Road, Calcutta – 700 054.

5. Power Department,
   Government of Sikkim, Gangtok – 737 101.

6. Jharkhand State Electricity Board,
Doranda, Ranchi – 834 002.

……**Respondents**

Parties present : Shri S. S. Raju, PGCIL
Shri S. K. Venkatesan, PGCIL
Shri Amit Yadav, PGCIL
Shri Vivek Kumar Singh, PGCIL
Shri Zafrul Hasan, PGCIL
Shri S. K. Niranjan, PGCIL

ORDER

The petitioner, Power Grid Corporation of India Limited (hereinafter also referred to as "PGCIL") has filed the instant Petition for approval of transmission tariff, from COD to 31.3.2019, for replacement of 1 No. of 1 x 315 MVA, 400/220 kV ICT (hereinafter referred to as "existing asset") with 1 x 500 MVA, 400/220 kV ICT (2nd) at 400 kV Maithon Sub-station under Transmission System for "Eastern Region System Strengthening Scheme-IX" in Eastern Region (hereinafter referred to as "the instant asset"), 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 petitioner was entrusted with the implementation of Eastern Region Strengthening Scheme IX (hereinafter referred to as "the project"). The petitioner has submitted that the instant asset was discussed and agreed in the 73rd OCC meeting of Eastern Region (hereinafter referred to as "ER"), the 1st Meeting of Standing Committee (hereinafter referred to as "SCM") on Power System Planning in ER held on 5.1.2013 and 24th ERPC meetings held on 26th & 27th April 2013.

3. The Investment Approval (hereinafter referred to as "IA") for implementation of

the project was accorded by the Board of Directors of the petitioner company in its 299th meeting held on 26.2.2014 (communicated vide Memorandum Ref.: C/CP/ERSS-IX dated 3.3.2014), at an estimated cost of ₹196.58 Crores including IDC of ₹10.65 Crores, based on December, 2013 price level. As per IA, the project was scheduled to be commissioned within 24 months from the date of IA. Accordingly, the scheduled date of commercial operation (hereinafter referred to as "SCOD") of the project / instant asset is 25.2.2016.

4. The scope of work covered under the project as per IA is as follows:

(i) **Addition / Replacement of Bus Reactors at 400 kV Sub-station ("S/S"):**

- Installation of 1 x 125 MVAR Bus Reactor at Gazuwaka 400 kV (East) bus.
- Installation of 2 x 125 MVAR Bus Reactor at Rengali.
- Installation of 1 x 125 MVAR Bus Reactor at Maithon.
- Installation of 1 x 125 MVAR Bus Reactor in parallel with existing 50 MVAR (3 x 16.67) Bus Reactor at Biharsharif, using existing Reactor bay.
- Installation of 2 x 125 MVAR Bus Reactor in parallel with existing 2 x 50 MVAR Bus Reactor at Jamshedpur
- Installation of 1 x 125 MVAR Bus Reactor in parallel with existing 1 x 50 MVAR Bus Reactor at Rourkela.
- Installation of 2 x 125 MVAR Bus Reactors at Durgapur (Parulia). Out of 2 x 125 MVAR Bus Reactor, 1 x 125 MVAR Bus Reactor would be in

parallel with existing 1 x 50 MVAR Bus Reactor, using existing Reactor bay.

Note: As there is space constraint for parallel operation of reactors at Jamshedpur and Rourkela the existing 50 MVAR Bus Reactor is being replaced by 125 MVAR Bus Reactor and the 50 MVAR Reactors will be utilised as regional spares. In case of space constraint for parallel operation of reactors at Biharsharif and Durgapur the existing 50 MVAR Bus Reactor would be similarly replaced by 125 MVAR Bus Reactor and the 50 MVAR Reactors will be utilised as regional spares.

(ii) **Augmentation of Transformation Capacity at Maithon, Muzzaffarpur and Ara S/S of PGCIL:**

- Addition of 1 x 500 MVA, 400/220 kV ICT along with associated bays at Muzaffarpur 400/220 kV S/S.
- Addition of 1 x 160 MVA, 220/132 kV ICT along with associated bays at Ara 220/132 kV S/S.
- Replacement of 2 x 315 MVA, 400/220 kV ICTs with 2 x 500 MVA, 400/220 kV ICTs at Maithon (2 x 315 MVA, 400/220 kV ICTs, thus released from Maithon, would be used as Regional Spare).

(iii) **Spare 500 MVA Single Phase Unit of 765/400 kV ICT for Eastern Region:**

- Procurement of one 500 MVA, Single Phase unit of 765/400 kV ICT for ER to be stationed at Gaya S/S.

(iv) **Converting 2 x 80 MVAR Line Reactors at Gorakhpur to Switchable.**

- Converting 2 x 80 MVAR Line Reactors at Gorakhpur end of Barh-II – Gorakhpur 400 kV Quad D/c line to 2 x 80 MVAR (Switchable) Line Reactors.

5. The details of petitions covering assets under the scope of work of the project

are as under:

Name of Asset	COD	Covered under Petition No.
Asset-I: Addition of 1 x 160 MVA, 220/132 kV ICT along with associated bays at Ara 220/132 kV S/S	2.1.2016	238/TT/2015
Asset-II: Addition of 1 x 500 MVA, 400/220 kV ICT along with associated bays at Muzaffarpur 400/220 kV S/S	6.1.2016	
Asset-I: 1No. of 1 x 125 MVAR Bus Reactor and associated bay at 400 kV Maithon S/S	18.9.2016	29/TT/2016
Asset-II: Replacement of 1 No. of 1 x 315 MVA, 400/220 kV ICT with 1 x 500 MVA, 400/220 kV ICT (1st) at 400 kV Maithon S/S	1.10.2016	
Asset-III: Replacement of 1 No. of 1 x 315 MVA, 400/220 kV ICT with 1 x 500 MVA, 400/220 kV ICT (2nd) at 400 kV Maithon S/S **	*25.10.2017*	
Asset-I: 1 No. of 1 x 125 MVAR Bus Reactor (1st) and associated bay equipments at 400 kV Durgapur S/S	23.10.2016	38/TT/2017
Asset-II: 1 No. of 1 x 125 MVAR Bus Reactor (2nd) and associated bay equipments at 400 kV Durgapur S/S	30.12.2016	
Asset-III & IV: 2 Nos. of 125 MVAR Bus Reactor I & II at Rengali S/S	3.8.2017	
Asset-V: Installation of 1 x 125 MVAR Bus Reactor by replacing existing 1 x 50 MVAR Bus Reactor at 400 kV *Rourkela S/S*	7.1.2018	
Asset-VI: Installation of 1 x 125 MVAR Bus Reactor in Parallel with existing 50 (3X16.67) MVAR Bus Reactor at *Biharsharif S/S*	13.10.2017	
Asset VII(a): Installation of 1 x 125 MVAR Bus Reactor-II after replacing existing 1 x 50 MVAR Bus Reactor at *Jamsedpur S/S*	17.11.2017	
Asset VII(b): Installation of 1x125 MVAR Bus Reactor-I in Parallel with existing 1X50 MVAR Bus Reactor at *Jamsedpur S/S*	3.12.2017	
Asset-VIII: Procurement of 1 No. 500 MVA, Single phase unit of 765/400 kV ICT for Eastern Region to be stationed at Gaya S/S (diverted to Ranchi)	31.3.2018	
Asset-IX: Installation of 1 x 125 MVAR Bus Reactor at 400 kV Gazuwaka S/S	27.9.2017	
Asset-X: Converting 2 x 80 MVAr Line Reactor to 2 x 80 MVAr Switchable Line Reactor at Gorakhpur end for 400 kV Barh-II – Gorakhpur transmission line	09.2.2017	

** The tariff of the asset was earlier claimed in Petition No. 29/TT/2016. However, the same was not commissioned till the time of issuance of order, dated 24.7.2016, in Petition No. 29/TT/2016. In the said order the Commission directed that the tariff allowed for the aforesaid asset will lapse if it was not commissioned by 30.9.2016. Subsequently, with the commissioning of the asset on 25.10.2017, the petitioner has filed the instant Petition for determination of tariff of the asset.

6. The instant Petition covers following asset:

Name of Assets	Claimed COD
Replacement of 1 No. of 1 x 315 MVA, 400/220 kV ICT with 1 x 500 MVA, 400/220 kV ICT (2nd) at 400 KV Maithon S/S	25.10.2017

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

(₹ in lakh)

Particulars	2017-18 (pro-rata)	2018-19
Depreciation	25.08	73.69
Interest on Loan	25.14	70.28
Return on Equity	27.95	82.10
Interest on Working Capital	1.70	4.93
O&M Expenses	0.00	0.00
Total	**79.87**	**231.00**

8. 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. Further, none of the respondents have filed any reply in the matter.

9. The Petition was heard on 28.2.2019 and the Commission reserved the order in the Petition.

10. Based on the documents available on record and after considering the submission of the petitioner, 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.

Date of Commercial Operation

11. The petitioner has claimed COD of the instant asset as 25.10.2017 and has also submitted the self declaration letter of commercial operation dated 27.10.2017, RLDC certificate dated 31.1.2018 regarding completion of trial operation of transmission element, CEA certificate dated 8.11.2017, as required under Regulation 43 of CEA (Measures relating to Safety and Electric Supply) Regulations, 2010 and CMD certificate as required under Grid Code in support of its

claim. Accordingly, taking into consideration the RLDC certificate, CEA certificate, self declaration letter and CMD certificate, the COD of the instant asset is approved as 25.10.2017.

Time over-run

12. As stated above, the SCOD of the instant asset is 25.2.2016 and COD of the instant asset is 25.10.2017. Accordingly, there is a time over-run of 608 days.

13. The reason for the delay as submitted by the petitioner in the Petition is as under:

(i) Delay due to excessive overloading at Maithon S/S:

Augmentation of transformation capacity at the existing 400/220 kV Maithon S/S is due to the maximum loading on 2 x 315 MVA, 400/220 kV at Maithon (PG) has gone upto 300 MW on each transformer continuously and outage of one ICT may lead to failure of other ICT due to excessive loading. Due to excessive load condition on existing ICTs technically it is not possible to replace both ICT simultaneously. Hence, as per technical requirement dismantling 315 MVA ICT-I was started after charging of 1st 500 MVA ICT i.e. 16.09.2016. The commissioning of 2nd 500 MVA ICT could be only possible after dismantling of 315 MVA ICT-I. As per schedule in L-2 network, the ICT dispatch date was taken as 13.9.2015, but due to technical issue as elaborated above ICT dispatch as per original schedule was not meaningful. Considering the above situation the 2nd ICT was dispatched in the month of August, 2016. Accordingly, there is delay of 11 months and 5 days (From 13.9.2015 to 16.9.2016) due to technical issue of overloading at Maithon S/S which was not envisaged at the time of original DPR.

(ii) Delay due to road accident:

Simultaneous to commissioning of 500 MVA ICT-I at Maithon S/S in the month of Sep, 2016, ICT-II was dispatched in the month of August, 2016 and unfortunately met with a road accident with a big trailer near Seoni, Madhya Pradesh on 23.8.2016 causing damage to the ICT and delivery vehicle. The Transformer was lifted for sending back to Toshiba factory for further necessary action at their factory. Finally, M/s. TOSHIBA had dispatched 500 MVA ICT-2 on 23.6.2017 and the same was received at Maithon S/S on 29.8.2017. Due to road accident of trailer the transportation activity hampered by 12 months i.e. from Aug, 2016 to Aug, 2017.

(iii) Delay due to Shut down:

After the receipt of ICT at Maithon on 29.8.2017, all the pre-commissioning activity was done and applied for shutdown on 19.9.2017 and due to load constraint on Maithon S/S, finally shut down was granted on 13.10.2017. This delay in approval caused a delay of 25 days.

14. The petitioner further vide affidavit dated 31.12.2018 has submitted the delay in commissioning of the instant asset was beyond the control of the petitioner and has requested to condone these unforeseen circumstances. The details of time over-run and chronology of activities, as submitted by the petitioner, is as under:

Activity	Period of activity				Remarks, if any
	Schedule		Actual		
	From	To	From	To	
LOA	26.2.2014	27.4.2014	20.10.2014	20.10.2014	Delay due to excessive overloading of existing 315 MVA ICTs at Maithon S/S. This issue was technical and could not be envisaged at the time of DPR stage.
Supplies ICT-II	1.10.2015	31.10.2015	1.9.2017	30.9.2017	The 2nd ICT 500MVA was dispatched in August, 2016 but the same unfortunately met with an accident and toppled during transit at Seoni (M.P.) on 23.8.16. The

					ICT has been lifted and transported back to Toshiba factory and was subsequently dispatched after rectification from suppliers factory. The same was received at Maithon S/S on 29.8.2017 thus leading to a delay of about 12 months.
Testing & Commissioning	1.2.2016	25.2.2016	1.10.2017	25.10.2017	Due to loading constraints the shutdown was granted on 13.10.2017 by ERLDC with a delay on 25 days and immediately upon this the ICT was charged and subsequently declared commissioned w.e.f. 25.10.17.

15. We have considered the submissions of the petitioner. The petitioner has attributed the time over-run of (a) 12 months due to excessive loading at Miathon S/S, (b) 12 months due to damage to ICT-II during transportation and subsequent repair works and (c) 25 days due to delay in grant of shutdown at Maithon S/S.

16. As regards loading at Maithon S/S, the petitioner should have factored in such technical aspects while preparing the DPR and should have appropriately built in the time frame for replacement of ICTs. As the petitioner had not done such due diligence, we do not find any ground to condone the delay.

17. With regard to the delay of 12 months caused due to road accident, the petitioner has submitted that ICT-II was damaged during transportation and it was taken to the factory for repair. The ICT-II was dispatched in August 2016 and on the way it was damaged in an accident on 23.8.2016 and it was received finally at the Maithon S/S after repairs on 29.8.2017. The petitioner has submitted that the time over-run due to accident should be condoned as it is an uncontrollable factor as defined in Regulation 12(2) of the 2014 Tariff Regulations. Regulation 12(2) of the 2014 Tariff Regulations provide as under:

"12. Controllable and Uncontrollable factors: The following shall be considered as controllable and uncontrollable factors leading to cost escalation impacting Contract Prices, IDC and IEDC of the project:
(2) The "uncontrollable factors" shall include but shall not be limited to the following:
i. Force Majeure events; and
ii. Change in law.
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18. The term "force majeure events" have been defined in clause 25 of Regulation 3 of the 2014 Tariff Regulations as under:

"(25) 'Force Majeure' for the purpose of these regulations means the event or circumstance or combination of events or circumstances including those stated below which partly or fully prevents the generating company or transmission licensee to complete the project within the time specified in the Investment Approval, and only if such events or circumstances are not within the control the generating company or transmission licensee and could not have been avoided, had the generating company or transmission licensee taken reasonable care or complied with prudent utility practices:
a) Act of God including lightning, drought, fire and explosion, earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado, geological surprises, or exceptionally adverse weather conditions which are in excess of the statistical measures for the last hundred years; or
(b) Any act of war, invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, terrorist or military action; or
(c) Industry wide strikes and labour disturbances having a nationwide impact in India;
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19. As per above said Regulation, an accident during transportation is neither an "uncontrollable factor" nor a "force majeure" event. Accordingly, the time over-run due to this aspect is attributable to petitioner and its contractor. The time over-run cannot be condoned and we are of the view that the cost of time over-run should not be loaded on the beneficiaries. However, the corresponding liquidation damages and insurance proceeds, if any, recovered by the petitioner shall be retained by the petitioner.

20. As regards the delay in getting approval of shutdown at Maithon S/S, it is

observed that the petitioner took about 2 months for installation and charging of ICT-II after its arrival at site. As per the above chronological activities provided by the petitioner, there is a time line of about 4 months between the completion of supply to the commissioning of the instant asset (i.e. 31.10.2015 to 25.2.2016) against which the petitioner has taken about 2 months. Hence, the petitioner was able to commission the ICT-II within the scheduled time line despite 25 days taken in obtaining shutdown permission and therefore does not call for condonation of the delay on this count.

21. In view of above, the time over-run of 20 months (i.e. 608 days) in the instant asset is not condoned.

Capital Cost

22. The details of capital cost claimed by the petitioner in terms of the Auditor's certificate dated 11.1.2018 as on COD (i.e. 25.10.2017) along with the actual / estimated additional capital expenditure incurred / to be incurred for the instant asset is summarized below:

(₹ in lakh)

Apportioned approved cost	Expenditure up to COD	Estimated expenditure		Estimated completion cost
		2017-18	2018-19	
1603.87	915.86	388.27	200.00	1504.13

23. According to the Auditor's certificate, the expenditure upto 31.3.2017 is verified and is in accordance with the audited books of accounts of PGCIL and the expenditure for the period from 1.4.2017 to 24.10.2017 is in accordance with the books of accounts of ERTS-II. In this regard the petitioner is hereby directed to furnish a revised Auditor certificate in respect of its capital cost claim, strictly in accordance with the audited books of accounts of PGCIL, as on COD, at the time of

truing up.

24. The petitioner has claimed capital cost of ₹894.57 lakh as on COD. The break-up of the claimed capital cost is as under:

(₹ in lakh)

Particulars	Capital cost claimed (on accrual basis) (A)	Un-discharged Liabilities (B)	Capital cost claimed (on cash basis) (C = A-B)
Hard Cost	1208.49	357.63	850.86
IDC	47.98	21.29	26.69
IEDC	17.02	0.00	17.02
Total	**1273.49**	**378.92**	**894.57**

25. Thus, the claimed capital cost before IDC and IEDC works out to ₹850.86 lakh, on cash basis.

Cost over-run

26. The total estimated completed cost of the instant asset, as stated above, is ₹1504.13 lakh as against the apportioned approved cost of ₹1603.87 lakh. Hence, there is no cost over-run in the commissioning of the instant asset.

Treatment of IDC and IEDC

27. The petitioner has claimed Interest during Construction (IDC) of ₹47.98 lakh on accrual basis and ₹26.69 lakh on cash basis, for the instant asset. The petitioner has submitted the discharge details of IDC as under:

(₹ in lakh)

IDC as per Auditor certificate	IDC discharged		
	upto COD	2017-18	2018-19
47.98	26.69	4.20	17.09

28. The petitioner's claim for IDC has been examined and it is observed that petitioner has claimed IDC corresponding to drawls amounting to ₹641.10 lakh upto

COD of the instant asset. Considering the details of loans as submitted in the instant Petition along with the fact that time over-run has not been condoned the admissible IDC, as on COD, works out to "nil" on accrual basis as well as cash basis, the same has been considered for the purpose of tariff.

29. The petitioner has claimed IEDC of ₹17.02 lakh for the instant asset upto COD. However, as per the statement showing "Abstract of Cost" corresponding to IA, IEDC as a percentage of accorded capital cost (before IDC, IEDC and FERV) is 10.75%, in line with the prevailing practice the same has been considered as ceiling limit for working out the admissible IEDC. Accordingly, the admissible IEDC works out to ₹9.28 lakh.

Treatment of initial spares

30. The petitioner has claimed initial spares amounting to ₹21.75 lakh upto COD of instant asset which works out to 1.51% of the total estimated plant and machinery cost (excluding IDC, IEDC, land cost and cost of civil works) upto 31.3.2019. The initial spares claimed is well within the ceiling limits of 6%, of the admissible plant and machinery cost (excluding IDC, IEDC, land cost and cost of civil works), as specified under the 2014 Tariff Regulations, accordingly, the same has been considered for the purpose of tariff.

De-capitalisation of Replaced Asset

31. The petitioner has submitted that, augmentation of transformation capacity at the existing 400/220 kV Maithon S/S is due to the fact that maximum loading on 2x315 MVA, 400/220 kV at Maithon (PG) has gone upto 300 MW on each transformer during last one year and outage of one ICT may lead to failure of other

ICT due to excessive loading. The augmentation/replacement of transformers at Maithon (PG) by 500 MVA transformers was discussed and agreed in the 73rd OCC meeting of ER and was also agreed in the ERPC meetings. The existing 315 MVA transformer would be used as regional spare as was discussed and agreed in 24th ERPC meeting held on 26th & 27th April 2013. Hence, de-capitalisation is not applicable for instant asset and the replaced ICT may be allowed as regional spare.

32. The petitioner has submitted following details in respect of the de-capitalised asset:

(₹ in lakh)

Name of de-capitalised asset	Year of put to use	Project	Date of de-capitalisation / Replacement	Life elapsed	Gross Block	Cumulative Depreciation	Net Block
1x315 MVA ICT (2nd) at Maithon S/S	1.6.1994	Kahalgaon Transmission System in ER	24.10.2017	23 years (appx.)	429.12	386.21	42.91

33. We have considered the submissions of the petitioner. The instant petition covers installation of a new 400/220 kV 500 MVA ICT at Maithon S/S by replacing the existing 315 MVA ICT (2nd), originally installed under Kahalgaon Associated Transmission System (ATS). The petitioner has proposed to use the dismantled ICT as regional spare. The existing ICT was originally commissioned on 1.6.1994 and dismantled on 24.10.2017. Accordingly, the age of the transformer is about 23 years and the petitioner has already recovered 90% of the asset value as depreciation.

34. Further, Clause 6 of Regulation 9 of the 2014 Tariff Regulations provides as under:

"(6) The following shall be excluded or removed from capital cost of the existing and new project:
(a) The assets forming part of the project, but not in use;
(b) Decapitalisation of Asset;

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35. From the above it is clear that assets not in use or assets which has been de-capitalised from the books shall be excluded from the admitted/admissible capital cost. Accordingly, we are of the view that, the original cost of replaced/de-capitalised asset shall be removed from the cost of instant asset.

Capital cost as on COD

36. 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)

Capital cost as on COD (on accrual basis) (A)	Items disallowed (B)					Items corresponding to admitted capital cost as on COD (C)		Capital cost allowed as on COD (D=A-B-C)
	IDC	IEDC	De-capitalised Asset	Cost over-run	Initial Spares	Un-discharged IDC	Balance & retention payments	
1273.49	47.98	7.74	429.12	0.00	0.00	0.00	357.63	**431.02**

Additional capital expenditure

37. The details of additional capital expenditure (hereinafter referred to as "ACE") on actual / projected basis as claimed by the petitioner under Regulation 14(1) of 2014 Tariff Regulations are as under:

(₹ in lakh)

Particulars	2017-18	2018-19
ACE to the extent of unexecuted work	230.64	0.00
Discharges of un-discharged IDC as on COD	4.20	17.09
Discharges towards balance & retention payments	157.63	200.00
ACE claimed	**392.47**	**217.09**

38. The ACE claimed by the petitioner for the instant asset is on the account of works deferred for execution, balance and retention payments and discharges of un-discharged liabilities corresponding to IDC and is well within the approved apportioned cost as well as the cut-off date. However, since the un-discharged IDC

corresponding to admissible capital cost as on COD of the instant asset is 'nil', the corresponding claim of petitioner towards discharges of IDC has been ignored for the purpose of tariff. Accordingly, the ACE allowed, subject to truing up, for the period 2017-19 is as under:

(₹ in lakh)

Particulars	2017-18	2018-19
ACE to the extent of unexecuted work	230.64	0.00
Discharges of un-discharged IDC as on COD	0.00	0.00
Discharges towards balance & retention payments	157.63	200.00
ACE claimed	**388.27**	**200.00**

39. However, petitioner is directed to furnish details of the works pertaining to "ACE to the extent of unexecuted work" at the time of truing up.

Capital cost for the tariff period 2014-19

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

(₹ in lakh)

Particulars	2017-18	2018-19
Opening Capital Cost	431.02	819.29
Add: ACE	388.27	200.00
Closing Capital Cost	**819.29**	**1019.29**
Average Capital Cost	625.16	919.29

Debt-Equity Ratio

41. The petitioner has claimed debt-equity ratio of 70:30 for the instant asset for the tariff period 2014-19. However, considering the details of debt as has been used for calculation of IDC the debt-equity ratio as on COD works out to 71.67:28.33, the same is allowed subject to truing up. Further, for the purpose of ACE, debt-equity of 70:30 has been considered, subject to truing up. The details of (gross) debt and

equity considered, subject to truing up, is as under:

(₹ in lakh)

Particulars	As on COD	As on 31.03.2019
Debt	308.89	720.68
Equity	122.13	298.61
Total	**431.02**	**1019.29**

Return on equity

42. The petitioner has claimed RoE considering rate of 19.61% after grossing up the RoE of 15.5% with MAT rate of 20.961%. The petitioner also submitted that the grossed up RoE is subject to truing up based on the actual tax paid along with any additional tax or interest, duly adjusted for any refund of tax including the interest received from IT authorities, pertaining to the tariff period 2014-19 on actual gross income of any financial year. Any under-recovery or over recovery of grossed up ROE after truing up shall be recovered or refunded to the beneficiaries on year to year basis.

43. 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.

44. We have considered the submission of the petitioner. ROE has been computed at the rate of 19.610% for the period 2014-19 after grossing up the ROE with MAT rate in terms of the above Regulations. Regulation 24 read with Regulation 25 in 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. The petitioner has submitted that MAT rate is applicable to the petitioner's company. Accordingly, the MAT rate applicable during 2013-14 has been considered for the purpose of return on equity. This is however subject to truing up based on the actual tax rate in accordance with Regulation 25 (3) in the 2014 Tariff Regulations. Accordingly, ROE has been allowed, subject to truing up, as under:

(₹ in lakh)

Particulars	2017-18	2018-19
Opening Equity	122.13	238.61
Addition due to ACE	116.48	60.00
Closing Equity	**238.61**	**298.61**
Average Equity	180.37	268.61
Return on Equity (Pre-tax)	*** 15.31**	**52.67**

* pro-rata

Interest on loan

45. In terms of the provisions of Regulation 26 in the 2014 Tariff Regulations, the petitioner's entitlement to interest on loan has been calculated on the following basis:

(i) Gross normative loan of ₹308.89 lakh has been considered as on COD.

(ii) The gross opening loan as on COD as stated at Form-9C is at variance with the amount of loan used for computing the IDC as shown at "Statement showing IDC Discharged upto DOCO". Accordingly, for the present the weighted average rate of interest as claimed by the petitioner has been considered, subject to truing up, for the purpose of tariff.

(iii) The normative repayment for the tariff period 2014-19 shall be deemed to be equal to the depreciation allowed for that period.

(iv) Based on the above, interest on loan has been calculated, subject to truing up, as under:

(₹ in lakh)

Particulars	2017-18	2018-19
Gross Normative Loan	**308.89**	**580.68**

Cumulative Repayment upto previous Year	0.00	14.29
Net Loan-Opening	**308.89**	**566.39**
Addition due to ACE	271.79	140.00
Repayment during the year	14.29	48.54
Net Loan-Closing	**566.39**	**657.86**
Average Loan	437.64	612.12
Weighted Average Rate of Interest	7.6866%	7.6809%
Interest on Loan	*** 14.56**	**47.02**

* pro-rata

Depreciation

46. The depreciation has been calculated annually based on Straight Line Method at the rates specified in **Appendix-II** in the 2014 Tariff Regulations. Based on the above, the depreciation has been considered and allowed, subject to truing up, as under:

(₹ in lakh)

Particulars	2017-18	2018-19
Average Capital Cost	625.16	919.29
Rate of Depreciation	5.28%	5.28%
Depreciable Value	562.64	827.36
Remaining Depreciable Value	562.64	813.07
Depreciation	*** 14.29**	**48.54**

* pro-rata

Operation and Maintenance Expenses (O&M Expenses)

47. The instant asset being replacement of an existing asset, the petitioner has not claimed any O&M Expenses in the instant petition. Accordingly, O&M Expenses has been considered as 'nil' for the purpose of tariff in the instant petition.

Interest on Working Capital (IWC)

48. 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) **Receivables**

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

(ii) **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 as 'nil'.

(iii) **O & M expenses**

O&M expenses have been considered for one month as a component of working capital. The value of O&M expense has accordingly been worked out as 'nil'.

(iv) **Rate of interest on working capital**

The petitioner has considered 12.80% (i.e. SBI Base Rate of 9.30% as on 5.10.2015 + 350 bps) as the rate of interest on working capital. However, in accordance with the provisions contained in Regulation 28 of the 2014 Tariff Regulations the rate of interest on working capital works out to 12.60% (i.e. SBI Base Rate of 9.10% as on 1.4.2017 + 350 bps), the same is considered for the purpose of tariff.

49. The interest on working capital, subject to truing up, has been worked out and allowed as under:

(₹ in lakh)

Particulars	**2017-18**	**2018-19**

Maintenance Spares	0.00	0.00
O&M expenses	0.00	0.00
Receivables	7.52	25.23
Total	**7.52**	**25.23**
Interest on Working Capital	*** 0.95**	**3.18**

* pro-rata

<u>Annual Transmission charges</u>

50. In view of the above, the transmission charges allowed for the instant asset is as under:

(₹ in lakh)

Particulars	2017-18 (pro-rata)	2018-19
Depreciation	14.29	48.54
Interest on Loan	14.56	47.02
Return on Equity	15.31	52.67
Interest on Working Capital	0.95	3.18
O&M Expenses	0.00	0.00
Total	**45.11**	**151.41**

<u>Filing fee and the publication expenses</u>

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

<u>License fee and RLDC Fees and Charges</u>

52. The petitioner has prayed to allow the petitioner to bill and recover License fee and RLDC fees and charges, separately from the respondents. We are of the view that the petitioner shall be entitled for reimbursement of licence fee and RLDC fees and charges in accordance with Clause (2)(b) and (2)(a) of Regulation 52 in the

2014 Tariff Regulations.

Goods and Services Tax

53. The petitioner has prayed for reimbursement of tax, if any, on account of proposed implementation of GST. The petitioner has submitted that the Commission should allow recovering GST from the beneficiaries, if imposed on transmission charges under the proposed GST when implemented by Government of India. We are of the view that petitioner's prayer is premature.

Sharing of Transmission Charges

54. 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, as provided in Regulation 43 of the 2014 Tariff Regulations.

55. This order disposes of Petition No. 171/TT/2018.

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