

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 6/TT/2021

Coram:

**Shri P. K. Pujari, Chairperson
Shri Arun Goyal, Member
Shri P. K. Singh, Member**

Date of order: 31.12.2021

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 for truing up of transmission tariff of 2009-14 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, truing up of transmission tariff of the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 in respect of **Combined Asset** comprising of **Asset-1 & 2:** Combined Assets of 500 MVA 400/220 kV ICT-III & 500 MVA 400/220 kV ICT-IV along with associated bay at Maharaniibagh Sub-station; **Asset-3:** 500 MVA, 400/220 kV ICT-II along with associated bays at Lucknow; **Asset-4:** 400/220 kV ICT along with associated bays at Bahadurgarh Sub-station covered under the Transmission System associated with "Northern Region System Strengthening Scheme- XXIII" in the Northern Region.

And in the matter of:

Power Grid Corporation of India Limited,
SAUDAMINI, Plot No-2, Sector-29,
Gurgaon - 122001 (Haryana).

.....Petitioner

Versus

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



4. Caligiri Road, Malviya Nagar, Jaipur - 302017 (Rajasthan).
Jodhpur Vidyut Vitran Nigam Limited,
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 Limited,
(Formerly Uttar Pradesh State Electricity Board),
Shakti Bhawan, 14, Ashok Marg,
Lucknow - 226001 (Uttar Pradesh).
10. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi - 110002.
11. BSES Yamuna Power Limited,
B-Block, Shakti Kiran, Building (Near Karkadooma Court),
Karkadooma 2nd Floor,
New Delhi - 110092.
12. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi - 110019.
13. Tata Power Delhi Distribution Limited,
NDPL house, Hudson Lines Kingsway Camp
Delhi - 110009.
14. Chandigarh Administration,
Sector-9,
Chandigarh.



15. Uttarakhand Power Corporation Limited,
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)

For Petitioner: Shri S.S. Raju, PGCIL
Shri D.K. Biswal, PGCIL
Shri Ved Rastogi, PGCIL
Shri A.K. Verma, PGCIL

For Respondent: None

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited, for truing of transmission tariff for the period from COD to 31.3.2014 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as “the 2009 Tariff Regulations”), truing of transmission tariff for the period from 1.4.2014 to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and for determination of transmission tariff for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of the following transmission assets forming part of **Combined Asset** under the Transmission System associated with “Northern Region System Strengthening Scheme- XXIII” (hereinafter referred to as “the transmission system”):



Asset-1&2 (combined): Combined Assets of 500 MVA 400/220 kV ICT-III and 500 MVA 400/220 kV ICT-IV along with associated bay at Maharanibagh Sub-station;

Asset-3: 500 MVA, 400/220 kV ICT-II along with associated bays at Lucknow Sub-station; and

Asset-4: 400/220 kV ICT along with associated bays at Bahadurgarh Sub-station.

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

“(i) Approve the Additional Capitalisation expenditure incurred during 2009-14, 2014-19 and 2019-24 tariff block.

(ii) Approve the trued up Transmission Tariff for 2009-14 and 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 19, 25.1 and 29 above.

(iii) 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 Hon’ble Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019.

(iv) 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.

(v) 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.

(vi) 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.

(vii) Allow the Petitioner to file a separate petition before Hon’ble Commission for claiming the overall security expenses and consequential Interest on Working Capital on that security expenses.

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

(ix) 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 follows:

a) The Investment Approval (IA) for the transmission system was accorded by the Board of Directors of the Petitioner's Company *vide* Memorandum No. C/CP/NRSS-XXIII dated 10.12.2009, at an estimated cost of ₹10972 lakh, including IDC of ₹641 lakh, based on 2nd quarter of 2009 price level.

b) The scope of work covered under the transmission system is as follows:

Sub-station

a) Maharaniabagh 400/220 kV GIS Sub-station (Extension) - 2x500 MVA, 400/220 kV transformer.

b) Bahadurgarh 400/220 kV Sub-station (Extension) - 1x500 MVA, 400/220 kV transformer.

c) Lucknow 400/220 kV Sub-station (Extension) - 1x500 MVA, 400/220 kV transformer.

c) All the assets under the transmission system are completed and covered under the instant petition.

d) As per IA, the scheduled date of commercial operation (SCOD) of the transmission system was 10.12.2011. COD of Asset-1&2 (combined) having been approved as 1.12.2010, there was no time over-run in their case. The Commission *vide* order dated 16.5.2012 in Petition No. 3/TT/2011 allowed the transmission tariff for Asset-1&2 (combined) for the period from COD to 31.3.2014 based on the 2009 Tariff Regulations.

e) The Commission *vide* order dated 9.7.2012 in Petition No. 146/TT/2011 allowed COD in respect of Asset-3 as 1.2.2012 (and condoned time over-run of one month) and allowed the transmission tariff for the period from COD to 31.3.2014.

f) The Commission *vide* order dated 8.2.2013 in Petition No. 189/TT/2011 allowed COD for Asset-4 as 1.11.2011 and allowed the transmission tariff for the period from COD to 31.3.2014. There was no delay in commissioning of Asset-4.



g) The transmission tariff from COD to 31.3.2014 allowed during 2009-14 tariff period for Asset-1&2 (combined), Asset-3 and Asset-4 was trued up and the transmission tariff of 2014-19 period was allowed *vide* order dated 29.3.2016 in Petition No. 5/TT/2015.

h) Due to non-submission of Revised Cost Estimate (RCE) by the Petitioner in Petition No. 5/TT/2015, the Commission in order dated 29.3.2016, had restricted the capital cost of Asset-1&2 (combined) to the approved apportioned cost i.e. ₹6177.21 lakh.

i) The Petitioner, in the instant petition, has submitted RCE in respect of the transmission system approved by the Board of Directors of the Petitioner's Company *vide* Memorandum dated 1.6.2016 at an estimated cost of ₹11727 lakh, including IDC of ₹301 lakh, based on December 2015 price level.

4. The Respondents are distribution licensees, transmission utilities 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 regarding the filing of this petition has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003. No comments/ or 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 in the matter.

6. The hearing in this matter was held on 31.8.2021 through video conference and the order was reserved.

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



8. This order is issued considering the submissions made by the Petitioner in the petition and affidavits dated 9.7.2021 and 27.8.2021.

TRUING UP OF ANNUAL FIXED CHARGES FOR THE 2009-14 TARIFF PERIOD

9. The Petitioner has submitted that due to non-submission of RCE, while truing up the transmission tariff for 2009-14 period, the Commission *vide* order dated 29.3.2016 in Petition No. 5/TT/2015 had restricted the capital cost of Asset-1&2 (combined) to ₹6177.21 lakh (the apportioned approved cost as per FR) against total estimated completed cost of ₹6820.42 lakh. Aggrieved by the order dated 29.3.2016 in Petition No.5/TT/2015 against the disallowance of capital cost in respect of Asset-1&2 (combined), the Petitioner filed Review Petition No. 33/RP/2017 for revision of capital cost. The Commission *vide* order 20.3.2018 in Petition No. 33/RP/2017 dismissed the Review Petition on the ground that the Review Petition was filed after statutory period of 45 days from the date of order without going into the merits of the review petition and granted liberty to the Petitioner to submit RCE for consideration at the time of truing up of the transmission tariff of 2014-19 period.

10. In compliance to the Commission's direction *vide* order dated 20.3.2018 in the Review Petition No. 33/RP/2017, the Petitioner has furnished the copy of RCE in the instant petition and has submitted that the completion cost for Asset-1&2 (combined) is within the apportioned approved cost as per RCE and has prayed to allow the trued-up transmission charges for 2009-14 tariff period as claimed in this petition. The Petitioner has submitted the following revised apportioned approved cost along with completion cost in respect of the transmission assets:



(₹ in lakh)

Particulars	Apportioned Approved Cost as per (FR)	Revised Apportioned Approved Cost
Asset-1 & Asset-2 (combined)	6177.21	7039
Asset-3	2417.45	2503
Asset-4	2377.78	2185
Total	10972.44	11727

11. The Petitioner has claimed the following transmission charges (after taking into account RCE) for the 2009-14 tariff period in respect of the transmission assets:

(₹ in lakh)

Asset	Particulars	2010-11 (Pro-rata)	2011-12 (Pro-rata)	2012-13	2013-14
Asset-1 & Asset-2 (combined)	Annual Fixed Tariff approved <i>vide</i> order dated 29.3.2016 in Petition No. 5/TT/2015	327.06	1200.39	1258.54	1246.11
	Revised Annual Fixed Tariff based on truing up	328.04	1230.12	1315.91	1315.27
Asset-3	Annual Fixed Tariff approved <i>vide</i> order dated 29.3.2016 in Petition No. 5/TT/2015	-	104.55	661.12	692.51
	Revised Annual Fixed Tariff based on truing up	-	104.61	661.57	692.97
Asset-4	Annual Fixed Tariff approved <i>vide</i> order dated 29.3.2016 in Petition No. 5/TT/2015	-	181.65	529.69	542.90
	Revised Annual Fixed Tariff based on truing up	-	181.72	529.83	543.15

12. We have considered the submissions of the Petitioner. In view of the non-submission of RCE, the Commission while truing-up the transmission tariff for the 2009-14 period in respect of the transmission assets covered in Petition No. 5/TT/2015 had restricted the capital cost of Asset-1&2 (combined) to the apportioned approved cost as per FR i.e. ₹6177.21 lakh. The relevant portion of the order dated 29.3.2016 in Petition No. 5/TT/2015 is as follows:



“19. The approved apportioned cost as per investment approval is as ₹3124.59 lakh, ₹3052.62 lakh, ₹2417.45 lakh and ₹2377.78 lakh in case of Asset-I, II, III and IV, respectively. The total capital cost as on 31.3.2014 in case of Asset-III and Asset-IV is within the approved apportioned cost. However, the total capital cost as on 31.3.2012 of Asset-I and Asset-II exceed the approved apportioned cost. In this regard, the petitioner was directed to submit the revised RCE for the transmission assets, if any. The petitioner, vide affidavit dated 4.2.2016, has requested for revision in tariff after approval of RCE. The petitioner is yet to submit the RCE for Asset-I and II. Therefore, we have restricted the capital cost including additional capitalisation to approved apportioned cost of ₹3124.59 lakh and ₹3052.62 lakh of Asset-I and Asset-II, respectively, after deducting excess initial spares from actual cost as on COD.”

13. Aggrieved by the disallowance of capital cost in respect of Asset-1&2 (combined), the Petitioner had filed Review Petition No. 33/RP/2017 for the revision of capital cost. The Commission vide order dated 20.3.2018 in Review Petition No. 33/RP/2017 held that the Review Petitioner may submit RCE dated 1.6.2016 for consideration of the Commission at the time of truing up of the 2014-19 period. The relevant portion of the order dated 20.3.2018 in Review Petition No. 33/RP/2017 is as follows:

“8. The review petition is disallowed on the ground of non-compliance with the statutory time limit for filing the review petition and we are not expressing any opinion on the merit of the review petition. The Review Petitioner may submit the RCE dated 1.6.2016 for consideration of the Commission at the time of truing up of the 2014-19 tariff which will be dealt with in accordance with law.”

14. Accordingly, RCE submitted by the Petitioner in the instant petition has been considered. However, as there is no provision of revising tariff once the same has been trued up in terms of the 2009 Tariff Regulations, we are not inclined to re-open the tariff of the 2009-14 period based upon RCE submitted after the truing-up exercise. Therefore, RCE submitted in the instant petition has been considered for the purpose of truing up the transmission tariff for the 2014-19 tariff period and for determination of the transmission tariff for the 2019-24 tariff period.

TRUING UP OF ANNUAL FIXED CHARGES FOR 2014-19 TARIFF PERIOD

15. The details of the transmission charges claimed by the Petitioner for the Combined Asset (after combining all the four transmission assets) is as follows:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	577.73	577.78	577.78	579.89	584.76
Interest on Loan	523.87	472.22	420.23	370.28	323.22
Return on Equity	646.99	650.02	649.69	652.05	659.26
O&M Expenses	645.78	667.20	689.38	712.20	735.88
Interest on Working Capital	75.93	75.99	76.01	76.22	76.73
Total	2470.30	2443.21	2413.09	2390.64	2379.85

16. The details of the Interest on Working Capital (IWC) claimed by the Petitioner in respect of the Combined Asset is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	53.82	55.60	57.45	59.35	61.32
Maintenance Spares	96.87	100.08	103.41	106.83	110.38
Receivables	411.72	407.20	402.18	398.44	396.64
Total Working Capital	562.41	562.88	563.04	564.62	568.34
Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	75.93	75.99	76.01	76.22	76.73

Capital Cost

17. The capital cost of the Combined Asset has been calculated in accordance with Regulation 9(3) of the 2014 Tariff Regulations. The details of capital cost approved *vide* order dated 29.3.2016 in Petition No. 5/TT/2015 are as follows:

(₹ in lakh)

Assets	Apportioned Approved Cost as per FR	Capital cost as on 1.4.2014	Additional Capital Expenditure (ACE) during 2014-19 period	Capital cost as on 31.3.2019
Asset-1 & Asset-2 (Combined)	6177.21	6177.21	0.00	6177.21
Asset-3	2417.45	2366.78	0.00	2366.78
Asset-4	2377.78	1963.21	121.31	2084.52
Total	10972.44	10507.20	121.31	10628.51

18. The details of capital cost claimed by the Petitioner in the instant petition are as follows:



(₹ in lakh)

Assets	AppORTIONED Approved Cost as per FR	RCE Approved Cost	Capital cost as on 1.4.2014 as per Auditor's Certificate	ACE during			Capital cost as on 31.3.2019
				2014-15	2017-18	2018-19	
Asset-1 & Asset-2 (Combined)	6177.21	7039.00	6954.42	0.00	0.00	0.00	6954.42
Asset-3	2417.45	2503.00	2387.59	0.00	0.00	104.18	2491.77
Asset-4	2377.78	2185.00	2027.29	2.00	80.00	0.00	2109.29
Total	10972.44	11727.00	11369.30	2.00	80.00	104.18	11174.40

19. The Petitioner has claimed capital cost of ₹10988.22 lakh as on 1.4.2014 in the instant petition as against the capital cost of ₹10507.20 lakh as on 1.4.2014 approved *vide* order dated 29.3.2016 in Petition No. 5/TT/2015. The difference in the capital cost claimed is on account of adding back of capital cost deducted by the Commission due to cost over-run *vide* order dated 29.3.2016 in Petition No. 5/TT/2015 and the Petitioner has submitted RCE regarding the same in the instant petition.

20. We have considered the submissions of the Petitioner. As discussed above, RCE submitted by the Petitioner has been considered for the purpose of truing-up of tariff of the 2014-19 period and determination of tariff of the 2019-24 period. We observe that the completion cost as on 31.3.2019 as claimed by the Petitioner in respect of the Combined Asset is within the apportioned approved cost as per RCE.

21. The Commission *vide* order dated 29.3.2016 in Petition No. 5/TT/2015 had also deducted the excess initial spares after restricting the capital cost as per FR cost. The Petitioner has claimed the revised initial spares in the instant petition and the same is as follows:



(₹ in lakh)

Assets	Cost for Spare Calculation	Initial spares claimed	Ceiling limit (in %)	Initial spares worked out	Excess initial spares
Asset-1 & Asset-2 Combined	6954.42	533.22	3.50	232.89	300.33
Asset-3	2491.77	79.98	2.50	61.84	18.14
Asset-4	2084.52	113.16	2.50	50.55	62.61

22. The Petitioner has reduced the above amount of excess initial spares while claiming the tariff for the Combined Asset.

23. We have considered the submissions of the Petitioner. The initial spares computed and allowed as per the 2009 Tariff Regulations are as follows:

Asset	Particulars	Capital Cost up to cut-off date (A) (₹ in lakh)	Initial Spares claimed (B) (₹ in lakh)	Ceiling limit (%) (C)	Initial Spares worked out	Excess Initial Spares	Initial Spares allowed (₹ in lakh)
					$D = [(A-B)*C / (100-C)]$ (₹ in lakh)	$E = D-B$ (₹ in lakh)	
Asset-1 & Asset-2 Combined	GIS Sub-Station	6820.42	533.22	3.50	228.03	305.19	228.03
Asset-3	Sub-station	2387.59	79.98	2.50	59.17	20.81	59.17
Asset-4	Sub-station	2027.29	113.16	2.50	49.08	64.08	49.08
Total		11235.30	726.36		336.28	390.08	336.28

24. Accordingly, the capital cost considered as on 1.4.2014 for trueing-up of transmission tariff for the 2014-19 tariff period is as follows:

(₹ in lakh)

Assets	AppORTIONED Approved Cost as per FR	RCE AppORTIONED Approved Cost	Capital cost as on 1.4.2014 as per Auditors Certificate	Excess Initial Spares	Capital cost as on 1.4.2014
Asset-1& Asset-2 (combined)	6177.21	7039.00	6954.42	305.19	6649.23
Asset-3	2417.45	2503.00	2387.59	20.81	2366.78
Asset-4	2377.78	2185.00	2027.29	64.08	1963.21
Combined Asset	10972.44	11727.00	11369.30	390.08	10979.22



Additional Capital Expenditure (“ACE”)

25. The Commission *vide* order dated 29.3.2016 in Petition No. 5/TT/2015 had allowed following ACE in respect of the Combined Asset during the 2014-19 tariff period in accordance with Regulation 14(3)(v) of the 2014 Tariff Regulations:

(₹ in lakh)

ACE allowed in 2014-19 period				
2014-15	2015-16	2016-17	2017-18	2018-19
121.31	0.00	0.00	0.00	0.00

26. The Petitioner *vide* affidavit dated 9.7.2021 has submitted package-wise and vendor-wise details of ACE claimed (beyond cut-off date) as per Regulation 14(3)(v) of the 2014 Tariff Regulations, for the 2014-19 tariff period and the same is as follows:

Year	ACE (₹ in lakh)	Party Name	Package
Asset-3			
2018-19	104.18	BHEL	Sub-station
Asset-4			
2014-15	2.00	BHEL	Sub-station
2017-18	80.00	BHEL	Sub-station

27. The Petitioner has further submitted that ACE claimed during 2014-19 tariff period pertains to the balance and retention payment for works executed prior to the cut-off date as per Regulation 14(3)(v) of the 2014 Tariff Regulations. Accordingly, the details of the capital cost claimed by the Petitioner are as follows:

Assets	Apportioned Approved Cost as per FR	RCE Approved Cost	Capital cost as on 1.4.2014	ACE during			Capital cost as on 31.3.2019
				2014-15	2017-18	2018-19	
Asset-1 & Asset-2 (Combined)	6177.21	7039.00	6654.09	0.00	0.00	0.00	6654.09
Asset-3	2417.45	2503.00	2369.45	0.00	0.00	104.18	2473.63
Asset-4	2377.78	2185.00	1964.68	2.00	80.00	0.00	2046.68
Combined Asset	10972.44	11727.00	10988.22	2.00	80.00	104.18	11174.40



28. We have considered the submissions of the Petitioner. ACE claimed for 2014-15, 2017-18 and 2018-19 is beyond the cut-off date and pertains to the balance and retention payments for works executed within the cut-off date, hence, it is allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations. Accordingly, the details of capital cost as on 1.4.2019 and as on 31.3.2019 considered for truing up of tariff of the 2014-19 tariff period is as follows:

Assets	Capital cost as on 1.4.2014	ACE during			(₹ in lakh)
		2014-15	2017-18	2018-19	Capital cost as on 31.3.2019
Asset-1 & Asset-2 (Combined)	6649.23	0.00	0.00	0.00	6649.23
Asset-3	2366.78	0.00	0.00	104.18	2470.96
Asset-4	1963.21	2.00	80.00	0.00	2045.21
Combined Asset	10979.22	2.00	80.00	104.18	11165.40

Debt-Equity ratio

29. Debt-equity ratio has been allowed in accordance with Regulation 19(3) of the 2014 Tariff Regulations. As per Regulation 19(3) of the 2014 Tariff Regulations, debt-equity ratio allowed by the Commission for determination of tariff for the period ending on 31.3.2014 shall be considered. Accordingly, debt-equity ratio for the period ending on 31.3.2014, considered for the purpose of determination of tariff of 2014-19 tariff period has been considered for the purpose of truing up of the tariff of the Combined Asset for 2014-19 tariff period. The details of the debt-equity ratio as on 1.4.2014 and 31.3.2019 in respect of the Combined Asset is as follows:

Combined Asset				
Particulars	Capital Cost as on 1.4.2014 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	7685.46	70.00	7815.78	70.00
Equity	3293.77	30.00	3349.62	30.00
Total	10979.22	100.00	11165.40	100.00



Depreciation

30. The Petitioner's claim towards depreciation in respect of the Combined Asset is found to be higher than the depreciation allowed in respect of the transmission assets in order dated 29.3.2016 in Petition No. 5/TT/2015. The Petitioner has neither given any justification for claiming higher depreciation than that allowed earlier vide order dated 29.3.2016 in Petition No. 5/TT/2015 nor made any specific prayer for allowing higher depreciation in the instant petition. It is observed that in Petition No. 5/TT/2015, the Petitioner had claimed IT equipment as part of sub-station despite there being a clear provision in the 2014 Tariff Regulations for higher depreciation for IT equipment. However, in this Petition, to claim higher depreciation, the Petitioner has segregated the IT equipment from sub-station. Similar issue had come up in Petition No.19/TT/2020. The Commission vide order dated 9.5.2020 in Petition No. 19/TT/2020, has considered depreciation for IT equipment @5.28% as part of the sub-station up to 31.3.2019 while truing up the capital expenditure for 2014-19 period. However, for 2019-24 tariff period, IT equipment has been considered separately and depreciation has been allowed @15% for 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 Gross Block during 2014-19 tariff period has been depreciated at Weighted Average Rate of Depreciation (WAROD) (as placed in Annexure-I). WAROD has been worked out after taking into account the depreciation rates of the Combined Asset as prescribed in the 2014 Tariff Regulations and depreciation allowed during 2014-19 period is as follows:

	(₹ in lakh)				
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block	10979.22	10981.22	10981.22	10981.22	11061.22
ACE	2.00	0.00	0.00	80.00	104.18
Closing Gross Block	10981.22	10981.22	10981.22	11061.22	11165.40



Average Gross Block	10980.22	10981.22	10981.22	11021.22	11113.31
Weighted Average Rate of Depreciation (in %)	5.24	5.24	5.24	5.24	5.24
Balance useful life of the asset at the beginning of the year (Year)	23	22	21	20	19
Elapsed life at the beginning of the year (Year)	2	3	4	5	6
Aggregate Depreciable Value at the beginning of the year	9882.20	9883.10	9883.10	9919.10	10001.98
Combined Depreciation during the year	575.49	575.54	575.54	577.65	582.51
Cumulative aggregate depreciation at the end of the year	2082.77	2658.30	3233.84	3811.49	4394.00
Remaining aggregate Depreciable Value at the end of the year	7799.44	7224.80	6649.26	6107.61	5607.98

31. The details of depreciation approved *vide* order dated 29.3.2016 in Petition No. 5/TT/2015, claimed by the Petitioner in the instant petition and trued-up depreciation allowed in respect of the Combined Asset is as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 29.3.2016 in Petition No. 5/TT/2015	554.35	558.19	558.19	558.19	558.19
Claimed by the Petitioner in the instant petition	577.73	577.78	577.78	579.89	584.76
Allowed after true-up in this order	575.49	575.54	575.54	577.65	582.51

Interest on Loan (“IoL”)

32. The Petitioner has claimed the Weighted Average Rate of IoL (WAROI), based on its actual loan portfolio and rate of interest.

33. We have considered the submissions of the Petitioner and, accordingly, calculated IoL based on actual interest rate submitted by the Petitioner in accordance with Regulation 26 of the 2014 Tariff Regulations. Trued-up IoL allowed in respect of the Combined Asset for the 2014-19 tariff period is as follows:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Loan					
Gross Normative Loan	7685.46	7686.86	7686.86	7686.86	7742.86
Cumulative Repayments up to Previous Year	1507.28	2082.77	2658.30	3233.84	3811.49
Net Loan-Opening	6178.18	5604.09	5028.55	4453.02	3931.37
Additions	1.40	0.00	0.00	56.00	72.93
Repayment during the year	575.49	575.54	575.54	577.65	582.51
Net Loan-Closing	5604.09	5028.55	4453.02	3931.37	3421.78
Average Loan	5891.13	5316.32	4740.78	4192.19	3676.57
Weighted Average Rate of Interest on Loan (in %)	8.9592	8.9602	8.9555	8.9405	8.9195
Interest on Loan	527.80	476.35	424.56	374.80	327.93

34. The details of IoL approved *vide* order dated 29.3.2016 in Petition No. 5/TT/2015, claimed by the Petitioner in the instant petition and trued up IoL allowed in the instant order in respect of the Combined Asset is as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 29.3.2016 in Petition No. 5/TT/2015	502.89	457.26	407.33	357.35	307.36
Claimed by the Petitioner in the instant petition	523.87	472.22	420.23	370.28	323.22
Allowed after true-up in this order	527.80	476.35	424.56	374.80	327.93

Return on Equity (“RoE”)

35. The Petitioner has claimed RoE in respect of the Combined Asset in terms of Regulation 24 and Regulation 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 2014-19 tariff period:

Year	Claimed effective tax rate (in %)	Grossed up RoE (in %) [Base Rate/(1-t)]
2014-15	21.018	19.625
2015-16	21.382	19.715
2016-17	21.338	19.705
2017-18	21.337	19.704
2018-19	21.549	19.758



36. We have considered the submissions made by the Petitioner. The Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate based on the notified MAT rates for the Petitioner and the same is as follows:

Year	Notified MAT rates (in %) (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

37. MAT rates considered in order dated 27.4.2020 in Petition No. 274/TT/2019 is considered for the purpose of grossing up of rate of RoE for truing up of the tariff of 2014-19 period in terms of the provisions of the 2014 Tariff Regulations which is as follows:

Year	Notified MAT rates (in %) (inclusive of surcharge & cess)	Base rate of RoE (in %)	Grossed up RoE (in %) [(Base Rate)/(1-t)]
2014-15	20.961	15.50	19.610
2015-16	21.342	15.50	19.705
2016-17	21.342	15.50	19.705
2017-18	21.342	15.50	19.705
2018-19	21.549	15.50	19.758

38. Accordingly, RoE is trued up on the basis of the MAT rate applicable in the respective years and the same is allowed as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	3293.77	3294.37	3294.37	3294.37	3318.37
Additions	0.60	0.00	0.00	24.00	31.25
Closing Equity	3294.37	3294.37	3294.37	3318.37	3349.62
Average Equity	3294.07	3294.37	3294.37	3306.37	3333.99
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	645.97	649.15	649.15	651.52	658.73



39. The details of RoE approved *vide* order dated 29.3.2016 in Petition No. 5/TT/2015, claimed by the Petitioner in the instant petition and trued up in respect of Combined Asset in the instant order is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 29.3.2016 in Petition No. 5/TT/2015	621.71	625.28	625.28	625.28	625.28
Claimed by the Petitioner in the instant petition	646.99	650.02	649.69	652.05	659.26
Allowed after true-up in this order	645.97	649.15	649.15	651.52	658.73

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

40. O&M Expenses claimed by the Petitioner in respect of the Combined Asset are as follows:

O&M Expenses					
	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station					
400 kV bays at: Bahadurgarh:ICT BAY Lucknow:ICT II BAY					
Number of bays	2	2	2	2	2
220 kV bays at: Bahadurgarh:ICT BAY Bahadurgarh:LINE III BAY Bahadurgarh:LINE IV Lucknow:ICT II BAY Lucknow:LINE III BAY Lucknow:LINE IV BAY Lucknow:LINE V BAY Lucknow:LINE VI BAY					
Number of bays	8	8	8	8	8
400 kV GIS bays at: Maharanibagh:ICT-III BAY Maharanibagh:ICT-IV BAY					
Number of bays	2	2	2	2	2
220 kV GIS bays at: Maharanibagh:ICT-III BAY Maharanibagh:ICT-IV BAY					
Number of bays	2	2	2	2	2
Total O&M Expenses (₹ in lakh)	645.78	667.20	689.38	712.20	735.88



41. Regulation 29(3) of the 2014 Tariff Regulations specifies the norms for O&M Expenses for the transmission system. The norms specified in respect of the elements covered in the transmission asset are as follows:

Element	Norms for 2014-15	Norms for 2015-16	Norms for 2016-17	Norms for 2017-18	Norms for 2018-19
400 kV Sub-station (₹ lakh/ bay)	60.30	62.30	64.37	66.51	68.71
220 kV Sub-station (₹ lakh/ bay)	42.21	43.61	45.06	46.55	48.10
400 kV GIS Sub-station (₹ lakh/ bay)	51.54	53.25	55.02	56.84	58.73
220 kV GIS Sub-station (₹ lakh/ bay)	42.21	43.61	45.06	46.55	48.10

42. We have considered the submissions of the Petitioner. O&M Expenses are allowed under Regulation 29(3) of the 2014 Tariff Regulations and are as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
2 Numbers of 400 kV Sub-station	120.60	124.60	128.74	133.02	137.42
8 Numbers of 220 kV Sub-station	337.68	348.88	360.48	372.40	384.80
2 Numbers of 400 kV GIS Sub-station	103.08	106.50	110.04	113.68	117.46
2 Numbers of 220 kV GIS Sub-station	84.42	87.22	90.12	93.10	96.20
Total	645.78	667.20	689.38	712.20	735.88

43. The details of O&M Expenses approved *vide* order dated 29.3.2016 in Petition No. 5/TT/2015, claimed by the Petitioner in the instant petition and trued-up in respect of the Combined Asset in the instant order are as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 29.3.2016 in Petition No. 5/TT/2015	645.78	667.20	689.38	712.20	735.88
Claimed by the Petitioner in the instant petition	645.78	667.20	689.38	712.20	735.88
Allowed after true-up in this order	645.78	667.20	689.38	712.20	735.88



Interest on Working Capital (“IWC”)

44. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and trued-up IWC has been allowed in respect of the Combined Asset as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Interest on Working Capital					
Working Capital for O&M Expenses (O&M Expenses for one month)	53.82	55.60	57.45	59.35	61.32
Working Capital for Maintenance Spares (15% of O&M Expenses)	96.87	100.08	103.41	106.83	110.38
Working Capital for Receivables (Equivalent to two months of annual transmission charges)	411.83	407.38	402.45	398.74	396.97
Total Working Capital	562.51	563.06	563.30	564.92	568.68
Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	75.94	76.01	76.05	76.26	76.77

45. The details of IWC approved *vide* order dated 29.3.2016 in Petition No. 5/TT/2015, claimed by the Petitioner in the instant petition and trued up IWC in respect of the Combined Asset in the instant order is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 29.3.2016 in Petition No. 5/TT/2015	74.32	74.62	74.70	74.81	74.97
Claimed by the Petitioner in the instant petition	75.93	75.99	76.01	76.22	76.73
Allowed after true-up in this order	75.94	76.01	76.05	76.26	76.77

Approved Annual Fixed Charges for 2014-19 Tariff Period

46. The trued up Annual Fixed Charges (AFC) approved in respect of the Combined Asset for 2014-19 tariff period is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	575.49	575.54	575.54	577.65	582.51
Interest on Loan	527.80	476.35	424.56	374.80	327.93
Return on Equity	645.97	649.15	649.15	651.52	658.73
O&M Expenses	645.78	667.20	689.38	712.20	735.88



Interest on Working Capital	75.94	76.01	76.05	76.26	76.77
Total	2470.97	2444.26	2414.68	2392.43	2381.83

47. Accordingly, the Annual Transmission Charges approved *vide* order dated 29.3.2016 in Petition No. 5/TT/2015, claimed by the Petitioner in the instant petition and approved after truing up in the instant order is as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved <i>vide</i> order dated 29.3.2016 in Petition No. 5/TT/2015	2399.05	2382.55	2354.88	2327.82	2301.67
Claimed by the Petitioner in the instant petition	2470.30	2443.21	2413.09	2390.64	2379.85
Allowed after true-up in this order	2470.97	2444.26	2414.68	2392.43	2381.83

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2019-24 TARIFF PERIOD

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

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	587.20	586.86	586.86	586.86	586.86
Interest on Loan	275.23	224.14	171.84	119.65	67.40
Return on Equity	630.74	631.85	631.85	631.85	631.85
O&M Expenses	1037.28	1074.54	1112.22	1152.22	1190.76
Interest on Working Capital	67.66	68.63	69.49	70.44	71.23
Total	2598.11	2586.02	2572.26	2561.02	2548.10

49. The details of IWC claimed by the Petitioner for 2019-24 tariff period in respect of the Combined Asset is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	86.44	89.55	92.69	96.02	99.23
Maintenance Spares	155.59	161.18	166.83	172.83	178.61
Receivables	319.44	318.82	317.13	315.74	313.29
Total Working Capital	561.47	569.55	576.65	584.59	591.13
Rate of Interest on working capital (in %)	12.05	12.05	12.05	12.05	12.05



Interest on Working Capital	67.66	68.63	69.49	70.44	71.23
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Capital Cost

50. Regulation 19 of the 2019 Tariff Regulations provide as follows:

“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 up to 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.”



51. The Petitioner has claimed a capital cost of ₹11174.40 lakh as on 31.3.2019 in respect of the Combined Asset. The capital cost of ₹11165.40 lakh admitted by the Commission as on 31.3.2019 has been considered as the 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”)

52. Regulation 24 and Regulation 25 of the 2019 Tariff Regulations provides as follows:

“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.”

53. The Petitioner has claimed ACE of ₹39.31 lakh for 2019-24 period in respect of the Combined Asset in accordance with Regulation 25(1)(d) of the 2019 Tariff Regulations. The Petitioner has claimed ACE on account of un-discharged liability towards final payment after the cut-off date for works executed within cut-off date as follows:

(₹ in lakh)		
Capital cost as on 1.4.2019	ACE claimed for 2019-20	Capital cost as on 31.3.2024
11174.40	39.31	11213.71

54. The Petitioner vide affidavit dated 9.7.2021 has submitted the following details of ACE incurred/ projected to be incurred after cut-off date:

Year	ACE (₹ in lakh)	Party's Name	Package
2019-20	39.31	BHEL	Sub-station

55. We have considered the submissions of the Petitioner. ACE has been claimed in respect of Asset-4 and it is allowed under Regulation 25(1)(d) of the 2019 Tariff Regulations, as it is towards liabilities for works executed prior to the cut-off date and is within apportioned approved cost. Accordingly, the capital cost considered for 2019-24 tariff period is as follows:

(₹ in lakh)		
Capital cost as on 1.4.2019	ACE claimed for 2019-20	Capital cost as on 31.3.2024
11165.40	39.31	11204.71

Debt-Equity ratio

56. Regulation 18 of the 2019 Tariff Regulations provides as follows:



“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.”



57. The details of debt-equity considered in respect of the Combined Asset for the purpose of computation of tariff for 2019-24 tariff period are as follows:

Combined Asset				
Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	7815.78	70.00	7843.30	70.00
Equity	3349.62	30.00	3361.41	30.00
Total	11165.40	100.00	11204.71	100.00

Depreciation

58. Regulation 33 of the 2019 Tariff Regulations provides as follows:

"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 thereof 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.

(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable;

Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the generating station:

Provided also that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to



the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

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

(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.

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

(6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2019 from the gross depreciable value of the assets.

(7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.

(8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the decapitalized asset during its useful services.”

59. WAROD has been worked out at Annexure-II to this order and the same is based on the rates of depreciation specified in the 2019 Tariff Regulations. Depreciation is approved considering ACE as on 31.3.2019 and accumulated depreciation up to 31.3.2019. Depreciation allowed in respect of the Combined Asset for 2019-24 tariff period is as follows:

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation					
Opening Gross Block	11165.40	11204.71	11204.71	11204.71	11204.71
Addition during the year	39.31	0.00	0.00	0.00	0.00

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2019-24 due to projected ACE					
Closing Gross Block	11204.71	11204.71	11204.71	11204.71	11204.71
Average Gross Block	11185.06	11204.71	11204.71	11204.71	11204.71
Weighted average rate of Depreciation (WAROD) (in %)	5.26	5.26	5.26	5.26	5.26
Balance useful life at the beginning of the year (Year)	18	17	16	15	14
Lapsed Life at the beginning of the year (in year)	7	8	9	10	11
Aggregate Depreciable Value	10068.36	10086.05	10086.05	10086.05	10086.05
Combined Depreciation during the year	588.06	589.10	589.10	589.10	589.10
Cumulative Aggregate Depreciation at the end of the year	4982.06	5571.16	6160.26	6749.36	7338.45
Remaining Aggregate Depreciable Value at the end of the year	5086.30	4514.89	3925.79	3336.70	2747.60

Interest on Loan (“IoL”)

60. Regulation 32 of the 2019 Tariff Regulations provides as follows:

“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 up to 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.”

61. 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. IoL allowed in respect of the Combined Asset for 2019-24 tariff period is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	7815.78	7843.30	7843.30	7843.30	7843.30
Cumulative Repayments up to Previous Year	4394.00	4982.06	5571.16	6160.26	6749.36
Net Loan-Opening	3421.78	2861.24	2272.14	1683.04	1093.94
Additions due to ACE	27.52	0.00	0.00	0.00	0.00
Repayment during the year	588.06	589.10	589.10	589.10	589.10
Net Loan-Closing	2861.24	2272.14	1683.04	1093.94	504.85
Average Loan	3141.51	2566.69	1977.59	1388.49	799.40
Weighted Average Rate of Interest on Loan (in %)	8.9129	8.9133	8.9138	8.9224	8.9380
Interest on Loan	280.00	228.78	176.28	123.89	71.45

Return on Equity (“RoE”)

62. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provides as follows:

“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.”

63. The Petitioner has submitted that MAT rate is applicable to it. We have considered the submissions of the Petitioner. Accordingly, 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 in respect of the Combined Asset for 2019-24 tariff period is as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	3349.62	3361.41	3361.41	3361.41	3361.41
Additions	11.79	0.00	0.00	0.00	0.00
Closing Equity	3361.41	3361.41	3361.41	3361.41	3361.41
Average Equity	3355.52	3361.41	3361.41	3361.41	3361.41
Return on Equity (Base Rate) (in %)	15.50	15.50	15.50	15.50	15.50
MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
Return on Equity	630.23	631.34	631.34	631.34	631.34



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

64. O&M Expenses claimed by the Petitioner in respect of the transmission asset for the various elements included in the Combined Asset for 2019-24 tariff period are as follows:

O&M Expenses					
	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station					
400 kV bays at: Bahadurgarh:ICT BAY Lucknow:ICT II BAY					
Number of bays	2	2	2	2	2
220 kV bays at: Bahadurgarh:ICT BAY Bahadurgarh:LINE III BAY Bahadurgarh:LINE IV Lucknow:ICT II BAY Lucknow:LINE III BAY Lucknow:LINE IV BAY Lucknow:LINE V BAY Lucknow:LINE VI BAY					
Number of bays	8	8	8	8	8
400 kV GIS bays at: Maharanibagh:ICT-III BAY Maharanibagh:ICT-IV BAY					
Number of bays	2	2	2	2	2
220 kV GIS bays at: Maharanibagh:ICT-III BAY Maharanibagh:ICT-IV BAY					
Number of bays	2	2	2	2	2
Transformers					
400 kV ICT Bays at: Maharanibagh:2 Numbers 500 MVA ICT AT MAHARANI BAGH, 1 Number 500 MVA ICT at Lucknow and 1 Number 500 MVA ICT at Bahadurgarh					
MVA Capacity	2000	2000	2000	2000	2000
PLCC (2% of ₹17.85 lakh)	17.85	17.85	17.85	17.85	17.85
Total O&M Expenses (₹ in lakh)	1037.28	1074.54	1112.22	1152.22	1190.76

65. The norms specified under Regulation 35(3)(a) of the 2019 Tariff Regulations provides as follows:



“35 Operation and Maintenance Expenses (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
Norms for sub-station Bays (₹ Lakh per bay)					
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
Norms for Transformers (₹ Lakh per MVA)					
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
Norms for AC and HVDC lines (₹ Lakh per km)					
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-conductors)	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
Norms for HVDC stations					
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 year

(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.”

66. We have considered the submissions of the Petitioner. The Petitioner has claimed O&M Expenses separately for PLCC under Regulation 35(4) of the 2019 Tariff Regulations @2% of its original project cost in the instant petition. The Petitioner has made similar claim in other petitions as well. Though PLCC is a communication system, it has been considered as part of the sub-station in the 2014 Tariff Regulations and the 2019 Tariff Regulations and the norms for sub-station have been specified accordingly. Accordingly, the Commission *vide* order dated 24.1.2021 in Petition No. 126/TT/2020 has already concluded that no separate O&M Expenses can be allowed for PLCC under Regulation 35(4) of the 2019 Tariff Regulations even though PLCC is a communication system. Therefore, the Petitioner’s claim for separate O&M Expenses for PLCC @ 2% is not allowed.

67. Accordingly, O&M expenses have been worked out as per the norms specified in the 2019 Tariff Regulations and the same are allowed as follows:

	(₹ in lakh)				
Details	2019-20	2020-21	2021-22	2022-23	2023-24
2 Numbers of 400 kV Sub-station bays					
Norm (₹ lakh per bay)	32.15	33.28	34.45	35.66	36.91
O&M Expenses	64.30	66.56	68.90	71.32	73.82
8 Numbers of 220 kV Sub-station bays					
Norm (₹ lakh per bay)	22.51	23.30	24.12	24.96	25.84
O&M Expenses	180.08	186.40	192.96	199.68	206.72
2 Numbers of 400 kV GIS Sub-station bays					
Norm (₹ lakh per bay)	22.505	23.296	24.115	24.962	25.837
O&M Expenses	45.01	46.59	48.23	49.92	51.67
2 Numbers of 220 kV GIS Sub-station bays					
Norm (₹ lakh per bay)	15.757	16.31	16.884	17.472	18.088
O&M Expenses	31.51	32.62	33.77	34.94	36.18
2000 MVA Transformation Capacity					
Norm (₹ lakh per MVA)	0.358	0.371	0.384	0.398	0.411
O&M Expenses	716.00	742.00	768.00	796.00	822.00
Total O&M Expenses	1036.90	1074.17	1111.86	1151.87	1190.39



Interest on Working Capital (“IWC”)

68. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of the 2019 Tariff Regulations specifies as follows:

“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;”

69. The Petitioner has submitted that it has computed IWC for 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%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (ROI) considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-2021 and from 2021-22 onwards as 10.50% (SBI 1-year MCLR



applicable as on 1.4.2021 of 7.00% plus 350 basis points). The components of the working capital and interest thereon allowed in respect of Combined Asset for 2019-2024 tariff period is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for one month)	86.41	89.51	92.65	95.99	99.20
Working Capital for Maintenance Spares (15% of O&M Expenses)	155.54	161.13	166.78	172.78	178.56
Working Capital for Receivables (Equivalent to 45 days of annual transmission cost)	320.03	319.00	316.73	315.31	312.82
Total Working Capital	561.97	569.64	576.17	584.08	590.58
Rate of Interest on working capital (in %)	12.05	11.25	10.50	10.50	10.50
Interest on Working Capital	67.72	64.08	60.50	61.33	62.01

Annual Fixed Charges for 2019-24 Tariff Period

70. The transmission charges allowed in respect of the Combined Asset for 2019-24 tariff period is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	588.06	589.10	589.10	589.10	589.10
Interest on Loan	280.00	228.78	176.28	123.89	71.45
Return on Equity	630.23	631.34	631.34	631.34	631.34
O&M Expenses	1036.90	1074.17	1111.86	1151.87	1190.39
Interest on Working Capital	67.72	64.08	60.50	61.33	62.01
Total	2602.92	2587.47	2569.07	2557.52	2544.29

Filing Fee and Publication Expenses

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



Licence Fee & RLDC Fees and Charges

72. The Petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for 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 2019-24 tariff period.

Goods and Services Tax

73. 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.

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

Security Expenses

75. The Petitioner has submitted that security expenses in respect of the Combined Asset are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential IWC.

76. We have considered the submissions of the Petitioner. The Petitioner has claimed consolidated security expenses on projected basis for 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The said petition has already been disposed of by the Commission vide order dated 3.8.2021 in Petition No. 260/MP/2020. Therefore, security expenses will be shared in



terms of the order dated 3.8.2021 in Petition No. 260/MP/2020. Therefore, the Petitioner's prayer in the instant petition for allowing it to file a separate petition for claiming the overall security expenses and consequential IWC has become infructuous.

Capital Spares

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

Sharing of Transmission Charges

78. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the provisions of the 2010 Sharing Regulations. However, with effect from 1.11.2020 (after repeal of the 2010 Sharing Regulations), sharing of transmission charges is governed by the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2020 (in short "the 2020 Sharing Regulations"). Accordingly, the liabilities of the DICs for arrears of the transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and shall be recovered from the concerned DICs through Bill under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of transmission charges for subsequent period shall be recovered in terms of the provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

79. To summarise:



(a) The trued-up AFC allowed in respect of the transmission asset for 2014-19 tariff period are:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	2470.97	2444.26	2414.68	2392.43	2381.83

(b) AFC approved in respect of the Combined Asset for 2019-24 tariff period are:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
AFC	2602.92	2587.47	2569.07	2557.52	2544.29

80. Annexure-I and Annexure-II to this order form part of this order.

81. This order disposes of Petition No. 6/TT/2021 in terms of the above discussion and findings.

sd/-
(P. K. Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(P. K. Pujari)
Chairperson



Annexure-I

2014-19 Capital Expenditure	Combined Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE (₹ 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)				
		2014-15	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Building Civil Works & Colony	229.80	0.00	0.00	0.00	229.80	3.34%	7.68	7.68	7.68	7.68	7.68
Sub Station	10713.47	2.00	80.00	104.18	10899.65	5.28%	565.72	565.78	565.78	567.89	572.75
PLCC	17.85	0.00	0.00	0.00	17.85	6.33%	1.13	1.13	1.13	1.13	1.13
IT Equipment (Including Software)	18.10	0.00	0.00	0.00	18.10	5.28%	0.96	0.96	0.96	0.96	0.96
Total	10979.22	2.00	80.00	104.18	11165.40	Total	575.49	575.54	575.54	577.65	582.51
Average Gross Block (₹ in lakh)							10980.22	10981.22	10981.22	11021.22	11113.31
Weighted Average Rate of Depreciation							5.24%	5.24%	5.24%	5.24%	5.24%



Annexure-II

2019-24	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciations as per Regulations (₹ in lakh)				
Particulars		2019-20			2019-20	2020-21	2021-22	2022-23	2023-24
Building Civil Works & Colony	229.80	0.00	229.80	3.34%	7.68	7.68	7.68	7.68	7.68
Sub Station	10899.65	39.31	10938.96	5.28%	576.54	577.58	577.58	577.58	577.58
PLCC	17.85	0.00	17.85	6.33%	1.13	1.13	1.13	1.13	1.13
IT Equipment (Including Software)	18.10	0.00	18.10	15.00%	2.72	2.72	2.72	2.72	2.72
Total	11165.40	39.31	11204.71		588.06	589.10	589.10	589.10	589.10
Average Gross Block (₹ in lakh)					11185.06	11204.71	11204.71	11204.71	11204.71
Weighted Average Rate of Depreciation					5.26%	5.26%	5.26%	5.26%	5.26%

