

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 139/TT/2020

Coram:

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

Date of Order: 15.07.2020

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 for the 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2019 for transmission system associated with SEWA-II HEP in the Northern Region consisting of - Asset-I: One circuit of 132 kV D/C SEWA-II Hiranagar line along with associated bays at Hiranagar Sub-station and one circuit of 132 kV D/C SEWA-II Mahanpur line and associated bays at Mahanpur ; Asset-II: Second circuit of 132 kV D/C SEWA-II Hiranagar line along with associated bays at Hiranagar Sub-station; Asset-III: 132 kV S/C SEWA-II Mahanpur-Kathua transmission line along with associated bays at Kathua and 132 kV S/C Mahanpur-Kathua transmission line along with bays at Mahanpur and Kathua.

And in the Matter of:

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

.....Petitioner

Versus

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited
Vidyut Bhawan, Vidyut Marg
Jaipur – 302005 (Rajasthan)
2. Ajmer Vidyut Vitran Nigam Ltd.
132 kV, GSS RVPNL Sub-station Building
Caligiri Road, Malviya Nagar
Jaipur-302017 (Rajasthan)



3. Jaipur Vidyut Vitran Nigam Ltd.
132 kV, GSS RVPNL Sub-station Building
Caligiri Road, Malviya Nagar
Jaipur-302017 (Rajasthan)
4. Jodhpur Vidyut Vitran Nigam Ltd.
132 kV, GSS RVPNL Sub-station Building
Caligiri Road, Malviya Nagar
Jaipur-302017 (Rajasthan)
5. Himachal Pradesh State Electricity Board
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171004 (Himachal Pradesh)
6. Punjab State Electricity Board
Thermal Shed Tia
Near 22 Phatak
Patiala-147001 (Punjab)
7. Haryana Power Purchase Centre
Shakti Bhawan, Sector-6
Panchkula- 134109 (Haryana)
8. Power Development Department
Government of Jammu & Kashmir
Mini Secretariat, Jammu
9. Uttar Pradesh Power Corporation Ltd.
(Formerly Uttar Pradesh State Electricity Board)
Shakti Bhawan, 14, Ashok Marg
Lucknow - 226001 (Uttar Pradesh)
10. Delhi Transco Ltd.
Shakti Sadan, Kotla Road
New Delhi-110002
11. BSES Yamuna Power Ltd.
B-Block, Shakti Kiran, Bldg. (Near Karkadooma Court)
Karkadooma 2nd Floor
New Delhi-110092
12. BSES Rajdhani Power Ltd.
BSES Bhawan, Nehru Place
New Delhi-110019
13. Tata Power Delhi Distribution Limited (TPDDL)
NDPL house, Hudson Lines Kingsway Camp
Delhi – 110009



14. Chandigarh Administration
Sector-9, Chandigarh
15. Uttarakhand Power Corporation Ltd.
Urja Bhawan
Kanwali Road, Dehradun (Uttarakhand)
16. North Central Railway
Allahabad (Uttar Pradesh)
17. New Delhi Municipal Council
Palika Kendra, Sansad Marg
New Delhi-110002

...Respondent(s)

Parties present:

For Petitioner: Shri S.S. Raju, PGCIL
Shri A.K. Verma, PGCIL
Shri Vipin Joseph, PGCIL
Shri V.P. Rastogi, PGCIL
Shri B. Dash, PGCIL

For Respondent: Shri R.B. Sharma, Advocate, BSES Rajdhani Power Ltd.

ORDER

The present 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 from 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 the Combined Asset consisting of **Asset-I:** One circuit of 132 kV D/C SEWA-II - Hiranagar line along with associated bays at Hiranagar Sub-station and one circuit of 132 kV D/C SEWA-II - Mahanpur line and associated bays at Mahanpur; **Asset-II:** Second circuit of 132 kV D/C SEWA-II -



Hiranagar line along with associated bays at Hiranagar Sub-station; and **Asset-III:** 132 kV S/C SEWA-II Mahanpur-Kathua transmission line along with associated bays at Kathua and 132 kV S/C Mahanpur-Kathua transmission line along with bays at Mahanpur and Kathua (hereinafter collectively referred to as “the transmission assets/ Combined Asset”) under transmission system associated with SEWA-II HEP in the Northern Region (hereinafter referred to as “the transmission project”).

2. The Petitioner has made the following prayers in this 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 5 and 6 above.

2) 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 5 and 6 above for respective block.

3) 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.

4) Allow the Petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the beneficiaries in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.

5) 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 beneficiaries.

6) Allow the Petitioner to file a separate petition before the Commission for claiming the overall security expenses and consequential IWC on that security expenses as mentioned at para 6.6 above.

7) Allow the Petitioner to claim the capital spares at the end of tariff block as per actual.

8) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the beneficiaries, if GST on transmission is withdrawn from negative list at any time 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 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 assets was accorded by the Board of Directors of the Petitioner Company vide letter no. C/CP/SEWA-II dated 18.7.2005 at an estimated cost of ₹9847 lakh including IDC of ₹473 lakh (based on 4th Quarter 2004 price level).
- b) The tariff for Asset-I was allowed from 1.9.2009 (COD of Asset-I) to 31.3.2014, vide order dated 15.2.2011 in Petition No. 73/2010 in accordance with the 2009 Tariff Regulations. Thereafter, the combined tariff for Asset-I and Asset-II was allowed from 1.7.2010 (COD of Asset-II) to 31.3.2014 vide order dated 10.8.2011 in Petition No. 325/2010. Further, the tariff from 1.9.2011 (COD of Asset-III and the Combined Asset) to 31.3.2014 was allowed vide order dated 15.5.2014 in Petition No. 88/TT/2011 in accordance with the 2009 Tariff Regulations. The tariff of Asset-I, Combined Asset-I & II and Combined Asset-I, II & III for the 2009-14 period was trued up vide order dated 14.3.2016 in Petition No. 1/TT/2015. The entire scope of work is covered under the instant petition. The details of the dates of commercial operation of the assets covered in the instant petition are as under:

Asset	Description	SCOD	COD	COD of Combined Asset	Time over-run	Time over-run condoned
Asset-I	One circuit of 132kV D/C SEWA-II- Hiranagar line along with associated bays at Hiranagar Sub-station and one circuit of 132 kV D/C SEWA-II - Mahanpur line and associated bays at Mahanpur	May 2008	1.9.2009	1.9.2011	16 months	11 months
Asset-II	Second circuit of 132 kV D/C SEWA-II -Hiranagar line along with associated bays at Hiranagar Sub-station		1.7.2010		26 months	
Asset-III	132 kV S/C SEWA-II Mahanpur-Kathua		1.9.2011		40 months	40 months



Asset	Description	SCOD	COD	COD of Combined Asset	Time over-run	Time over-run condoned
	transmission line along with associated bays at Kathua and 132 kV S/C Mahanpur- Kathua transmission line along with bays at Mahanpur and Kathua					

- c) The transmission tariff was allowed for the instant assets for the 2014-19 period vide order dated 14.3.2016 in Petition No. 1/TT/2015 and the Petitioner has claimed the trued-up transmission tariff as under:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges(AFC) approved vide order dated 14.3.2016 in Petition No. 1/TT/2015	1603.34	1570.08	1534.30	1498.64	1463.52
AFC claimed by the Petitioner based on truing up in the instant petition	1600.88	1567.47	1532.66	1497.97	1464.33

4. The respondents are distribution licensees and power departments, which are procuring transmission service from the Petitioner, mainly beneficiaries of the Northern 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. Reply to the petition has been filed by BSES Rajdhani Power Limited (BRPL), Respondent No.12, vide affidavit dated 13.3.2020 which has raised the issues of effective tax rate for grossing up of RoE and the effect of GST and additional taxes. Reply has also been filed by Uttar Pradesh Power Corporation Limited (UPPCL), Respondent No. 9, vide affidavit dated 18.3.2020. The Petitioner vide



affidavits dated 5.6.2020 has filed rejoinder to the replies filed by BRPL and UPPCL. The issues raised by BRPL and UPPCL, and the clarifications given by the Petitioner are dealt in the relevant portions of this order.

6. The hearing in this matter was held on 9.6.2020 through video conferencing. The learned counsel for BRPL reiterated the issues raised in its reply vide affidavit dated 13.3.2020 regarding grossing up of RoE and sought additional information regarding use of Optical Ground Wire (OPGW) as earth wire for the instant assets. The Commission directed the Petitioner to submit its response on affidavit with an advance copy to the beneficiaries by 26.6.2020 and reserved the order. However, the Petitioner did not submit any further response to the same within the specified time.

7. This order is issued considering submissions made by the Petitioner dated 9.1.2020 and 12.3.2020; BRPL's reply vide affidavit dated 13.3.2020 and the Petitioner's rejoinder vide affidavit dated 5.6.2020; and UPPCL's reply vide affidavit dated 18.3.2020 and the Petitioner's rejoinder vide affidavit dated 5.6.2020. 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 Tariff Period

8. The details of the transmission charges claimed by the Petitioner in respect of the Combined Asset are as under:

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	452.74	452.79	453.17	453.48	453.48
Interest on Loan	379.23	336.60	294.21	251.74	209.00
Return on Equity	505.29	507.68	507.78	508.07	509.44
Interest on Working Capital	42.97	42.45	41.91	41.37	40.87
O&M Expenses	220.65	227.95	235.59	243.31	251.54
Total	1600.88	1567.47	1532.66	1497.97	1464.33



9. The details of the Interest on Working Capital (IWC) claimed by the Petitioner in respect of the Combined Asset are as under:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	18.39	19.00	19.63	20.28	20.96
Maintenance Spares	33.10	34.19	35.34	36.50	37.73
Receivables	266.81	261.25	255.44	249.66	244.06
Total Working Capital	318.30	314.44	310.41	306.44	302.75
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	42.97	42.45	41.91	41.37	40.87

Capital Cost as on 1.4.2014

10. The capital cost of ₹8582.47 lakh for the Combined Asset admitted by the Commission as on 31.3.2014 has been considered as opening capital cost as on 1.4.2014 by the Petitioner for determination of tariff. The Commission has considered the same to work out true up tariff for the 2014-19 tariff period, in accordance with Regulation 9(3) of the 2014 Tariff Regulations.

Additional Capital Expenditure (ACE)

11. The Commission vide order dated 14.3.2016 in Petition No.1/TT/2015 had allowed ACE of ₹31.67 lakh for Combined Assets in 2014-19 towards balance and retention payments.

12. The Petitioner has claimed following ACE based on actual expenditure: -

(₹ in lakh)						
Year	ACE claimed by Petitioner					Total ACE
	2014-15	2015-16	2016-17	2017-18	2018-19	
Combined Asset	0.00	2.24	9.90	0.00	0.00	12.14

13. The Petitioner has submitted that ACE incurred during 2014-19 tariff period is for Asset-III and is on account of balance and retention payments for works executed prior to the cut-off date, which is claimed under Regulation 14(3)(v) of the 2014 Tariff



Regulations. In reply to the Technical Validation (TV) letter dated 3.3.2020 to furnish additional information regarding ACE, the Petitioner vide affidavit dated 12.3.2020 submitted the following:

Year	Parties	Amount (₹ in lakh)
2015-16	Shree Drishtee Bharat Udyog	2.24
2016-17	IVRCL Infrastructures & Project	9.90
	Total	12.14

14. We have considered the submissions made by the Petitioner and the claim has been verified from the Auditor Certificates. ACE claimed by the Petitioner is allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations as it pertains to balance and retention payments for works executed prior to the cut-off date. Further, the capital cost of ₹8594.61 lakh as on 31.3.2019 is within the apportioned approved capital cost of ₹9847 lakh.

(₹ in lakh)

Asset	Apportioned Approved Capital Cost	Admitted Capital Cost as on 31.3.2014	Allowed ACE					Total Capital Cost as on 31.3.2019
			2014- 15	2015- 16	2016- 17	2017- 18	2018- 19	
Combined Asset	9847.00	8582.47	0.00	2.24	9.90	0.00	0.00	8594.61

Debt-Equity ratio

15. The Petitioner has claimed Debt-Equity ratio of 70:30 as on the date of commercial operation. Debt-Equity ratio of 70:30 is considered as provided in Regulation 19 of the 2014 Tariff Regulations. The details of Debt-Equity ratio in respect of the transmission assets as on 1.4.2014 and as on 31.3.2019 are as under:



Funding	Capital Cost as on 1.4.2014 (₹ in lakh)	(%)	ACE 2014-19 (₹ in lakh)	(%)	Total Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	6007.73	70.00	8.50	70.00	6016.23	70.00
Equity	2574.74	30.00	3.64	30.00	2578.38	30.00
Total	8582.47	100.00	12.14	100.00	8594.61	100.00

Interest on Loan (IoL)

16. The Petitioner has claimed the 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, in accordance with Regulation 26 of the 2014 Tariff Regulations.

IoL allowed is as under:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	6007.73	6007.73	6009.30	6016.23	6016.23
Cumulative Repayments upto Previous Year	1730.29	2182.86	2635.48	3088.48	3541.80
Net Loan-Opening	4277.44	3824.87	3373.81	2927.74	2474.43
Additions	0.00	1.57	6.93	0.00	0.00
Repayment during the year	452.57	452.63	453.00	453.31	453.31
Net Loan-Closing	3824.87	3373.81	2927.74	2474.43	2021.12
Average Loan	4051.16	3599.34	3150.78	2701.09	2247.77
Weighted Average Rate of Interest on Loan (%)	9.3613	9.3524	9.3390	9.3219	9.3013
Interest on Loan	379.24	336.62	294.25	251.79	209.07

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 14.3.2016 in Petition No. 1/TT/2015	380.20	338.43	295.59	252.76	209.93
Claimed by the Petitioner in the instant petition	379.23	336.60	294.21	251.74	209.00
Allowed after true-up in this order	379.24	336.62	294.25	251.79	209.07

IoL allowed in the instant order is less than IoL allowed vide order dated 14.3.2016 in Petition No. 1/TT/2015 due to lower ACE and , spread of ACE over the period



Return on Equity (RoE)

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

Year	Claimed effective tax (in %)	Grossed up RoE (Base Rate/1-t) (in %)
2014-15	21.018	19.625
2015-16	21.382	19.716
2016-17	21.338	19.705
2017-18	21.337	19.704
2018-19	21.549	19.758

18. BRPL has submitted that the Petitioner has claimed effective tax rate based on consolidated income of the company, whereas income from other business activities of the Petitioner like consulting, communication, planning and design of projects are required to be excluded from the computation of effective rate. BRPL has further submitted that deferred tax liability (DTL) relevant to the aforesaid other businesses should not be considered in the computation of effective tax rate. In response, the Petitioner vide affidavit dated 5.6.2020 has submitted that it has claimed deferred tax liability during the period 2009-14 only for the deferred tax liability upto 31.3.2009 and materialised. Further, the DTL amount billed/ materialised is not considered while grossing up the RoE.

19. We have considered the submissions of the Petitioner and BRPL. The Commission in order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate for the Petitioner based on the notified MAT rates and the same is given in the table below. The same MAT rates are considered for the purpose of



grossing up of rate of RoE for trueing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations.

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	19.610
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

20. 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 the above said Regulation. The RoE is trueed up on the basis of the MAT rate applicable in the respective years and is allowed as under:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Return on Equity					
Opening Equity	2574.74	2574.74	2575.41	2578.38	2578.38
Additions	0.00	0.67	2.97	0.00	0.00
Closing Equity	2574.74	2575.41	2578.38	2578.38	2578.38
Average Equity	2574.74	2575.08	2576.90	2578.38	2578.38
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (%)	19.610	19.705	19.705	19.705	19.758
Return on Equity	504.92	507.43	507.79	508.08	509.42
(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 14.3.2016 in Petition No. 1/TT/2015	505.84	506.77	506.77	506.77	506.77
Claimed by the Petitioner in the instant petition	505.29	507.68	507.78	508.07	509.44
Allowed after true-up in this order	504.92	507.43	507.79	508.08	509.42

The variation in RoE allowed in the instant order and RoE allowed vide order dated 14.3.2016 in Petition No. 1/TT/2015 is due to lower ACE, spread of ACE over the



period and change in the applicable MAT rate for the purpose of grossing up of base rate of RoE.

Depreciation

21. The transmission assets were put into commercial operation during the 2009-14 period. The tariff for Asset-I was allowed from 1.9.2009 (COD of Asset-I) to 31.3.2014, vide order dated 15.2.2011 in Petition No. 73/2010 in accordance with the 2009 Tariff Regulations. Thereafter, the combined tariff for Asset-I and Asset-II was allowed from 1.7.2010 (COD of Asset-II) to 31.3.2014 vide order dated 10.8.2011 in Petition No. 325/2010. Further, the tariff from 1.9.2011 (COD of Asset-III and the Combined Asset) to 31.3.2014 was allowed vide order dated 15.5.2014 in Petition No. 88/TT/2011 in accordance with the 2009 Tariff Regulations. The tariff of Asset-I, Assets-I & II and Combined Asset-I, II & III for the 2009-14 period was trued up and tariff for 2014-19 period was allowed vide order dated 14.3.2016 in Petition No. 1/TT/2015. The Petitioner did not apportion part of capital expenditure towards "IT Equipment" in the above said petitions, even though there was a clear provision in the 2009 Tariff Regulations and 2014 Tariff Regulations providing depreciation @15% for IT Equipment. Having failed to make a claim as per the 2009 Tariff Regulations (the period during which COD of assets was achieved), the Petitioner has now, at the time of truing up of the tariff allowed for the 2014-19 period, apportioned a part of the capital expenditure to "IT Equipment". It is observed that the Petitioner has for the first time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head "IT Equipment" @15% at the time of truing up of the tariff of the 2014-19 period. Regulation 8(1) of the 2014 Tariff Regulations provides for truing up of the capital expenditure including the ACE, incurred upto 31.3.2019,



admitted by the Commission after prudence check. We are of the view that scope of truing up exercise is restricted to truing up of the capital expenditure already admitted and apportionment or reapportionment of the capital expenditure cannot be allowed at the time of truing up. Therefore, we are not inclined to consider the Petitioner's prayer for apportionment of capital expenditure towards IT Equipment and allowing depreciation @15% from 1.4.2014 onwards. Accordingly, the depreciation @5.28% has been considered for IT Equipment as part of the Sub-station upto 31.3.2019 while truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @ 15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations. The calculation of weighted average rate of depreciation (WAROD) is placed in **Annexure-I**. The Gross Block during the tariff period 2014-19 has been depreciated at above WAROD.. The WAROD 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	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	8582.47	8582.47	8584.71	8594.61	8594.61
Additional Capitalisation	0.00	2.24	9.90	0.00	0.00
Closing Gross Block	8582.47	8584.71	8594.61	8594.61	8594.61
Average Gross Block	8582.47	8583.59	8589.66	8594.61	8594.61
Freehold Land	8.10	8.10	8.10	8.10	8.10
Weighted average rate of Depreciation (WAROD) (%)	5.27	5.27	5.27	5.27	5.27
Balance useful life of the asset	31	30	29	28	27
Aggregate Depreciable Value	7716.93	7717.94	7723.40	7727.86	7727.86
Combined Depreciation during the year	452.57	452.63	453.00	453.31	453.31



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Aggregate Cumulative Depreciation	2182.86	2635.48	3088.48	3541.80	3995.11
Remaining Aggregate Depreciable Value	5534.08	5082.46	4634.92	4186.06	3732.75

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 14.3.2016 in Petition No. 1/TT/2015	453.63	454.42	454.42	454.42	454.42
Claimed by the Petitioner in the instant petition	452.74	452.79	453.17	453.48	453.48
Allowed after true-up in this order	452.57	452.63	453.00	453.31	453.31

The depreciation allowed in the instant order for the 2014-19 period is less than the depreciation allowed vide order dated 14.3.2016 in Petition No. 1/TT/2015 due to lower ACE and spread of ACE over the period.

Operation & Maintenance Expenses (O&M Expenses)

22. Regulation 29(3) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The total O&M Expenses for the instant assets claimed by the Petitioner are as under:

O&M Expenses					
Sub-station bays					
132 kV & below					
	2014-15	2015-16	2016-17	2017-18	2018-19
No. of bays	6	6	6	6	6
Norms (₹ lakh/bay)	30.15	31.15	32.18	33.25	34.36
Transmission line					
D/C Single Conductor (kms)	131.167	131.167	131.167	131.167	131.167
Norms (₹ lakh/km)	0.303	0.313	0.324	0.334	0.346
Total O&M Expense (₹ in lakh)	220.64	227.96	235.58	243.31	251.54

The O&M Expenses claimed by the Petitioner vary slightly from the norms specified in the 2014 Tariff Regulations.



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 14.3.2016 in Petition No. 1/TT/2015	220.64	227.96	235.58	243.31	251.54
Claimed by the Petitioner in the instant petition	220.65	227.95	235.59	243.31	251.54
Allowed after true-up in this order	220.64	227.96	235.58	243.31	251.54

The O&M Expenses now trued-up are same as that of O&M Expenses approved vide order dated 14.3.2016 in Petition No. 1/TT/2015.

Interest on Working Capital (IWC)

23. The IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and allowed as under:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	18.39	19.00	19.63	20.28	20.96
Maintenance Spares	33.10	34.19	35.34	36.50	37.73
Receivables	266.72	261.18	255.42	249.64	244.04
Total Working Capital	318.20	314.37	310.39	306.42	302.73
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	42.96	42.44	41.90	41.37	40.87

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 14.3.2016 in Petition No. 1/TT/2015	43.03	42.51	41.94	41.38	40.85
Claimed by the Petitioner in the instant petition	42.97	42.45	41.91	41.37	40.87
Allowed after true-up in this order	42.96	42.44	41.90	41.37	40.87

The variation in the IWC allowed in the instant order as compared to the IWC allowed vide order dated 14.3.2016 in Petition No. 1/TT/2015 is due to lower AFC approved for the 2014-19 period on account of lower ACE, spread of ACE over the period and change in the applicable MAT rate for the purpose of grossing up of base rate of RoE.



Approved Annual Fixed Charges of the 2014-19 Tariff Period

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

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Transmission Charges					
Depreciation	452.57	452.63	453.00	453.31	453.31
Interest on Loan	379.24	336.62	294.25	251.79	209.07
Return on Equity	504.92	507.43	507.79	508.08	509.42
Interest on Working Capital	42.96	42.44	41.90	41.37	40.87
O&M Expenses	220.64	227.96	235.58	243.31	251.54
Total	1600.33	1567.08	1532.52	1497.86	1464.22

Determination of Annual Fixed Charges for the 2019-24 Period

25. The Petitioner has claimed the following transmission charges for the 2019-24 period in respect of the Combined Asset:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	453.65	453.71	453.71	453.71	453.71
Interest on Loan	166.58	124.17	81.58	39.73	9.57
Return on Equity	484.54	484.81	484.81	484.81	484.81
Interest on Working Capital	23.03	22.68	22.27	21.88	21.62
O&M Expenses	147.33	152.53	157.78	163.33	168.95
Total	1275.13	1237.90	1200.15	1163.46	1138.66

26. The Petitioner has claimed the following IWC for the 2019-24 period in respect of the Combined Asset:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	12.28	12.71	13.15	13.61	14.08
Maintenance Spares	22.10	22.88	23.67	24.50	25.34
Receivables	156.78	152.62	147.96	143.44	140.00
Total Working Capital	191.16	188.21	184.78	181.55	179.42
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	23.03	22.68	22.27	21.88	21.62



Capital Cost as on 1.4.2019

27. Regulation 19 of the 2019 Tariff Regulations provides 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 tried 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 Vidyutikaran 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."



28. The Petitioner, vide Auditor Certificates dated 30.7.2019, has claimed Capital Cost of ₹8594.61 lakh as on 31.3.2019 for the Combined Asset, which is the same as worked out by the Commission. Accordingly, ₹8594.61 lakh has been considered as opening Capital Cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

Additional Capital Expenditure (ACE)

29. Regulation 24 and Regulation 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.”

30. The Petitioner has claimed ₹9.49 lakh (projected to be incurred in 2019-20) as ACE for the transmission assets during the 2019-24 period. The Petitioner has claimed the Capital Cost as on 31.3.2024 as under:

(₹ in lakh)

Asset	Apportioned Approved Capital Cost	Total Capital Cost as on 31.3.2019	Estimated ACE	Total Capital Cost as on 31.3.2024
			2019-20	
Combined Asset	9847.00	8594.61	9.49	8604.10

31. The Petitioner has submitted that the ACE incurred during 2019-20 is for Asset-III and is on account of balance and retention payments for works executed prior to the cut-off date, which is claimed under Regulation 25(1)(d) of the 2019 Tariff Regulations. In reply to the Commission’s directions vide Technical Validation (TV)



letter dated 3.3.2020 to furnish additional information regarding the ACE, the Petitioner vide affidavit dated 12.3.2020 submitted the following:

Year	Party	Amount (₹ in lakh)
2019-20	BPL	9.49

32. The Petitioner has further submitted that presently no other undischarged liability is envisaged other than that claimed in the instant petition.

33. The ACE claimed by the Petitioner has been allowed under Regulation 25(1)(d) of the 2019 Tariff Regulations as it is towards liability for works executed prior to the cut-off date to be payable at a future date. Accordingly, ACE for 2019-24 and Capital Cost as on 31.3.2024 as approved by the Commission is as under:

Asset	Admitted Capital Cost as on 1.4.2019	Admitted ACE	Total Capital Cost as on 31.3.2024
		2019-20	
Combined Asset	8594.61	9.49	8604.10

The total Capital Cost of ₹8604.10 lakh as on 31.3.2024 is within the apportioned approved Capital Cost of ₹9847 lakh.

Debt-Equity ratio

34. 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 ACE 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.”

35. The debt and equity considered for the purpose of tariff for 2019-24 tariff period is as under: -

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	%	ACE for 2019-24 (₹ in lakh)	%	Capital Cost as on 31.3.2024 (₹ in lakh)	%
Debt	6016.23	70.00	6.64	70.00	6022.87	70.00
Equity	2578.38	30.00	2.85	30.00	2581.23	30.00
Total	8594.61	100.00	9.49	100.00	8604.10	100.00



Return on Equity (RoE)

36. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provide 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.

(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.”

37. 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. The RoE allowed for the instant assets is as under:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	2578.38	2581.23	2581.23	2581.23	2581.23
Additions	2.85	0.00	0.00	0.00	0.00
Closing Equity	2581.23	2581.23	2581.23	2581.23	2581.23
Average Equity	2579.81	2581.23	2581.23	2581.23	2581.23
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	484.53	484.79	484.79	484.79	484.79

Interest on Loan (IoL)

38. 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.”

39. 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 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. The 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	6016.23	6022.87	6022.87	6022.87	6022.87
Cumulative Repayments upto Previous Year	3995.11	4448.84	4902.83	5356.82	5810.80
Net Loan-Opening	2021.12	1574.03	1120.04	666.05	212.07
Additions	6.64	0.00	0.00	0.00	0.00
Repayment during the year	453.74	453.99	453.99	453.99	212.07
Net Loan-Closing	1574.03	1120.04	666.05	212.07	0.00
Average Loan	1797.57	1347.03	893.05	439.06	106.03
Weighted Average Rate of Interest on Loan (%)	9.2710	9.2224	9.1387	9.0493	9.0194
Interest on Loan	166.65	124.23	81.61	39.73	9.56

Depreciation

40. 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 project or element thereof including communication project. In case of the tariff of all the units of a generating station or all elements of a transmission project including communication project 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 project 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 project, 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 project, weighted average life for the generating station of the transmission project 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 project:



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.”

41. The IT equipment has been considered as a part of the Gross Block and depreciated using weighted average rate of depreciation (WAROD). The WAROD has been worked out after taking into account the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered as nil i.e., IT asset has been considered as 100 per cent depreciable. The calculation of WAROD for the 2019-24 period is placed in **Annexure-II**. 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 depreciation allowed for the instant asset is as under:-

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation					
Opening Gross Block	8594.61	8604.10	8604.10	8604.10	8604.10
Additional Capitalisation	9.49	0.00	0.00	0.00	0.00
Closing Gross Block	8604.10	8604.10	8604.10	8604.10	8604.10
Average Gross Block	8599.36	8604.10	8604.10	8604.10	8604.10
Freehold Land	8.10	8.10	8.10	8.10	8.10
Weighted average rate of Depreciation (WAROD) (%)	5.28	5.28	5.28	5.28	5.28
Balance useful life of the asset	26	25	24	23	22
Aggregate Depreciable Value	7732.31	7736.58	7736.58	7736.58	7736.58
Combined Depreciation during the year	453.74	453.99	453.99	453.99	453.99
Aggregate Cumulative Depreciation	4448.84	4902.83	5356.82	5810.80	6265.99
Remaining Aggregate Depreciable Value	3283.46	2833.75	2379.76	1925.77	1470.58

Operation & Maintenance Expenses (O&M Expenses)

42. Regulation 35(3)(a) of the 2019 Tariff Regulations provides as under:

“35(3) Transmission system: (a) The following normative operation and maintenance expenses shall be admissible for the transmission system:



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<i>Norms for sub-station Bays (₹ Lakh per bay)</i>					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
<i>Norms for Transformers (₹ Lakh per MVA)</i>					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
<i>Norms for AC and HVDC lines (₹ Lakh per km)</i>					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
<i>Norms for HVDC stations</i>					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942



Provided that the O&M expenses for the GIS bays shall be allowed as worked out by multiplying 0.70 of the O&M expenses of the normative O&M expenses for bays;

Provided further that:

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;*
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;*
- iii. the O&M expenses of ± 500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);*
- iv. the O&M expenses of ± 800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme;*
- v. the O&M expenses of ± 800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme; and*
- vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.*

(b) The total allowable operation and maintenance expenses for the transmission system shall be calculated by multiplying the number of sub-station bays, transformer capacity of the transformer (in MVA) and km of line length with the applicable norms for the operation and maintenance expenses per bay, per MVA and per km respectively.

(c) The Security Expenses and Capital Spares for transmission system shall be allowed separately after prudence check:

Provided that the transmission licensee shall submit the assessment of the security requirement and estimated security expenses, the details of year-wise actual capital spares consumed at the time of truing up with appropriate justification.

(4) Communication system: The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up.”



43. The O&M Expenses claimed by the Petitioner for the Combined Asset for the 2019-24 period are as under:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses claimed by the Petitioner in the instant petition	147.33	152.53	157.78	163.33	168.95

44. The O&M Expenses claimed by the Petitioner vary slightly from the norms specified in the 2019 Tariff Regulations. The O&M Expenses allowed for the Combined Asset as per the norms are as under:

	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses					
Sub-station bays					
132 kV & below					
No. of bays	6	6	6	6	6
Norms (₹ lakh/bay)	16.08	16.64	17.23	17.83	18.46
Transmission line					
D/C Single Conductor (kms)	131.167	131.167	131.167	131.167	131.167
Norms (₹ lakh/km)	0.377	0.391	0.404	0.419	0.433
PLCC					
Original Capital Cost	70.16	70.16	70.16	70.16	70.16
Norms (₹ lakh)	2% of Original Capital Cost				
Total O&M Expense (₹ in lakh)	147.33	152.53	157.77	163.34	168.96

Interest on Working Capital (IWC)

45. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations specifies 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;”

46. 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%. 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 allowed thereon are as under:

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	12.28	12.71	13.15	13.61	14.08
Maintenance Spares	22.10	22.88	23.67	24.50	25.34
Receivables	156.80	152.66	148.00	143.47	140.03
Total Working Capital	191.18	188.25	184.81	181.59	179.46
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	23.04	22.68	22.27	21.88	21.62

Annual Fixed Charges of the 2019-24 Tariff Period

47. The transmission charges allowed for the instant transmission assets for the 2019-24 tariff period are as below:



(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	453.74	453.99	453.99	453.99	453.99
Interest on Loan	166.65	124.23	81.61	39.73	9.56
Return on Equity	484.53	484.79	484.79	484.79	484.79
Interest on Working Capital	23.04	22.68	22.27	21.88	21.62
O & M Expenses	147.33	152.53	157.77	163.34	168.96
Total	1275.29	1238.22	1200.44	1163.74	1138.93

Filing Fee and the Publication Expenses

48. BRPL has submitted that though the Commission can allow filing fee and publication expenses at its discretion under Regulation 70(1) of the 2019 Tariff Regulations, the exercise of such discretion is a judicial discretion in the adjudication of tariff for which no justification has been filed by the Petitioner. BRPL also referred to the Commission's order dated 11.9.2008 in Petition No. 129 of 2005 wherein the claim of Central Power Sector undertakings for allowing the reimbursement of the application filing fee was declined. The Petitioner, in response has submitted that it has requested for reimbursement of expenditure by the beneficiaries towards petition filing fee and publication expense, in terms of Regulation 70(1) of the 2019 Tariff Regulations. Further, the Petitioner also referred to the Commission's order dated 28.3.2016 in Petition No. 137/TT/2015 wherein the recovery of petition filing fee and expenditure for publication of notices from beneficiaries was allowed on pro-rata basis.

49. We have considered the submissions of the Petitioner and BRPL. 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

50. The Petitioner has prayed to bill and recover the licensee fee and RLDC fees and charges, separately from the beneficiaries in terms of Regulation 70(3) and (4) of the 2019 Tariff Regulations. UPPCL has submitted that the license fee should be borne by the Petitioner. We have considered the submission of the Petitioner and UPPCL. The Petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 70(4) and RLDC fee and charges in accordance with Regulations 70(3) of the 2019 Tariff Regulations for the 2019-24 tariff period.

Goods and Services Tax

51. 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 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.

52. BRPL has submitted that the demand of the Petitioner is premature and need not be considered at this juncture. In response, the Petitioner has submitted that currently transmission of electricity by an electric transmission utility is exempt from GST. Hence, the transmission charges currently charged are exclusive of GST. Further, if GST is levied at any rate and at any point of time in future, the same shall be borne and additionally paid by the respondent to the Petitioner and the same shall be charged and billed separately.



53. We have considered the submission of the Petitioner and BRPL. Since GST is not levied on transmission service at present, we are of the view that Petitioner's prayer is premature.

Security Expenses

54. The Petitioner has submitted that security expenses for the instant assets are not claimed in the instant petition and the Petitioner 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 a yearly basis on the basis of the actual expenses of previous year subject to true up at the end of the year on actual expenses. The Petitioner has submitted that the difference, if any, between the estimated security expenses and actual security expenses as per the audited accounts may be allowed to be recovered from the beneficiaries on a yearly basis.

55. BRPL has submitted that the approach adopted by the Petitioner towards claim of security expenses does not warrant the need for IWC as the same is claimed in advance. The Petitioner, in response has submitted that the expenses are not claimed in the instant petition and shall be claimed in a separate petition.

56. We have considered the submissions of the Petitioner and BRPL. Any application filed by the Petitioner in this regard will be dealt in accordance with the appropriate provisions of the 2019 Tariff Regulations.



Capital Spares

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

Sharing of Transmission Charges

58. 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 period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 period.

59. This order disposes of Petition No. 139/TT/2020.

sd/-
(Arun Goyal)
Member

sd/-
(I.S. Jha)
Member

sd/-
(P. K. Pujari)
Chairperson





Annexure-I

2014-19 Capital Expenditure	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	Additional Capitalisation (₹ 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)						
		2015- 16	2016- 17			2014-15	2015-16	2016-17	2017-18	2018-19		
Land - Freehold	8.10	-	-	8.10	-	-	-	-	-	-	-	-
Land - Leasehold	40.82	-	-	40.82	3.34%	1.36	1.36	1.36	1.36	1.36	1.36	1.36
Building Civil Works & Colony	-	-	-	-	3.34%	-	-	-	-	-	-	-
Transmission Line	7487.41	2.24	-	7489.65	5.28%	395.34	395.39	395.45	395.45	395.45	395.45	395.45
Sub Station	984.10	-	-	984.10	5.28%	51.96	51.96	51.96	51.96	51.96	51.96	51.96
PLCC	60.26	-	9.90	70.16	6.33%	3.81	3.81	4.13	4.13	4.44	4.44	4.44
IT Equipment (Incl. Software)	1.78	-	-	1.78	5.28%	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Total	8582.47	2.24	9.90	8594.61		452.57	452.63	453.00	453.31	453.31	453.31	453.31
				Average Gross Block (₹ in lakh)		8582.47	8583.59	8589.66	8594.61	8594.61	8594.61	8594.61
				Weighted Average Rate of Depreciation		5.27%	5.27%	5.27%	5.27%	5.27%	5.27%	5.27%

Annexure-II

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected Additional Capitalisation (₹ in lakh) 2019- 20	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreci ation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
					2019-20	2020-21	2021-22	2022-23	2023-24
Land - Freehold	8.10	-	8.10	-	-	-	-	-	-
Land - Leasehold	40.82	-	40.82	3.34%	1.36	1.36	1.36	1.36	1.36
Building Civil Works & Colony	-	-	-	3.34%	-	-	-	-	-
Transmission Line	7489.65	9.49	7499.14	5.28%	395.70	395.95	395.95	395.95	395.95
Sub Station	984.10	-	984.10	5.28%	51.96	51.96	51.96	51.96	51.96
PLCC	70.16	-	70.16	6.33%	4.44	4.44	4.44	4.44	4.44
IT Equipment (Incl. Software)	1.78	-	1.78	15.00%	0.27	0.27	0.27	0.27	0.27
Total	8594.61	9.49	8604.10		453.74	453.99	453.99	453.99	453.99
Average Gross Block (₹ in lakh)					8599.36	8604.10	8604.10	8604.10	8604.10
Weighted Average Rate of Depreciation					5.28%	5.28%	5.28%	5.28%	5.28%

