

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 505/TT/2019

Coram:

Shri P.K. Pujari, Chairperson
Shri I. S. Jha, Member
Shri Arun Goyal, Member

Date of Order : 27.07.2020

In the Matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 and truing up of transmission tariff of the 2014-19 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 in respect of Combined Asset consisting of **Asset-I:** Re-conductoring of one circuit (Ckt-I) Farakka-Malda 400 kV D/C with HTLS conductor and upgradation/ replacement of associated bay equipment at Farakka and Malda **Asset-II:** Re-conductoring of one circuit (Ckt-II) Farakka-Malda 400 kV D/C with HTLS conductor and upgradation/ replacement of associated bay equipment at Farakka and Malda under Eastern Region Strengthening Scheme–XIII (ERSS-XIII) in the Eastern Region.

And in the Matter of:

Power Grid Corporation of India Ltd.,
SAUDAMINI, Plot No-2,
Sector-29, Gurgaon-122 001 (Haryana).

.....**Petitioner**

Versus

1. Bihar State Power (Holding) Company Ltd.,
(Formerly Bihar State Electricity Board -BSEB),
Vidyut Bhavan, Bailey Road, Patna-800001.
2. West Bengal State Electricity Distribution Company Ltd.,
Bidyut Bhawan, Bidhan Nagar
Block DJ, Sector-II, Salt Lake City
Calcutta-700091.
3. Grid Corporation of Orissa Ltd.,
Shahid Nagar, Bhubaneswar-751007.



4. Jharkhand State Electricity Board,
In Front of Main Secretariat,
Doranda, Ranchi-834002.
5. Damodar Valley Corporation,
DVC Tower, Maniktala,
Civic Centre, VIP Road, Calcutta-700054.
6. Power Department,
Government of Sikkim, Gangtok-737101.

....Respondent(s)

Parties Present

For Petitioner: Shri S.S. Raju, PGCIL
Shri A.K. Verma, PGCIL

For Respondent: Shri Navin Prakash, Advocate, BSP(H)CL

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as “the Petitioner”), a deemed transmission licensee, for truing up of the tariff for the period 1.4.2014 to 31.3.2019 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and for determination of tariff for the period from 1.4.2019 to 31.3.2024 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of Combined Asset consisting of **Asset-I:** Re-conductoring of one circuit (Ckt-I) Farakka- Malda 400 kV D/C with HTLS conductor and upgradation/ replacement of associated bay equipment at Farakka and Malda and **Asset-II:** Re-conductoring of one circuit (Ckt-II) Farakka- Malda 400 kV D/C with HTLS conductor and upgradation/ replacement of associated bay equipment at Farakka and Malda (hereinafter referred to as “the transmission assets/Combined Asset”) under Eastern Region Strengthening Scheme–XIII (ERSS-XIII) in the Eastern Region (hereinafter referred to as the “transmission project”).



2. The Petitioner has made the following prayers in the instant petition:

- “1) Approve the trued-up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 10.0 and 11.0 above.*
- 2) Approve the Completion cost and additional capitalization incurred during 2014-19.*
- 3) 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 in Tariff Regulation 2014 and Tariff regulations 2019 as per para 10.0 and 11.0 for respective block.*
- 4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.*
- 5) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.*
- 6) 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 2019-24 period, if any, from the Respondents.*
- 7) Allow the petitioner to file a separate petition before the Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 11.5 above.*
- 8) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.*
- 9) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.*
and pass such other relief as the Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.”

Background

3. The brief facts of the case are as under:

- a. The Investment Approval for the transmission project was accorded by Board of Directors of the Petitioner Company vide Memorandum No. C/CP/ERSS-XIII Part-A dated 19.5.2014 with an estimated cost of ₹12138 lakh including Interest During Construction (IDC) of ₹772 lakh, based on February, 2014 price level. The scheme was discussed in the 25th ERPC Meeting held on 20th and 21st September, 2013 and SCM of the Eastern Region. The scope of work under the “Eastern Region Strengthening



Scheme-XIII” includes re-conductoring of both circuits of Farakka-Malda 400 kV D/C TL (ckt-I & ckt-II) with HTLS conductor and Upgradation/ Replacement of asset.

- b. The instant assets were scheduled to be put into commercial operation on 19.11.2016 and they were put into commercial operation on 2.4.2016. Thus, there is no time over-run in case of the instant assets.
- c. As the Asset-I and Asset-II were put into commercial operation on the same day, combined tariff was allowed for the 2014-19 period vide order dated 30.6.2016 in Petition No. 13/TT/2016. The tariff allowed vide order dated 30.6.2016 and trued-up tariff claimed by the Petitioner for the Combined Asset in the instant petition is as under:

Particulars	(₹ in lakh)		
	2016-17	2017-18	2018-19
Annual Fixed Charges (AFC) approved vide order dated 30.6.2016 in Petition No. 13/TT/2016	1477.85	1975.33	2025.32
AFC claimed based on truing up in the instant petition	1403.37	1725.47	1730.86

4. The Respondents are the distribution licensees and power departments, which are procuring transmission service from the Petitioner, mainly beneficiaries of the Eastern Region.

5. The Petitioner has served the petition on the Respondents and notice of this petition has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003. No comments/ objections have been received from the general public in response to the aforesaid notice published in the newspaper by the Petitioner. None of the respondents have filed any reply to the petition.

6. This order is issued considering the submissions made in the Petition and affidavits dated 12.3.2020, 15.5.2020 and 29.5.2020.



7. Having heard the representatives of the Petitioner and perused the material on record, we proceed to dispose of the petition.

Truing up of Annual Fixed Charges of the 2014-19 Period

8. The Commission vide order dated 30.6.2016 in Petition No. 13/TT/2016 provisionally approved the date of commercial operation of the instant assets as 2.4.2016 and granted leave to the Petitioner to place on record the RLDC certificate as required under Regulation 5(2) of the 2014 Tariff Regulations at the time of truing up. The Petitioner vide affidavit dated 16.9.2019 has now submitted the RLDC certificate in the instant petition as required under Regulation 5(2) of the 2014 Tariff Regulations. Accordingly, the date of commercial operation of the instant assets is affirmed as 2.4.2016.

9. The details of the transmission charges claimed by the Petitioner for the instant Combined Asset are as under:

	(₹ in lakh)		
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Depreciation	426.52	547.15	564.26
Interest on Loan	469.38	528.92	496.23
Return on Equity	477.53	612.59	633.44
Interest on Working Capital	29.94	36.81	36.93
O&M Expenses	-	-	-
Total	1403.37	1725.47	1730.86

10. The details of the Interest on Working Capital (IWC) claimed by the Petitioner for the instant Combined Asset are as under:

	(₹ in lakh)		
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
O&M Expenses	0.00	0.00	0.00
Maintenance Spares	0.00	0.00	0.00
Receivables	234.55	287.58	288.48
Total Working Capital	234.55	287.58	288.48



Rate of Interest (%)	12.80	12.80	12.80
Interest of Working Capital	29.94	36.81	36.93

Effective Date of Commercial Operation (E-COD)

11. The Petitioner has submitted that E-COD of the Combined Asset works out to as 2.4.2016. The same has been worked out by the Commission based on the capital cost and actual date of commercial operation of the Combined Asset and is shown as under:

Capital Cost as on COD (₹ in lakh)	COD	No. of days from COD of Combined Asset from COD of Project	Weight of cost	Weighted days
5962.73	2.4.2016	0	100%	0

Weighted Average Life (WAL) of the Project

12. The WAL has been determined based on the admitted capital cost of individual elements as on date of commercial operation and their respective life as provided under the 2014 Tariff Regulations. Accordingly, the WAL of the assets executed during the 2014-19 period is worked out as 33 years as shown hereunder: -

Particulars (1)	Combined Asset (₹ in lakh) (2)	Life in Years (3)	Weighted Cost (₹ in lakh) (4) = (2)x(3)	Weighted Avg. Life of Asset (in years) (5) = (4)/(2)
Building Civil Works & Colony	0.00	25	0.00	
Transmission Line	5017.65	35	175617.60	
Sub Station	945.08	25	23627.10	
PLCC	0.00	15	0.00	
IT Equipment (Incl. Software)	0.00	6	0.00	
Total	5962.73		199244.71	33.41 years, rounded off to 33 years.



13. As per the Investment Approval dated 19.5.2014, the scheduled date of commercial operation (SCOD) of the instant assets was 19.11.2016 against which both the assets were put into commercial operation on 2.4.2016 and as such there was no time over-run in execution of the instant assets.

Capital Cost

14. The details of FR approved capital cost, actual expenditure upto COD and Additional Capital Expenditure (ACE) during the 2014-19 period claimed by the Petitioner for the Combined Asset are as under:-

Approved Capital Cost	Capital Cost as on COD after adjustment of accrued IDC	Accrued IDC discharged in 2016-17	ACE as per Auditor's Certificates			Total Capital Cost as on 31.3.2019
			2016-17	2017-18	2018-19	
12138.00	5962.73	81.11	4194.53	248.64	399.32	10886.33

(₹ in lakh)

15. We have considered the submissions of Petitioner. The estimated completion cost of the Combined Asset as on 31.3.2019 including additional capitalization is within the approved capital cost. Therefore, there is no cost over-run.

Interest During Construction (IDC) and Incidental Expense During Construction (IEDC)

16. There is no time over-run in case of the instant assets. The Petitioner has claimed IDC for the instant assets and has submitted the statement showing IDC claimed by the Petitioner and discharge of IDC liability as on COD. Accordingly, the IDC considered for the purpose of tariff calculation are as under:-

IDC as per Auditor Certificate	IDC Discharged upto COD	IDC discharged during 2016-17
136.32	55.21	81.11

(₹ in lakh)



17. Further, the Petitioner has submitted that the entire IEDC claimed in Auditor's Certificate is on cash basis and is paid up to COD of the assets. Hence, the entire amount of IEDC has been allowed. Accordingly, IEDC considered for the purpose of tariff calculation are as under:

(₹ in lakh)

IEDC claimed as per certificate	IEDC considered as on COD	IEDC discharged up to COD
115.84	115.84	115.84

Initial Spares

18. 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 the cut-off date, subject to the following ceiling norms:

*“(d) Transmission System
Transmission line: 1.00%
Transmission sub-station (Green Field): 4.00%
Transmission sub-station (Brown Field): 6.00%
Gas Insulated sub-station :5.00%
Communication System: 3.5%”*

19. Vide TV (technical validation) letter dated 3.3.2020, certain information were sought from the Petitioner including on Form-13 and to provide break-up of Initial Spares. In response, the Petitioner vide affidavit dated 12.3.2020 has submitted the details as under:-

Particulars	Plant & Machinery cost (excluding IDC and IEDC) upto COD (₹ in lakh)	IEDC (₹ in lakh)	IDC (₹ in lakh)	ACE (₹ in lakh)				Total Cost (₹ in lakh)	Initial Spares worked out and claimed by the Petitioner (₹ in lakh)	%
				2016-17	2017-18	2018-19	2019-20			
Transmission Line	4856.15	107.75	122.00	4073.38	0.00	311.79	0.00	9471.07	49.00	0.53



Particulars	Plant & Machinery cost (excluding IDC and IEDC) upto COD (₹ in lakh)	IEDC (₹ in lakh)	IDC (₹ in lakh)	ACE (₹ in lakh)				Total Cost (₹ in lakh)	Initial Spares worked out and claimed by the Petitioner (₹ in lakh)	%
				2016-17	2017-18	2018-19	2019-20			
Transmission Sub-station (Greenfield/Brownfield)	935.53	8.09	14.32	121.15	248.64	87.53	245.00	1660.26	40.99	2.50

20. The Initial Spares as claimed by the Petitioner and allowed for the instant assets under Regulation 13(d) of the 2014 Tariff Regulations are as under:

Particulars	Plant and Machinery cost (excluding IDC/IEDC, Land cost & Cost of Civil Works) (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per 2014 Tariff Regulations	Initial Spares allowable (₹ in lakh)	Allowed in order dated 30.6.2016 (₹ in lakh)	Initial Spares disallowed (₹ in lakh)	Initial Spares allowed (₹ in lakh)
	A	B	C	$D=(A-B)*C/(100-C)$	E	B-D	
Transmission Line	9241.32	49.00	1.0%	92.85	49.00	-	49.00
Sub-station (Brown Field)	1637.85	40.99	6.0%	101.93	40.99	-	40.99

Since, the Petitioner's claim of Initial Spares is within the ceiling provided in Regulation 13(d) of the 2014 Tariff Regulations, the same is allowed.

Capital Cost as on the date of commercial operation

21. The capital cost of the Combined Asset has been calculated in accordance with Regulation 9(3) and Regulation 9(6) of the 2014 Tariff Regulations.

22. The Commission vide order dated 30.6.2016 in Petition No.13/TT/2016 allowed capital cost of ₹5962.73 lakh as on COD and projected ACE of ₹6051.67 lakh for determination of tariff for the 2014-19 period for the instant assets. The details are as under:-



(₹ in lakh)

Approved Capital Cost as per FR	Capital Cost allowed as on COD	ACE (as admitted)		Estimated Completion Cost (as allowed)
		2016-17	2017-18	
12138.00	5962.73	4851.57*	1200.00	12014.30

(*) Accrued IDC added in 2016-17

23. The Petitioner has submitted that the original assets were covered under project Chukha Transmission System in Petition No. 60/TT/2015 and de-capitalization of the conductor was carried out therein. The Commission allowed de-capitalization vide order dated 8.1.2016 in Petition No. 60/TT/2015. The details of the capital cost now approved as on the COD for the instant assets after adjustment of IDC, IEDC and Initial Spares is as under:

(₹ in lakh)

Capital Cost claimed as on COD (A)	Un-discharged IDC (B)	Excess Initial Spares disallowed (C)	Capital Cost allowed as on COD (D) = (A-B-C)
6043.84	81.11	0	5962.73

Additional Capital Expenditure (ACE)

24. The Commission allowed ACE of ₹6051.67 lakh for the assets covered under the instant petition in the 2014-19 period towards balance and retention payments vide order dated 30.6.2016 in Petition No. 13/TT/2016.

25. The Petitioner has claimed the following ACE based on actual expenditure:

(₹ in lakh)

Approved Capital Cost as per FR	Expenditure up to COD	Accrued IDC discharged in 2016-17	Additional Capitalization (as per Auditor's Certificate)			Capital Cost as on 31.3.2019
			2016-17	2017-18	2018-19	
12138.00	5962.73	81.11	4194.53	248.64	399.32	10886.33

26. Vide TV (technical validation) letter dated 3.3.2020, the Petitioner was asked to provide reasons for claiming ACE during 2018-19 while ACE was allowed for 2016-17 and 2017-18 only vide order dated 30.6.2016 in Petition No.13/TT/2016. In response, the Petitioner vide affidavit dated 12.3.2020 submitted that the ACE approved by the



Commission vide order dated 30.6.2016 in Petition No.13/TT/2016 was based on projections as contract was not closed and liabilities were not finalised. The ACE claimed in the instant petition is based on the actual payment made to the contractor after receipt of final invoices from the contractor and after reconciliation in accordance with the provisions of contract.

27. BSPHCL during the hearing on 19.5.2020 submitted that the claimed capital cost of ₹10886.33 lakh as on 31.3.2019 is less than the approved capital cost of ₹12138.00 lakh. Hence, the actual capital cost should be considered while truing up the tariff for the 2014-19 period.

28. We have considered the submissions made by the Petitioner and BSPHCL. ACE claimed by the Petitioner has been allowed under Regulation 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations. The un-discharged IDC liability as on COD has been allowed as ACE during the year of its discharge. The ACE allowed is summarized as under:-

(₹ in lakh)

ACE as per Auditor Certificate			Un-discharged IDC in 2016-17	ACE (including accrued IDC)		
2016-17	2017-18	2018-19		2016-17	2017-18	2018-19
4194.53	248.64	399.32	81.11	4275.64	248.64	399.32

29. The capital cost and ACE approved upto 31.3.2019 for the instant assets are as under:-

(₹ in lakh)

Expenditure up to COD	ACE (including Accrual IDC discharged)			Capital Cost as on 31.3.2019
	2016-17	2017-18	2018-19	
5962.73	4275.64	248.64	399.32	10886.33



Debt Equity Ratio

30. The debt-equity ratio has been considered in accordance with Regulation 19(1), (3) and (5) of the 2014 Tariff Regulations. The debt- equity ratio of 70:30 has been considered for ACE allowed during the 2014-19 period in accordance with Regulation 19(3) of the 2014 Tariff Regulations.

31. The debt-equity in respect of Combined Asset as on COD and on 31.3.2019 are as under:-

Particulars	Capital Cost as on COD (₹ in lakh)	(%)	ACE during 2014-19 (₹ in lakh)	(%)	Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	4173.91	70.00	3446.52	70.00	7620.43	70.00
Equity	1788.82	30.00	1477.08	30.00	3265.90	30.00
Total	5962.73	100.00	4923.60	100.00	10886.33	100.00

Interest on Loan (IoL)

32. The Petitioner has claimed weighted average rate of IoL based on its actual loan portfolio and rate of interest. Accordingly, IoL has been calculated based on actual interest rate submitted by the Petitioner, in accordance with Regulation 26 of the 2014 Tariff Regulations. IoL worked out is as under:-

Particulars	(₹ in lakh)		
	2016-17 (Pro-rata)	2017-18	2018-19
Gross Normative Loan	4173.91	7166.86	7340.91
Cumulative Repayments up to Previous Year	0.00	426.54	973.69
Net Loan-Opening	4173.91	6740.32	6367.22
Additions	2992.95	174.05	279.52
Repayment during the year	426.54	547.15	564.26
Net Loan-Closing	6740.32	6367.22	6082.49
Average Loan	5457.12	6553.77	6224.85
Weighted Average Rate of Interest on Loan (%)	8.6253	8.0704	7.9718
Interest on Loan	469.41	528.91	496.23



(₹ in lakh)

Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Approved vide order dated 30.6.2016 in Petition No. 13/TT/2016	512.48	659.01	640.96
Claimed by Petitioner in the instant petition	469.38	528.92	496.23
Allowed after true-up in this order	469.41	528.91	496.23

Return on Equity (RoE)

33. The Petitioner is entitled to RoE for the instant assets in terms of Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that they are liable to pay income tax at MAT rates and has claimed the following effective tax rates for the 2014-19 tariff period:-

Year	Claimed effective tax rate (in %)	Grossed up RoE (Base Rate/1-t) (in %)
2014-15	21.018	19.624
2015-16	21.382	19.715
2016-17	21.338	19.704
2017-18	21.337	19.704
2018-19	21.549	19.757

34. We have considered the submissions of the Petitioner. The Commission vide order dated 27.4.2020 in Petition No. 247/TT/2019 has arrived at the effective tax rate for the Petitioner based on the notified MAT rates. The relevant portion of the order dated 27.4.2020 is as under:-

“26. We are conscious that the entities covered under MAT regime are paying Income Tax as per MAT rate notified for respective financial year under IT Act, 1961, which is levied on the book profit of the entity computed as per the Section 115JB of the IT Act, 1961. The Section 115JB(2) defines book profit as net profit in the statement of Profit & Loss prepared in accordance with Schedule-III of the Companies Act, 2013, subject to some additions and deductions as mentioned in the IT Act, 1961. Since the Petitioner has been paying income tax on income computed under Section 115JB of the IT Act, 1961 as per the MAT rates of the respective financial year, the notified MAT rate for respective financial year shall be considered as effective tax rate for the purpose of grossing up of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations. Interest imposed on any additional income tax demand as per the Assessment Order of the Income Tax authorities shall be considered on actual payment. However, penalty (for default on the part of the Assessee) if any imposed shall not be taken into account for the purpose of grossing up of rate of return



on equity. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term transmission customers/ DICs as the case may be on year to year basis.

27. Accordingly, following effective tax rates based on notified MAT rates are considered for the purpose of grossing up of rate of return on equity:

Year	Notified MAT rates (inclusive of surcharge & cess)	Effective tax (in %)
2014-15	20.961	20.961
2015-16	21.342	21.342
2016-17	21.342	21.342
2017-18	21.342	21.342
2018-19	21.549	21.549

35. The same MAT rates as above are considered for the instant assets for the purpose of grossing up of rate of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations. Accordingly, the grossed up RoE rate is as follows:-

Year	Notified MAT rates (inclusive of surcharge & cess) (in %)	Base rate of RoE (in %)	Grossed up RoE (Base Rate/1-t) (in %)
2014-15	20.9605	15.50	19.611
2015-16	21.3416	15.50	19.705
2016-17	21.3416	15.50	19.705
2017-18	21.3416	15.50	19.705
2018-19	21.5488	15.50	19.758

36. The Petitioner has claimed RoE for the 2014-19 period after grossing up the RoE of 15.50% with Effective Tax rates (based on MAT rates) each year as per Regulations 24 and 25 of the 2014 Tariff Regulations. The RoE is trued up on the basis of the MAT rates applicable in the respective years and is allowed for the instant assets as under:-

Particulars	(₹ in lakh)		
	2016-17 (Pro-rata)	2017-18	2018-19
Opening Equity	1788.82	3071.51	3146.10
Additions	1282.69	74.59	119.80



Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Closing Equity	3071.51	3146.10	3265.90
Average Equity	2430.17	3108.81	3206.00
Return on Equity (Base Rate) (%)	15.500	15.500	15.500
MAT Rate for respective year (%)	21.342	21.342	21.549
Rate of Return on Equity (%)	19.705	19.705	19.758
Return on Equity	477.56	612.60	633.43

(₹ in lakh)

Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Approved vide order dated 30.6.2016 in Petition No. 13/TT/2016	492.14	671.50	706.80
Claimed by Petitioner in the instant petition	477.53	612.59	633.44
Allowed after true-up in this order	477.56	612.60	633.43

Depreciation

37. The Gross Block during the tariff period 2014-19 has been depreciated at weighted average rate of depreciation (WAROD). The WAROD at Annexure-1 has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations and depreciation allowed is as under:

(₹ in lakh)

Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Depreciation			
Opening Gross Block	5962.73	10238.37	10487.01
Additional Capitalization	4275.64	248.64	399.32
Closing Gross Block	10238.37	10487.01	10886.33
Average Gross Block	8100.55	10362.69	10686.67
Weighted average rate of Depreciation (WAROD) (%)	5.28	5.28	5.28
Balance useful life of the asset	33.00	33.00	32.00
Elapsed life of the asset at the beginning of the financial year	0.00	0.00	1.00
Aggregated Depreciable Value	7290.50	9326.42	9618.00
Combined Depreciation during the year	426.54	547.15	564.26
Aggregate Cumulative Depreciation	426.54	973.69	1537.94
Remaining Aggregate Depreciable Value	6863.96	8352.73	8080.06

(₹ in lakh)



Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Approved vide order dated 30.6.2016 in Petition No. 13/TT/2016	441.70	602.68	634.36
Claimed by Petitioner in the instant petition	426.52	547.15	564.26
Allowed after true-up in this order	426.54	547.15	564.26

Operation & Maintenance Expenses (“O&M Expenses”)

38. The Petitioner has not claimed any O&M expenses for the Combined Asset as the same had already been claimed in respect of 400 kV D/C transmission line for the 2014-19 period in Petition No. 60/TT/2015 under Chukha Transmission System.

Interest on Working Capital (IWC)

39. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and is allowed for the instant assets as under:

(₹ in lakh)			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Interest on Working Capital			
O&M Expenses	0.00	0.00	0.00
Maintenance Spares	0.00	0.00	0.00
Receivables	234.55	287.58	288.47
Total Working Capital	234.55	287.58	288.47
Rate of Interest (%)	12.80	12.80	12.80
Interest of Working Capital	29.94	36.81	36.92

(₹ in lakh)			
Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Approved vide order dated 30.6.2016 in Petition No. 13/TT/2016	31.53	42.14	43.21
Claimed by Petitioner in the instant petition	29.94	36.81	36.93
Allowed after true-up in this order	29.94	36.81	36.92

Approved Annual Fixed Charges of the 2014-19 Period

40. The trued up annual fixed charges allowed for the instant transmission assets for the 2014-19 tariff period is as under:

(₹ in lakh)



Particulars	2016-17 (Pro-rata)	2017-18	2018-19
Depreciation	426.54	547.15	564.26
Interest on Loan	469.41	528.91	496.23
Return on Equity	477.56	612.60	633.43
Interest on Working Capital	29.94	36.81	36.92
O&M Expenses	0.00	0.00	0.00
Total	1403.45	1725.48	1730.84

Determination of Annual Fixed Charges of the 2019-24 Tariff Period

41. The Petitioner has claimed the following transmission charges for the Combined Asset for the 2019-24 tariff period:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	581.26	587.73	587.73	587.73	587.73
Interest on Loan	472.44	431.55	387.14	343.30	294.84
Return on Equity	652.54	659.80	659.80	659.80	659.80
Interest on Working Capital	25.66	25.32	24.65	23.99	23.20
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Total	1731.90	1704.40	1659.32	1614.82	1565.57

42. The Petitioner has claimed the following IWC for the Combined Asset for the 2019-24 tariff period:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Maintenance Spares	0.00	0.00	0.00	0.00	0.00
Receivables	212.94	210.13	204.57	199.09	192.49
Total Working Capital	212.94	210.13	204.57	199.09	192.49
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest of Working Capital	25.66	25.32	24.65	23.99	23.20

Capital Cost

43. Regulation 19 of the 2019 Tariff Regulations provide as under:

“19 Capital Cost: (1) *The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for 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) *Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
- (d) *Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*
- (e) *Capitalised Initial Spares subject to the ceiling rates in accordance with these regulations;*
- (f) *Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*
- (g) *Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*
- (h) *Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;*
- (i) *Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (j) *Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;*
- (k) *Capital expenditure on account of biomass handling equipment and facilities, for co-firing;*
- (l) *Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*
- (m) *Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*
- (n) *Expenditure on account of change in law and force majeure events; and*
- (o) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*

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

- (a) *Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;*
- (b) *Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
- (c) *Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (d) *Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (e) *Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*
- (f) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and*



Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.”

(4) The capital cost in case of existing or new hydro generating station shall also include:

- (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and*
- (b) cost of the developer’s 10% contribution towards Rajiv Gandhi Grameen Viduytikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.*

“(5) The following shall be excluded from the capital cost of the existing and new projects:

- (a) The assets forming part of the project, but not in use, as declared in the tariff petition;*
- (b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:*

Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be decapitalised only after its redeployment;

Provided further that unless shifting of an asset from one project to another is of permanent nature, there shall be no de-capitalization of the concerned assets.

- (c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;*
- (d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and*
- (e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment.”*

44. The Petitioner has claimed capital cost of ₹10886.33 lakh as on 31.3.2019 for the Combined Asset vide Auditor’s Certificate dated 9.7.2019. The admitted capital cost of ₹10886.33 lakh as on 31.3.2019 as trued up in above paragraphs is considered as the capital cost as on 1.4.2019 for the purpose of determination of tariff for the 2019-24 tariff period in accordance with Regulation 19 of the 2019 Tariff Regulations.

Additional Capital Expenditure (ACE)

45. Regulations 24 and 25 of the 2019 Tariff Regulations provide as under:

“24. Additional Capitalisation within the original scope and upto the cut-off date



(1) The additional capital expenditure in respect of a 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:

- (a) Undischarged liabilities recognized to be payable at a future date;*
- (b) Works deferred for execution;*
- (c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;*
- (d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;*
- (e) Change in law or compliance of any existing law; and*
- (f) Force Majeure events:*

Provided that in case of any replacement of the assets, the additional capitalization shall be worked out after adjusting the gross fixed assets and cumulative depreciation of the assets replaced on account of de-capitalization.

(2) The generating company or the transmission licensee, as the case may be shall submit 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.

25. Additional Capitalisation within the original scope and after the cut-off date:

(1) The additional capital expenditure incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:

- (a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;*
- (b) Change in law or compliance of any existing law;*
- (c) Deferred works relating to ash pond or ash handling system in the original scope of work;*
- (d) Liability for works executed prior to the cut-off date;*
- (e) Force Majeure events;*
- (f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and*
- (g) Raising of ash dyke as a part of ash disposal system.*

(2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:

- (a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;*
- (b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;*
- (c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and*
- (d) The replacement of such asset or equipment has otherwise been allowed by the Commission.”*



46. The Petitioner has claimed ACE of ₹245.00 lakh during the 2019-24 tariff period for the instant assets under Regulation 25(1)(d) of the 2019 Tariff Regulations. The Petitioner has claimed capital cost as on 31.3.2024 as under:

(₹ in lakh)

Approved Capital Cost as per FR	Expenditure as on 31.3.2019	Projected Additional Capitalization 2019-24 (as per Auditor's Certificate)	Capital Cost as on 31.3.2024
		2019-20	
12138.00	10886.33	245.00	11131.33

47. Vide TV (technical validation) letter dated 3.3.2020, the Petitioner was asked to provide reasons for claiming ACE during 2019-20 beyond the cut-off date i.e. 31.3.2019 against balance and retention payment amounting to ₹245.00 lakh. In response, the Petitioner vide affidavit dated 12.3.2020 has submitted that the ACE approved by the Commission vide order dated 30.6.2016 in Petition No. 13/TT/2016 was based on projections as contract was not closed and liabilities were not finalised. However, ACE claimed in the instant petition is for the works executed within the cut-off date and based on the actual payments made to the contractor after receipt of final invoices from the contractor and after reconciliation in accordance with the provisions of contract.

48. The Petitioner's claim of ACE on account of undischarged liability towards final payment/ withheld payment for works executed within the cut-off date is as under:

(₹ in lakh)

Party Name	Package	Balance & retention amount (2019-20)
GE	Sub-station	245.00

49. We have considered the submissions made by the Petitioner. ACE claimed by the Petitioner is allowed under Regulation 25(1)(d) of the 2019 Tariff Regulations on account of un-discharged liability towards final payment/ withheld payment for works



executed within the cut-off date. Accordingly, the capital cost considered for the instant Combined Asset for the 2019-24 tariff period is as under:

(₹ in lakh)			
Approved Capital Cost as per FR	Capital Cost as on 31.3.2019	ACE	Capital Cost as on 31.3.2024
		2019-20	
12138.00	10886.33	245.00	11131.33

Debt-Equity ratio

50. Regulation 18 of the 2019 Tariff Regulations provides as under:

“18. Debt-Equity Ratio: (1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. 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.

(2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.

(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

Provided that in case of a generating station or a transmission system including communication system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30%



of the capital cost, equity in excess of 30% shall not be taken into account for tariff computation;

Provided further that in case of projects owned by Damodar Valley Corporation, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 72 of these regulations.

(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 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.”

51. The debt-equity considered for the purpose of computation of tariff for the 2019-24 tariff period for the Combined Asset is as under:

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	%	ACE during 2019-24 (₹ in lakh)	%	Capital Cost as on 31.3.2024 (₹ in lakh)	%
Debt	7620.43	70.00	171.50	70.00	7791.93	70.00
Equity	3265.90	30.00	73.50	30.00	3339.40	30.00
Total	10886.33	100.00	245.00	100.00	11131.33	100.00

Return on Equity (RoE)

52. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provides as under:

“30. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of 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 return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;

Provided further that:



i. In case of a new project, the rate of return on equity shall be reduced by 1.00% 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) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;

ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;

iii. in case of a thermal generating station, with effect from 1.4.2020:

a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;

b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019.”

“31. Tax on Return on Equity:(1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations 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 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 paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded 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.

Illustration-

(i) In case of a generating company or a transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess:



$$\text{Rate of return on equity} = 15.50 / (1 - 0.2155) = 19.758\%$$

(ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:

(a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;

(b) Estimated Advance Tax for the year on above is Rs 240 crore;

(c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore / Rs 1000 Crore = 24%;

(d) Rate of return on equity = $15.50 / (1 - 0.24) = 20.395\%$.

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year 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 income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis.”

53. The Petitioner has submitted that MAT rate is applicable to the Petitioner's Company. Accordingly, the MAT rate applicable in 2019-20 has been considered for the purpose of RoE, which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for the Combined Asset is as under:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	3265.90	3339.40	3339.40	3339.40	3339.40
Additions	73.50	0.00	0.00	0.00	0.00
Closing Equity	3339.40	3339.40	3339.40	3339.40	3339.40
Average Equity	3302.65	3339.40	3339.40	3339.40	3339.40
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782
Return on Equity	620.29	627.19	627.19	627.19	627.19

Interest on Loan (IoL)

54. Regulation 32 of the 2019 Tariff Regulations provides as under:



“32. Interest on loan capital: (1) *The loans arrived at in the manner indicated in regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.*

(2) *The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.*

(3) *The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization 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 de-capitalisation 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.*

(7) *The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.”*

55. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during the 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true up. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed for the Combined Asset is as under:

(₹ in lakh)



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	7620.43	7791.93	7791.93	7791.93	7791.93
Cumulative Repayments upto Previous Year	1537.94	2119.21	2706.94	3294.68	3882.41
Net Loan-Opening	6082.49	5672.72	5084.99	4497.25	3909.52
Additions	171.50	0.00	0.00	0.00	0.00
Repayment during the year	581.27	587.73	587.73	587.73	587.73
Net Loan-Closing	5672.72	5084.99	4497.25	3909.52	3321.78
Average Loan	5877.60	5378.85	4791.12	4203.39	3615.65
Weighted Average Rate of Interest on Loan (%)	8.0379	8.0230	8.0804	8.1672	8.1544
Interest on Loan	472.44	431.54	387.14	343.30	294.83

Depreciation

56. Regulation 33(1), (2) and (5) of the 2019 Tariff Regulations provide as under:

"33. Depreciation: (1) *Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element there of including communication system. 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:*

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 a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis"*

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



57. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The weighted average rate of depreciation (WAROD) has been worked (Annexure-2) as per the rates of depreciation prescribed in 2019 Tariff Regulations. The depreciation allowed for the Combined Asset for the 2019-24 period is as under:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation					
Opening Gross Block	10886.33	11131.33	11131.33	11131.33	11131.33
Additional Capitalization	245.00	0.00	0.00	0.00	0.00
Closing Gross Block	11131.33	11131.33	11131.33	11131.33	11131.33
Average Gross Block	11008.83	11131.33	11131.33	11131.33	11131.33
Weighted average rate of Depreciation (WAROD) (%)	5.28	5.28	5.28	5.28	5.28
Balance useful life of the asset	31.00	30.00	29.00	28.00	27.00
Elapsed life of the asset	2.00	3.00	4.00	5.00	6.00
Aggregated Depreciable Value	9907.95	10018.20	10018.20	10018.20	10018.20
Combined Depreciation during the year	581.27	587.73	587.73	587.73	587.73
Aggregate Cumulative Depreciation	2119.21	2706.94	3294.68	3882.41	4470.15
Remaining Aggregate Depreciable Value	7788.74	7311.25	6723.52	6135.78	5548.05

Operation & Maintenance Expenses (O&M Expenses)

58. The Petitioner has not claimed any O&M expenses for the instant assets for the 2019-24 tariff period.

Interest on Working Capital (IWC)

59. Regulation 34(1)(c), Regulation 34(3), Regulation 3 and (4) and Regulation 3(7) of the 2019 Tariff Regulations provide as under:

“34. Interest on Working Capital

(1)...

(c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:



- i. Receivables equivalent to 45 days of fixed cost;
- ii. Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and
- iii. Operation and maintenance expenses, including security 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 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 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:

Provided that in case of truing-up, the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24.

(4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency.

“3. Definitions ...

(7) ‘**Bank Rate**’ means the one-year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;”

60. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%.

61. The IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points). The components of the working capital and interest thereon have been worked as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	0.00	0.00	0.00	0.00	0.00
Maintenance Spares	0.00	0.00	0.00	0.00	0.00
Receivables	208.91	206.05	200.49	195.01	188.42
Total Working Capital	208.91	206.05	200.49	195.01	188.42
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	25.17	24.83	24.16	23.50	22.70



Annual Fixed Charges of the 2019-24 Tariff Period

62. The transmission charges allowed for the Combined Asset for the 2019-24 tariff period is as under:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	581.27	587.73	587.73	587.73	587.73
Interest on Loan	472.44	431.54	387.14	343.30	294.83
Return on Equity	620.29	627.19	627.19	627.19	627.19
Interest on Working Capital	25.17	24.83	24.16	23.50	22.70
O & M Expenses	0.00	0.00	0.00	0.00	0.00
Total	1699.16	1671.30	1626.22	1581.72	1532.46

Filing Fee and the Publication Expenses

63. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

64. The Petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for the 2019-24 tariff period. The Petitioner shall also be entitled for recovery of RLDC fee and charges in accordance with Regulations 70(3) of the 2019 Tariff Regulations for the 2019-24 tariff period.

Security Expenses

65. The Petitioner has submitted that security expenses for the instant assets are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential IWC. The Petitioner has requested to consider the actual security expenses incurred during 2018-19 for claiming estimated



security expenses for 2019-20 which shall be subject to true up at the end of the year based on the actuals. The Petitioner has submitted that similar petition for security expenses for 2020-21, 2021-22, 2022-23 and 2023-24 shall be filed on yearly basis based on the actual expenses of previous year subject to true up at the end of the year on actual expenses. The Petitioner has submitted that difference, if any, between the estimated security expenses and the actual security expenses as per the audited accounts may be allowed to be recovered from the beneficiaries on yearly basis.

66. We have considered the submissions of the Petitioner. We are of the view that the Petitioner should claim security expenses for all the transmission assets in one petition. The Commission observes that the Petitioner has already filed the Petition No.260/MP/2020 claiming consolidated security expenses on projected basis for the 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19. Therefore, security expenses will be dealt with in Petition No. 260/MP/2020 in accordance with the applicable provisions of the 2019 Tariff Regulations.

Goods and Services Tax

67. The Petitioner has submitted that, if GST is levied at any rate and at any point of time in future on charges of transmission of electricity, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately by the Petitioner. Further additional taxes, if any, are to be paid by the Petitioner on account of demand from Government/ statutory authorities, the same may be allowed to be recovered from the beneficiaries.

68. We have considered the submissions of the Petitioner. GST is not levied on transmission service at present and we are of the view that the Petitioner's prayer at this stage is pre-mature.



Capital Spares

69. The Petitioner has sought reimbursement of capital spares at the end of tariff block. The Petitioner's claim, if any, shall be dealt with in accordance with the provisions of the 2019 Tariff Regulations.

Sharing of Transmission Charges

70. 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 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

71. To summarise, the trued-up Annual Fixed Charges allowed for the instant assets for the 2014-19 tariff period are as under:

Particulars	(₹ in lakh)		
	2016-17 (Pro-rata)	2017-18	2018-19
Annual Fixed Charges	1403.45	1725.48	1730.84

The Annual Fixed Charges allowed for the Combined Asset for the 2019-24 tariff period in this order are as under:

Combined Asset	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	1699.16	1671.30	1626.22	1581.72	1532.46

72. This order disposes of Petition No. 505/TT/2019.

sd/-
(Arun Goyal)
Member

sd/-
(I.S. Jha)
Member

sd/-
(P.K. Pujari)
Chairperson



DETAILS OF WEIGHTED AVERAGE RATE OF DEPRECIATION FOR THE 2014-19 PERIOD

Summary Sheet										
Name of the Company:		PGCIL								
Name of the Element:		Combined Assets under ERSS- XIII Project								
Effective COD		02.04.2016								
Petition No.:		505/TT/2019								
Period		2014-19 True-up								
ANNEXURE-I										
2014-19	Capital Expenditure	Admitted Capital Cost as on COD (₹ in lakh)	Additional Capitalization (₹ in lakh)			Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)		
			2016-17	2017-18	2018-19			2016-17	2017-18	2018-19
	Transmission Line	5017.65	4141.63	0.00	311.79	9471.07	5.28%	374.27	483.61	491.84
	Sub Station	945.08	134.01	248.64	87.53	1415.26	5.28%	53.44	63.54	72.41
	Total	5962.73	4275.64	248.64	399.32	10886.33	Total	427.71	547.15	564.26
							Average Gross Block (₹ in lakh)	8100.55	10362.69	10686.67
							Weighted Average Rate of Depreciation	5.28%	5.28%	5.28%



DETAILS OF WEIGHTED AVERAGE RATE OF DEPRECIATION FOR THE 2019-24 PERIOD

Summary Sheet														
Name of the Company:		PGCIL												
Name of the Element:		Combined Assets under ERSS-XIII Project												
Effective COD		02.04.2016												
Petition No.:		505/TT/2019												
Period		2019-24 Tariff												
ANNEXURE-2														
2019-24 Capital Expenditure	Combined Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected Additional Capitalization (₹ in lakh)					Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)					
		2019-20	2020-21	2021-22	2022-23	2023-24			2019-20	2020-21	2021-22	2022-23	2023-24	
Transmission Line	9471.07	0.00	0.00	0.00	0.00	0.00	9471.07	5.28%	500.07	500.07	500.07	500.07	500.07	500.07
Sub Station	1415.26	245.00	0.00	0.00	0.00	0.00	1660.26	5.28%	81.19	87.66	87.66	87.66	87.66	87.66
Total	10886.33	245.00	0.00	0.00	0.00	0.00	11131.33	Total	581.27	587.73	587.73	587.73	587.73	587.73
							Average Gross Block		11008.83	11131.33	11131.33	11131.33	11131.33	11131.33
							Weighted Average Rate of Depreciation		5.28%	5.28%	5.28%	5.28%	5.28%	5.28%

