

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 680/TT/2020

Coram:

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

Date of Order: 11.04.2022

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and revision of true up of transmission tariff of 2009-14 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 in respect of **Asset-1:** LILO of one Circuit of 400 kV Bawana-Bahadurgarh-Hissar Line at Bhiwani Sub-station, true-up of transmission tariff of 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff for 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 in respect of **Asset-1:** LILO of one Circuit of 400 kV Bawana-Bahadurgarh-Hissar Line at Bhiwani Sub-station; **Asset-2:** 400/220 kV 315 MVA ICT-I & II along with associated bays at Bhiwani Sub-station; **Asset-3:** LILO of Circuit-1 of 400 kV D/C Bareilly-Mandola Line at Meerut Sub-station; **Asset-4:** LILO of Circuit-2 of 400 kV D/C Bareilly-Mandola Line at Meerut Sub-station; **Asset-5:** 765 kV Bays for Bhiwani-Moga Line at Bhiwani Sub-station; 765 kV 240 MVAR Bus Reactor-I along with associated bays at Bhiwani Sub-station; 765/400 kV 1000 MVA ICT-I along with associated bays at Bhiwani Sub-station; 2 Numbers 400 kV Bays for Hisar-Bahadurgarh at Bhiwani Sub-station; **Asset-6:** LILO of Hisar-Bawana at Bhiwani along with 2 Numbers 400 kV Bays at Bhiwani Sub-station; **Asset-7:** 765 kV bays for Jattikalan- Bhiwani Line at Bhiwani Sub-station; **Asset-8:** 765 kV S/C Meerut-Bhiwani Line along with associated bays at Meerut and Bhiwani and 765 kV, 240 MVAR Line Reactor at Bhiwani Sub-station; **Asset-9:** 765/400 kV, 1000 MVA ICT-II along with associated bays at Bhiwani Sub-station; **Asset-10:** 765 kV 240 MVAR Bus Reactor-II along with associated bays at Bhiwani Sub-station, and **Asset-11:** 400/220 kV Ballabgarh Sub-station (re-alignment works) under "765 kV System for Central Part of Northern Grid-Part III" in Northern Region.

And in the matter of:

Power Grid Corporation of India Limited,
"Saudamini", Plot No. 2,
Sector 29,
Gurgaon – 122001, Haryana.

....Petitioner



Vs.

1. Rajasthan Raja 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,
Caligiri Road, Malviya Nagar,
Jaipur – 302017 (Rajasthan).
4. 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.
6. Punjab State Electricity Board,
The Mall,
Patiala – 147001.
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula – 134 109 (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.
10. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi – 110002.
11. BSES Yamuna Power Limited,
BSES Bhawan, Nehru Place,



New Delhi – 110019.

12. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi – 110019.
13. Tata Power Delhi Distribution Limited,
33 kV Sub-station, Building,
Hudson Lane, Kingsway Camp,
North Delhi – 110009.
14. Chandigarh Administration,
Sector – 9,
Chandigarh.
15. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road,
Dehradun.
16. North Central Railway,
Allahabad.
17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi – 110002.

...Respondents

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

For Respondents : None

ORDER

The instant petition has been filed by the Petitioner, Power Grid Corporation of India Limited, a deemed transmission licensee, for truing up of tariff for 2009-14 period in respect of **Asset-1**: LILO of one Circuit of 400 kV Bawana-Bahadurgarh-Hissar Line at Bhiwani Sub-station 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 up of transmission tariff of 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and determination of transmission tariff of 2019-24 period 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 assets under 765 kV System for Central Part of Northern Grid- Part-III in Northern Region (hereinafter referred to as the “transmission project):

Asset-1: LILO of one Circuit of 400 kV Bawana-Bahadurgarh-Hissar Line at Bhiwani Sub-station;

Asset-2: 400/220 kV 315 MVA ICT-I & II along with associated bays at Bhiwani Sub-Station;

Asset-3: LILO of Circuit-1 of 400 kV Double Circuit (D/C) Bareilly-Mandola Line at Meerut Sub-station;

Asset-4: LILO of Circuit-2 of 400 kV D/C Bareilly-Mandola Line at Meerut Sub-station;

Asset-5: 765 kV bays for Bhiwani-Moga Line at Bhiwani Sub-station; 765 kV 240 MVAR Bus Reactor-I along with associated bays at Bhiwani Sub-station; 765/400 kV 1000 MVA ICT-I along with associated bays at Bhiwani Sub-station; 2 Numbers 400 kV bays for Hisar-Bahadurgarh at Bhiwani Sub-station;

Asset-6: LILO of Hisar-Bawana at Bhiwani along with 2 Numbers 400 kV bays at Bhiwani Sub-station;

Asset-7: 765 kV bays for Jattikalan-Bhiwani Line at Bhiwani Sub-station;

Asset-8: 765 kV Single Circuit (S/C) Meerut-Bhiwani Line along with associated bays at Meerut and Bhiwani and 765 kV, 240 MVAR Line Reactor at Bhiwani Sub-station;

Asset-9: 765/400 kV, 1000 MVA ICT-II along with associated bays at Bhiwani Sub-station;



Asset-10: 765 kV 240 MVAR Bus Reactor-II along with associated bays at Bhiwani Sub-station; and

Asset-11: 400/220 kV Ballabgarh Sub-station (re-alignment works).

Asset-1 and Asset-2 have hereinafter been expressed as Combined Asset (Asset-1 and Asset-2) while Asset-3, Asset-4, Asset-5, Asset-6, Asset-7, Asset-8, Asset-9, Asset-10 and Asset-11 have been termed as Combined Asset (Asset-3 to Asset-11) in this order. All the individual transmission assets have been combined during 2019-24 tariff period. Therefore, during 2019-24 period, assets have been termed as Combined Asset in this order.

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

“1) Approve the revised trued up Transmission Tariff for 2009-14 block for Asset-1, as per para 7 above.

2) 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 8 and 9 above.

3) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 8 and 9 above for respective block.

4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.

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

6) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the respondents.

7) Allow the petitioner to file a separate petition before Hon'ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 9.10 above.

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



9) Allow recovery of annual lease rent for 2014-19 and remaining 25 years as allowed in order dtd. 27/12/2019 in petition No.: 234/TT/2018.

10) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

and pass such other relief as 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) Investment Approval (IA) of the transmission project excluding Asset-2 was accorded by the Board of Directors of the Petitioner vide Memorandum No. C/CP/765 kV system in Northern Grid dated 3.11.2009 at an estimated cost of ₹107512 lakh including Interest During Construction (IDC) of ₹7712 lakh based on 3rd quarter, 2009 price level.

b) IA of Asset-2 i.e. 400/220 kV 315 MVA ICT-I and ICT-II (nomenclature of the asset in Petition No. 16/TT/2015 is Asset 2A and Asset 2B) was accorded by the Board of Directors of the Petitioner vide letter dated 27.10.2006 at an estimated cost of ₹23825 lakh including IDC of ₹2085 lakh based on 2nd Quarter, 2006 price level.

c) Further, the administrative approval and expenditure sanction of Revised Cost Estimate (RCE) was accorded by the Board of Directors of the Petitioner in its 329th meeting held on 26.5.2016 at an estimated cost of ₹103805 lakh including IDC of ₹6947 lakh based on December, 2015 price level (communicated vide Memorandum No. C/CP/RCE NCR-III dated 1.6.2016).



d) The Scope of work covered under the transmission project is as follows:

Transmission lines:

- (i) Meerut Bhiwani 765 kV S/C line- 175 km
- (ii) LILO of Bareilly- Mandola 400 kV D/C Line at Meerut- 103 km
- (iii) LILO of both circuits of Bawana/ Bahadurgarh- Hissar 400 kV D/C Line at Bhiwani-15 km

Sub-stations:

- (i) New 2 X 1000 MVA, 765/400 kV and 2X500 MVA, 400/ 220 kV Bhiwani 765/400/220 kV Sub-station
- (ii) Extension of Meerut 765/ 400 kV Sub-station
- (iii) Extension of Mandola 400/ 220 kV Sub-station
- (iv) Extension of Ballabgarh 400/220 kV Sub-station- Realignment works

Reactive Compensation:

Line Reactors

- (i) Meerut- Bhiwani 765 kV S/C Line (240 MVAR switchable)

Bus Reactors

- (i) Bhiwani- 2X240 MVAR

e) The details of assets covered in the instant petition are as follows:

Asset Nomenclature in original petition	Description	Asset Nomenclature in the instant petition	COD	Previous Orders
Asset-1	LILO of One Circuit of 400 kV Bawana-Bahadurgarh-Hissar Line at Bhiwani Sub-station	Asset-1	1.09.2011	Combined vide order dated 21.3.2016 in Petition No. 16/TT/2015
Asset-2	400/220 kV 315 MVA ICT-I & ICT-II along with associated bays at Bhiwani Sub-Station	Asset-2	1.12.2012	
Asset-1	LILO of Circuit-1 of 400 kV D/C Bareilly-Mandola Line at Meerut Sub-station	Asset-3	1.10.2012	Combined vide Order dated 27.12.2019 in Petition No. 234/TT/2018
Asset-2	LILO of Circuit-2 of 400 kV D/C Bareilly-Mandola Line at Meerut Sub-station	Asset -4	1.04.2013	
Asset-3	765 kV bays for Bhiwani-Moga Line at Bhiwani Sub-station;765 kV 240 MVAR Bus Reactor-I along with associated bays at Bhiwani Sub-	Asset-5	1.06.2012	



	station;765/400 kV 1000 MVA ICT-I along with associated bays at Bhiwani Sub-station; 2 Nos.400 kV bays for Hisar-Bahadurgarh at Bhiwani Sub-station,			
Asset-4	LILO of Hisar-Bawana at Bhiwani along with 2 No. 400 kV Bays at Bhiwani Sub-station	Asset-6	1.07.2012	
Asset-5	765 kV bays for Jattikalan- Bhiwani Line at Bhiwani Sub-station	Asset -7	1.10.2012	
Asset-6	765 kV S/C Meerut-Bhiwani Line along with associated bays at Meerut & Bhiwani and 765 kV, 240 MVAR Line Reactor at Bhiwani Sub-station	Asset-8	1.02.2014	
Asset-7	765/400 kV,1000 MVA ICT-II along with associated bays at Bhiwani Sub-station	Asset-9	1.10.2012	
Asset-8	765 kV 240 MVAR Bus Reactor-II along with associated bays at Bhiwani Sub-station	Asset -10	1.07.2012	
Asset-9	400/220 kV Ballabhgarh Sub-station (re-alignment works)	Asset-11	1.12.2012	

f) Truing up of tariff of 2009-14 period and tariff of 2014-19 period in respect of Combined Asset (Asset-1 and Asset-2) was allowed by the Commission vide order dated 21.3.2016 in Petition No. 16/TT/2015 and in respect of the Combined Asset (Assset-3 to Asset-11) truing up of 2009-14 tariff period and determination of tariff of 2014-19 period was allowed vide order dated 27.12.2019 in Petition No. 234/TT/2018.

g) Annual Fixed Charges (AFC) approved by the Commission, based on the capital cost as on 31.3.2014, vide orders dated 21.3.2016 and 27.12.2019 in Petition No. 16/TT/2015 and Petition No. 234/TT/2018 respectively in respect of the transmission assets are as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset (Asset-1 and Asset 2)	1856.21	1903.48	1881.60	1859.98	1838.93
Combined Asset (Asset-3 to Asset-11)	17132.08	17060.07	16812.71	16582.70	16280.56



h) The Commission vide order dated 21.3.2016 in Petition No. 16/TT/2015 restricted the cost of Asset-1 to apportioned approved cost. The Commission in the said order, allowed ACE of ₹30.60 lakh as against the claim of ₹121.44 lakh during 2009-14 tariff period and ACE of ₹25.97 lakh during 2014-15 was disallowed as the completion cost was restricted to FR apportioned cost.

i) The Petitioner has prayed to allow the revised transmission tariff for 2009-14 tariff period in respect of Asset-1 as per RCE. The tariff for 2009-14 tariff period in respect of Asset-1 has already been tried up, therefore, the Petitioner's prayer for re-opening and revision of tariff for 2009-14 period is disallowed. However, RCE submitted by the Petitioner has been taken into consideration for revision of capital cost for 2014-19 period.

4. The Respondents are distribution licensees, power departments and transmission licensees which are procuring transmission services 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 also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. None of the Respondents have filed their reply in the matter.

6. Hearing in this matter was held on 31.8.2021 through video conference and order was reserved.



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

8. This order is issued considering the submissions made by the Petitioner in the petition vide affidavits dated 23.6.2020 and 19.8.2021.

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

9. The details of the transmission charges claimed by the Petitioner in respect of Combined Assets are as follows:

(₹ in lakh)

Combined Asset (Asset-1 and Asset-2)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	397.01	406.51	409.89	411.18	411.87
Interest on Loan	439.51	415.93	383.95	348.14	311.33
Return on Equity	467.17	481.96	486.68	488.30	490.44
Interest on working capital	55.85	56.72	57.06	57.21	57.38
O&M Expenses	467.70	483.22	499.28	515.81	532.96
Total	1827.24	1844.34	1836.86	1820.64	1803.98

(₹ in lakh)

Combined Asset (Asset-3 to Asset-11)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	4655.92	4742.13	4781.21	4818.00	4835.09
Interest on Loan	5224.34	4892.40	4496.20	4078.61	3655.58
Return on Equity	5317.80	5451.23	5500.74	5542.90	5577.52
Interest on working capital	435.87	436.15	432.02	427.28	421.88
O&M Expenses	1557.56	1609.44	1662.76	1718.05	1774.98
Total	17191.49	17131.35	16872.93	16584.84	16265.05

10. The details of the Interest on Working Capital (IWC) claimed by the Petitioner in respect of the Combined Assets are as follows:

(₹ in lakh)

Combined Asset (Asset-1 and Asset-2)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	38.98	40.27	41.61	42.98	44.41
Maintenance Spares	70.16	72.48	74.89	77.37	79.94
Receivables	304.54	307.39	306.14	303.44	300.66
Total	413.68	420.14	422.64	423.79	425.01
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	55.85	56.72	57.06	57.21	57.38



(₹ in lakh)

Combined Asset (Asset-3 to Asset-11)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	129.80	134.12	138.56	143.17	147.92
Maintenance Spares	233.63	241.42	249.41	257.71	266.25
Receivables	2865.25	2855.23	2812.16	2764.14	2710.84
Total	3228.68	3230.77	3200.13	3165.02	3125.01
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	435.87	436.15	432.02	427.28	421.88

Capital Cost

11. The Commission *vide* orders dated 21.3.2016 and 27.12.2019 in Petition No. 16/TT/2015 and Petition No. 234/TT/2018 respectively has allowed the capital cost as on 31.3.2014 and ACE during 2014-19 period in respect of the Combined Assets and the same are as follows:

(₹ in lakh)

Assets	Admitted Cost as on 1.4.2014	ACE during 2014-19	Total cost as on 31.3.2019
Combined Asset (Asset-1 and Asset-2)	7704.99	835.56	8540.55
Combined Asset (Asset-3-Asset-11)	88967.63	5466.69	94434.31

12. The Petitioner in the instant true up petition has claimed the following capital cost as on COD and actual ACE up to 31.3.2019 in respect of the Combined Assets:

(₹ in lakh)

Assets	Apportioned Approved Cost as per RCE	Admitted Capital Cost as on 31.3.2014	Actual ACE for					Total cost as on 31.3.2019
			2014-15	2015-16	2016-17	2017-18	2018-19	
Asset -1	1477.46	1431.49	0.00	0.00	0.00	7.28	0.00	1438.77
Asset -2	7008.3	6364.34	289.62	134.02	25.82	21.61	0.00	6835.408
Combined Asset (Asset-1 and Asset- 2)	8485.76	7795.83	289.62	134.02	25.82	28.89	0.00	8274.178
Asset-3	8137.57	7724.79	90.9	18.74	28.27	59.58	0.00	7922.28
Asset-4	8392.29	7972.94	90.9	18.74	28.27	59.58	0.00	8170.43
Asset-5	18797.29	17276.85	984.87	293.43	101.02	19.77	37.29	18713.23
Asset-6	3247.3	2945.09	113.98	60.28	10.22	73.48	0.00	3203.05
Asset-7	2010.07	1767.78	89.8	60.66	10.34	10.83	0.00	1939.41



Assets-8	39217.99	36774.03	953.25	229.8	527.18	341.87	31.5	38857.63
Assets-9	10148.36	9526.15	343.89	112.6	70.36	12.54	0.00	10065.54
Assets-10	5153.04	4910.09	120.06	60.82	10.4	9.57	0.00	5110.94
Assets-11	215.33	69.92	0.00	0.00	33.96	18.77	0.00	122.65
Combined Asset (Asset- 3 to Asset-11)	95319.24	88967.64	2787.65	855.07	820.02	605.99	68.79	94105.16
Combined Asset (Asset-1 to Asset-11)	103805	96763.468	3077.27	989.09	845.84	634.88	68.79	102379.3

13. The Commission *vide* order dated 21.3.2016 in Petition No. 16/TT/2015 restricted the cost of Asset-1 to the approved apportioned cost and allowed ACE of ₹30.60 lakh as against the claim of ₹121.44 lakh during 2009-14 tariff period. The Commission in the said order further disallowed ACE of ₹25.97 lakh for 2014-15 period as the completion cost was restricted to FR apportioned cost.

14. In the instant petition, the Petitioner has submitted that administrative approval and expenditure sanction for RCE of the transmission project was accorded by Board of Directors of Petitioner in the 329th meeting held on 26.5.2016 for ₹103805 lakh including IDC of ₹6947 lakh based on December, 2015 price level.

15. We have considered the submissions of the Petitioner. As per IA, cost of the transmission project is ₹107512 lakh and as per RCE, the cost of the transmission project is ₹103805 lakh. The total project cost of the all the assets is within FR cost as well RCE cost. The Commission had already considered RCE in respect of Asset-3 to Asset-11. The RCE approved apportioned cost in respect of Asset-1 is ₹1477.46 lakh, against the estimated completion cost of ₹1431.49 lakh. Accordingly, the Commission has considered ₹1431.49 as the capital cost of Asset-1 as on 1.4.2014 based on the Auditor's Certificate dated 15.6.2020. In



respect of Asset-2 and Combined Asset (Asset-3 to Asset-11), the Commission has considered the trued-up cost approved vide orders dated 21.3.2016 and 27.12.2019 in Petition No. 16/TT/2015 and Petition No. 234/TT/2018 respectively as on 1.4.2014.

16. Accordingly, the capital cost considered by the Commission in respect of the Combined Asset (Asset-1 and Asset-2) and Combined Asset (Asset-3 to Asset-11) as on 1.4.2014 are as follows:

(₹ in lakh)	
Assets	Admitted Capital Cost (as on 1.4.2014)
Asset-1	1431.49
Asset-2	6364.34
Asset-3	7724.79
Asset-4	7972.94
Asset-5	17276.85
Asset-6	2945.09
Asset-7	1767.78
Asset-8	36774.03
Asset-9	9526.15
Asset-10	4910.09
Asset-11	69.92

Effective Date of Commercial Operation (“E-COD”)

17. Based on the trued-up admitted capital cost and actual COD of Asset-1 and Asset-2, E-COD of Combined Asset (Asset-1 and Asset-2) has been worked out and the same is as follows:

Combined Asset (Asset-1 and Asset-2)

Computation of E-COD					
Assets	Actual COD	Admitted Capital cost as on 31.3.2014	Weight of the cost	Number of days from last COD	Weighted Days
Asset-1	1.9.2011	1431.49	18.36%	457	83.92
Asset-2	1.12.2012	6364.34	81.64%	0	0.00
	1.12.2012	7795.83			83.92
E-COD- 8.9.2012					



18. E-COD is used to determine the lapsed life of the Combined Asset which works out to be as one (1) year as on 1.4.2014 (i.e. the number of completed year as on 1.4.2014 from E-COD).

Combined Asset (Asset-3 to Asset-11)

19. The Commission vide order dated 27.12.2019 in Petition No. 234/TT/2018 has determined E-COD of the Combined Asset (Asset-3 to Asset-11) as 5.4.2013 and lapsed life of one (1) year as on 1.4.2014.

Weighted Average Life (“WAL”)

Combined Asset (Asset-1 and Asset-2)

20. Life as defined in Regulation 27 of the 2014 Tariff Regulations has been considered for determination of Weighted Average Life (WAL). Combined Asset (Asset-1 and Asset-2) may have multiple elements such as land, building, transmission line, sub-station and PLCC and each element may have different span of life. Therefore, the concept of WAL has been used as the useful life of the project as a whole.

21. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2014 and their respective life as stipulated in the 2014 Tariff Regulations. The element-wise life as defined in the 2009 Tariff Regulations prevailing at the time of actual COD of individual assets has been ignored for this purpose. The life as defined in the 2014 Tariff Regulations has been considered for determination of WAL. Accordingly, WAL of the Combined Asset (Asset-1 and Asset-2) has been worked out as 27 years as follows:



Particulars	Combined Cost (as on 1.4.2014) (₹ in lakh) (a)	Life as per 2014 Tariff Regulation (Year) (b)	Weighted (c) = (a)*(b)	Weighted Average Life of Asset (in years) (d)=(c)/(a)
Building	108.73	25	2718.25	
Transmission Line	1431.49	35	50102.15	
Sub Station	5819.68	25	145492.00	
PLCC	59.81	15	897.15	
Total	7419.71		199209.6	26.85 Rounded off to 27 years

Combined Asset (Asset-3 to Asset-11)

22. The Commission vide order dated 27.12.2019 in Petition No. 234/TT/2018 has determined WAL of 29 years in respect of Combined Asset (Asset-3 to Asset-11).

Initial Spares

23. The Petitioner has submitted that the Commission has restricted Initial Spares of ₹0.58 lakh for transmission line of Asset-6, ₹5.25 lakh for transmission line of Asset-8 and ₹20.69 lakh for Sub-station of Asset-11 based on their individual capital cost as per order dated 27.12.2019 in Petition No. 234/TT/2018.

24. The Petitioner has claimed the following Initial Spares in respect of the individual transmission assets and prayed to revise the Initial Spares allowed earlier in the light of judgement of the Appellate Tribunal for Electricity (APTEL) dated 14.9.2019 in Appeal No. 74 of 2017. The detailed calculation of Initial Spares submitted by the Petitioner is as follows:



Assets	Particulars	Capital cost before disallowance (a)=b+ c+ d-h	Capital Cost after disallowance (b)	IDC and IEDC disallowances (c)	Spare claimed (d)	Pro. Spare claimed (e)=[d*(a-c)/a]	Limit (f) (in %)	Allowable (g)= f*(a-c)/(100-f)	Allowed in order (h)	Balance Spares (i)=(d-h)
Asset-1	Transmission Line	1438.77	1438.77	0.00	0.00	0.00	1.0	14.53	0	0.00
Asset-2	Sub-station	6979.34	6835.41	143.93	74.10	72.57	2.5	175.27	74.1	
Asset-3	Sub-station	1432.64	1432.64	0.00	36.21	36.21	2.5	36.73	36.21	26.52
	Transmission Line	6514.64	6514.64	0.00	0.00	0.00	1.0	65.80	0.00	
Asset-4	Sub-station	1432.64	1430.55	2.09	36.21	36.16	2.5	36.68	36.21	
	Transmission Line	6776.01	6764.88	11.13	0.00	0.00	1.0	68.33	0.00	
Asset-5	Sub-station	18790.31	18790.31	0.00	376.94	376.94	2.5	481.80	376.94	
Asset-6	Sub-station	1648.50	1648.50	0.00	24.16	24.16	2.5	42.27	24.16	
	Transmission Line	1555.13	1554.55	0.00	12.24 (11.66+ 0.58)	12.24	1.0	15.71	11.66	
Asset-7	Sub-station	1939.41	1939.41	0.00	36.07	36.07	2.5	49.73	36.07	
Asset-8	Sub-station	10398.01	10303.93	94.08	233.28	231.17	2.5	264.20	233.28	
	Transmission Line	28827.98	28558.15	264.58	222.13 (216.88 +5.25)	220.09	1.0	288.52	216.88	
Asset-9	Sub-station	10068.50	10065.54	2.96	208.04	207.98	2.5	258.09	208.04	
Asset-10	Sub-station	5110.94	5110.94	0.00	118.67	118.67	2.5	131.05	118.67	
Asset-11	Sub-station	145.51	122.65	2.17	25.06 (4.37+ 20.69)	24.69	2.5	3.68	4.37	
	Transmission Line	45112.53	44830.99	275.71	234.37	232.33	1.0	452.90	228.54	
Total	Sub-station	57945.80	57679.88	245.23	1168.74	1164.61	2.5	1479.50	1148.05	20.69
	Transmission Line	45112.53	44830.99	275.71	234.37	232.33	1.0	452.90	228.54	5.83

25. We have considered the submissions of the Petitioner. As per the APTEL's judgment dated 14.9.2019 in Appeal No. 74 of 2017, Initial Spares are to be allowed as per the ceiling on overall project cost. The APTEL, in judgement dated 14.9.2019 in Appeal No. 74 of 2017 has held as follows:

"8.13.....We do not agree with this methodology of restricting initial spares asset/element wise as adopted by the Central Commission. The Central Commission to have a prudence check on the initial spares, being restricted based on the individual asset wise cost initially, but subsequently ought to have allowed as per the ceiling limits on the overall project cost basis during the true-up"

26. In terms of the above judgment of APTEL, Initial Spares are to be allowed as percentage of the project cost as a whole. The entire transmission project was



completed during 2009-14 tariff period. Initial Spares in respect of Asset-1 and Asset-2 have been determined vide order dated 21.3.2016 in Petition 16/TT/2015 and in respect of Asset-3 to Asset-11 vide order dated 27.12.2019 in Petition No. 234/TT2018 and the same are as follows:

Sub-station

Assets	Plant and Machinery Cost (excluding IDC/ IEDC)	Norms as per 2009 Tariff Regulations (in %)	Initial Spares Claimed	Initial Spares admissible	Initial Spares allowed during 2009-14
Asset 2	7199.9	2.50	72.65	184.61	72.65
Asset 3	1469.79	2.50	36.21	37.69	36.21
Asset 4	1469.79	2.50	36.21	37.69	36.21
Asset 5	18729.09	2.50	376.95	468.69	376.95
Asset 6	1648.5	2.50	24.16	42.27	24.16
Asset 7	1939.41	2.50	36.08	49.73	36.08
Asset 8	10232.56	2.50	233.28	262.37	233.28
Asset 9	10068.5	2.50	208.04	258.17	208.04
Asset 10	5110.94	2.50	118.67	131.05	118.67
Asset 11	195.33	2.50	25.06	4.37	4.37
Combined Asset	58063.81		1167.31	1476.64	1146.62

Transmission Line

Assets	Plant and Machinery Cost (excluding IDC/ IEDC)	Norms as per 2009 Tariff Regulations (in %)	Initial Spares Claimed	Initial Spares admissible	Initial Spares allowed during 2009-14
Asset-1	1218.54	0.75	0.00	9.21	0.00
Asset 6	1555.13	0.75	12.24	11.66	11.66
Asset 8	28922.06	0.75	222.13	216.88	216.88
Combined Asset	31695.73		234.37	237.75	228.54

27. In the instant case, the overall project cost of the Combined Assets is arrived at only in the 2019-24 tariff period. Therefore, Initial Spares are allowed on the basis of cost of the individual transmission assets in 2009-14 tariff period and Initial Spares are allowed on the basis of overall project cost in 2019-24 period (as discussed in the relevant portion of the instant order).



Additional Capital Expenditure (“ACE”)

28. The Commission vide orders dated 21.3.2016 and 27.12.2019 in Petition No. 16/TT/2015 and Petition No. 234/TT/2018 respectively had allowed ACE for 2014-19 tariff period in respect of the Combined Assets and the same is as follows:

(₹ in lakh)			
Assets	Admitted Cost as on 1.4.2014	ACE during 2014-19	Total cost as on 31.3.2019
Combined Asset (Asset-1 and Asset-2)	7704.99	835.56	8540.55
Combined Asset (Asset-3-to Asset-11)	88967.63	5466.69	94434.31

29. The Petitioner in the instant true-up petition has claimed the following net ACE in respect of the individual transmission assets and submitted Auditor's Certificates dated 15.6.2020 in Asset-1, Asset-2, Asset-5, Asset-6, Asset-7, Asset-8, Asset-9 and Asset-10 and 16.3.2020 in Asset-3, Asset-4 and Asset-11 in support of its claim and the same is as follows:

(₹ in lakh)					
Asset-1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Regulation 14 (1)(i) of 2014 Tariff Regulations	0.00	0.00	0.00	0.00	0.00
Regulation 14 (1)(ii) of 2014 Tariff Regulations	0.00	0.00	0.00	0.00	0.00
Regulation 14 (3)(v) of 2014 Tariff Regulations	0.00	0.00	0.00	7.28	0.00
Total ACE	0.00	0.00	0.00	7.28	0.00

(₹ in lakh)					
Asset-2					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Regulation 14 (1)(i) of 2014 Tariff Regulations	119.24	0.00	0.00	0.00	0.00
Regulation 14 (1)(ii) of 2014 Tariff Regulations	170.38	0.00	0.00	0.00	0.00
Regulation 14 (3)(v) of 2014 Tariff Regulations	0.00	134.02	25.82	21.61	0.00
Total ACE	289.62	134.02	25.82	21.61	0.00



(₹ in lakh)

Asset-3					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Regulation 14 (1)(i) of 2014 Tariff Regulations	62.28	0.00	0.00	0.00	0.00
Regulation 14 (1)(ii) of 2014 Tariff Regulations	28.62	0.00	0.00	0.00	0.00
Regulation 14 (3)(v) of 2014 Tariff Regulations	0.00	18.74	28.27	59.58	0.00
Total ACE	90.90	18.74	28.27	59.58	0.00

(₹ in lakh)

Asset-4					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Regulation 14 (1)(i) of 2014 Tariff Regulations	62.28	18.74	0.00	0.00	0.00
Regulation 14 (1)(ii) of 2014 Tariff Regulations	28.62	0.00	0.00	0.00	0.00
Regulation 14 (3)(v) of 2014 Tariff Regulations	0.00	0.00	28.27	59.58	0.00
Total ACE	90.90	18.74	28.27	59.58	0.00

(₹ in lakh)

Asset-5					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Regulation 14 (1)(i) of 2014 Tariff Regulations	195.19	0.00	0.00	0.00	0.00
Regulation 14 (1)(ii) of 2014 Tariff Regulations	789.68	0.00	0.00	0.00	0.00
Regulation 14 (3)(v) of 2014 Tariff Regulations	0.00	293.43	101.01	19.77	37.29
Total ACE	984.87	293.43	101.01	19.77	37.29

(₹ in lakh)

Asset-6					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Regulation 14 (1)(i) of 2014 Tariff Regulations	0.00	0.00	0.00	0.00	0.00
Regulation 14 (1)(ii) of 2014 Tariff Regulations	113.98	0.00	0.00	0.00	0.00
Regulation 14 (3)(v) of 2014 Tariff Regulations	0.00	60.28	10.22	73.48	0.00
Total ACE	113.98	60.28	10.22	73.48	0.00



(₹ in lakh)

Asset-7					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Regulation 14 (1)(i) of 2014 Tariff Regulations	0.00	0.00	0.00	0.00	0.00
Regulation 14 (1)(ii) of 2014 Tariff Regulations	89.80	0.00	0.00	0.00	0.00
Regulation 14 (3)(v) of 2014 Tariff Regulations	0.00	60.66	10.35	10.83	0.00
Total ACE	89.80	60.66	10.35	10.83	0.00

(₹ in lakh)

Asset-8					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Regulation 14 (1)(i) of 2014 Tariff Regulations	785.77*	229.80	527.18	0.00	0.00
Regulation 14 (1)(ii) of 2014 Tariff Regulations	167.48	0.00	0.00	0.00	0.00
Regulation 14 (3)(v) of 2014 Tariff Regulations	0.00	0.00	0.00	341.87	31.50
Total ACE	953.25	229.80	527.18	341.87	31.50

*Capital cost includes Accrued IDC of ₹124.53 lakh (₹ 661.24+₹124.53)

(₹ in lakh)

Asset-9					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Regulation 14 (1)(i) of 2014 Tariff Regulations	238.43	0.00	0.00	0.00	0.00
Regulation 14 (1)(ii) of 2014 Tariff Regulations	105.46	0.00	0.00	0.00	0.00
Regulation 14 (3)(v) of 2014 Tariff Regulations	0.00	112.60	70.36	12.54	0.00
Total ACE	343.89	112.60	70.36	12.54	0.00

(₹ in lakh)

Asset-10					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Regulation 14 (1)(i) of 2014 Tariff Regulations	120.06	0.00	0.00	0.00	0.00
Regulation 14 (1)(ii) of 2014 Tariff Regulations	0.00	0.00	0.00	0.00	0.00
Regulation 14 (3)(v) of 2014 Tariff Regulations	0.00	60.82	10.40	9.57	0.00
Total ACE	120.06	60.82	10.40	9.57	0.00



(₹ in lakh)

Asset-11					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Regulation 14 (1)(i) of 2014 Tariff Regulations	0.00	0.00	0.00	0.00	0.00
Regulation 14 (1)(ii) of 2014 Tariff Regulations	0.00	0.00	0.00	0.00	0.00
Regulation 14 (3)(v) of 2014 Tariff Regulations	0.00	0.00	33.96	18.77	0.00
Total ACE	0.00	0.00	33.96	18.77	0.00

30. We have considered the submissions of the Petitioner. ACE claimed by the Petitioner has been allowed under Regulation 14(1)(i), Regulation 14(1)(ii) and Regulation 14(3)(v) of the 2014 Tariff Regulations. The details of ACE allowed in respect of the individual transmission assets are as follows:

(₹ in lakh)

Asset-1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Regulation 14 (1)(i) of 2014 Tariff Regulations	0.00	0.00	0.00	0.00	0.00
Regulation 14 (1)(ii) of 2014 Tariff Regulations	0.00	0.00	0.00	0.00	0.00
Regulation 14 (3)(v) of 2014 Tariff Regulations	0.00	0.00	0.00	7.28	0.00
Total ACE	0.00	0.00	0.00	7.28	0.00

(₹ in lakh)

Asset-2					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Regulation 14 (1)(i) of 2014 Tariff Regulations	119.24	0.00	0.00	0.00	0.00
Regulation 14 (1)(ii) of 2014 Tariff Regulations	170.38	0.00	0.00	0.00	0.00
Regulation 14 (3)(v) of 2014 Tariff Regulations	0.00	134.02	25.82	21.61	0.00
Total ACE	289.62	134.02	25.82	21.61	0.00

(₹ in lakh)

Asset-3					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Regulation 14 (1)(i) of 2014 Tariff Regulations	62.28	0.00	0.00	0.00	0.00
Regulation 14 (1)(ii) of 2014 Tariff Regulations	28.62	0.00	0.00	0.00	0.00
Regulation 14 (3)(v) of 2014 Tariff Regulations	0.00	18.74	28.27	59.58	0.00
Total ACE	90.90	18.74	28.27	59.58	0.00



(₹ in lakh)

Asset-4					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Regulation 14 (1)(i) of 2014 Tariff Regulations	62.28	18.74	0.00	0.00	0.00
Regulation 14 (1)(ii) of 2014 Tariff Regulations	28.62	0.00	0.00	0.00	0.00
Regulation 14 (3)(v) of 2014 Tariff Regulations	0.00	0.00	28.27	59.58	0.00
Total ACE	90.90	18.74	28.27	59.58	0.00

(₹ in lakh)

Asset-5					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Regulation 14 (1)(i) of 2014 Tariff Regulations	195.19	0.00	0.00	0.00	0.00
Regulation 14 (1)(ii) of 2014 Tariff Regulations	789.68	0.00	0.00	0.00	0.00
Regulation 14 (3)(v) of 2014 Tariff Regulations	0.00	293.43	101.01	19.77	37.29
Total ACE	984.87	293.43	101.01	19.77	37.29

(₹ in lakh)

Asset-6					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Regulation 14 (1)(i) of 2014 Tariff Regulations	0.00	0.00	0.00	0.00	0.00
Regulation 14 (1)(ii) of 2014 Tariff Regulations	113.98	0.00	0.00	0.00	0.00
Regulation 14 (3)(v) of 2014 Tariff Regulations	0.00	60.28	10.22	73.48	0.00
Total ACE	113.98	60.28	10.22	73.48	0.00

(₹ in lakh)

Asset-7					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Regulation 14 (1)(i) of 2014 Tariff Regulations	0.00	0.00	0.00	0.00	0.00
Regulation 14 (1)(ii) of 2014 Tariff Regulations	89.80	0.00	0.00	0.00	0.00
Regulation 14 (3)(v) of 2014 Tariff Regulations	0.00	60.66	10.35	10.83	0.00
Total ACE	89.80	60.66	10.35	10.83	0.00



(₹ in lakh)

Asset-8					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Regulation 14 (1)(i) of 2014 Tariff Regulations	785.77 (661.24+124.53*)	229.80	527.18	0.00	0.00
Regulation 14 (1)(ii) of 2014 Tariff Regulations	167.48	0.00	0.00	0.00	0.00
Regulation 14 (3)(v) of 2014 Tariff Regulations	0.00	0.00	0.00	341.87	31.50
Total ACE	953.25	229.80	527.18	341.87	31.50

*Accrued IDC of ₹ 124.53 lakh

(₹ in lakh)

Asset-9					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Regulation 14 (1)(i) of 2014 Tariff Regulations	238.43	0.00	0.00	0.00	0.00
Regulation 14 (1)(ii) of 2014 Tariff Regulations	105.46	0.00	0.00	0.00	0.00
Regulation 14 (3)(v) of 2014 Tariff Regulations	0.00	112.60	70.36	12.54	0.00
Total ACE	343.89	112.60	70.36	12.54	0.00

(₹ in lakh)

Asset-10					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Regulation 14 (1)(i) of 2014 Tariff Regulations	120.06	0.00	0.00	0.00	0.00
Regulation 14 (1)(ii) of 2014 Tariff Regulations	0.00	0.00	0.00	0.00	0.00
Regulation 14 (3)(v) of 2014 Tariff Regulations	0.00	60.82	10.40	9.57	0.00
Total ACE	120.06	60.82	10.40	9.57	0.00

(₹ in lakh)

Asset-11					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Regulation 14 (1)(i) of 2014 Tariff Regulations	0.00	0.00	0.00	0.00	0.00
Regulation 14 (1)(ii) of 2014 Tariff Regulations	0.00	0.00	0.00	0.00	0.00
Regulation 14 (3)(v) of 2014 Tariff Regulations	0.00	0.00	33.96	18.77	0.00
Total ACE	0.00	0.00	33.96	18.77	0.00

Capital Cost for 2014-19 tariff period

31. Accordingly, capital cost considered as on 31.3.2019 in respect of the Combined Assets for 2014-19 period is as follows:

Particulars	Apportioned Approved Cost as per RCE	Capital Cost as on 1.4.2014	ACE					Total Capital Cost as on 31.3.2019
			2014-15	2015-16	2016-17	2017-18	2018-19	
Combined Asset (Asset-1 and Asset-2)	8485.76	7795.83	289.62	134.02	25.81	28.89	0.00	8274.17
Combined Asset (Asset-3 to Asset-11)	95319.24	88967.63	2787.65	855.07	820.02	605.98	68.79	94105.14

Debt-Equity Ratio

32. The details of debt-equity ratio in respect of Combined Assets as on 1.4.2014 and as on 31.3.2019 are as follows:

Combined Asset (Asset-1 and Asset-2)	As on 1.4.2014		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ in lakh)		(₹ in lakh)	
Debt	5457.08	70.00	5791.92	70.00
Equity	2338.75	30.00	2482.25	30.00
Total	7795.83	100.00	8274.17	100.00
Combined Asset (Asset-3 to Asset-11)	As on 1.4.2014		As on 31.3.2019	
	Amount	(in %)	Amount	(in %)
	(₹ in lakh)		(₹ in lakh)	
Debt	62528.36	70.28	66124.63	70.27
Equity	26439.27	29.72	27980.51	29.73
Total	88967.63	100.00	94105.14	100.00

Depreciation

33. Depreciation has been allowed as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. Depreciation has been allowed considering capital expenditure as on 1.4.2014 and approved ACE during 2014-19 tariff period. The Gross Block during 2014-19 tariff period has been depreciated at Weighted Average Rate of Depreciation (WAROD) and working of WAROD is given at Annexure-I of the present order. Depreciation for 2014-19 tariff period is trued-up in respect of the Combined Assets as per the



methodology provided in Regulation 27 of the 2014 Tariff Regulations and the same is as follows:

(₹ in lakh)

Combined Asset (Asset-1 and Asset-2)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block (A)	7795.83	8085.45	8219.47	8245.28	8274.17
ACE (B)	289.62	134.02	25.81	28.89	0.00
Closing Gross Block (C)=(A+B)	8085.45	8219.47	8245.28	8274.17	8274.17
Average Gross Block (E)=[(A+C)/2]	7940.64	8152.46	8232.38	8259.73	8274.17
Weighted Average Rate of Depreciation (WAROD) (in %) (D)	5.00	4.99	4.98	4.98	4.98
Aggregate Depreciable Value	6808.07	6998.71	7070.63	7095.24	7108.25
Balance useful life of the asset (Year)	26.00	25.00	24.00	23.00	22.00
Lapsed Life (Year)	1.00	2.00	3.00	4.00	5.00
Depreciation during the year (F)=(E*D)	397.01	406.51	409.89	411.18	411.86
Cumulative depreciation at the end of the year	952.23	1358.74	1768.63	2179.80	2591.66
Remaining Depreciable Value at the end of the year	5855.84	5639.97	5302.00	4915.44	4516.58

(₹ in lakh)

Combined Asset (Asset-3 to Asset-11)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation					
Opening Gross Block (A)	88967.63	91755.28	92610.35	93430.37	94036.35
ACE (B)	2787.65	855.07	820.02	605.98	68.79
Closing Gross Block (C)=(A+B)	91755.28	92610.35	93430.37	94036.35	94105.14
Average Gross Block (D)=[(A+C)/2]	90361.46	92182.82	93020.36	93733.36	94070.75
Weighted Average Rate of Depreciation (WAROD) (in %) (E)	5.13	5.12	5.11	5.11	5.11
Aggregate Depreciable Value	79288.05	80927.28	81681.07	82322.77	82626.41
Balance useful life of the asset (Year)	29.00	28.00	27.00	26.00	25.00
Lapsed Life (Year)	0.00	1.00	2.00	3.00	4.00
Depreciation during the year (F)=(E*D)	4631.95	4718.07	4757.08	4793.86	4810.94
Cumulative depreciation at the end of the year	8646.96	13365.03	18122.11	22915.97	27726.91
Remaining Depreciable	70641.09	67562.25	63558.96	59406.80	54899.51



Value at the end of the year					
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34. The details of depreciation allowed in respect of the Combined Asset (Asset-1 and Asset-2) vide order dated 21.3.2016 in Petition No. 16/TT/2015 and for Combined Asset (Asset-3 to Asset-11) vide order dated 27.12.2019 in Petition No. 234/TT/2018, claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

(₹ in lakh)

Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset (Asset-1 and Asset-2)	Allowed vide order dated 21.3.2016 in Petition No. 16/TT/2015	401.28	417.07	417.07	417.07	417.07
	Claimed by the Petitioner in the instant petition	397.01	406.51	409.89	411.18	411.87
	Approved after truing up in this order	397.01	406.51	409.89	411.18	411.86
Combined Asset (Asset-3 to Asset-11)	Allowed vide order dated 27.12.2019 in Petition No. 234/TT/2018	4632.01	4718.09	4757.10	4804.31	4830.32
	Claimed by the Petitioner in the instant petition	4655.92	4742.13	4781.21	4818.00	4835.09
	Approved after truing up in this order	4631.95	4718.07	4757.08	4793.86	4810.94

Interest on Loan (“IoL”)

35. The Petitioner has prayed for change in interest rates prevailing as on 1.4.2019 for respective loans. The change in interest rate is due to floating rate of interest applicable for the project to be claimed/adjusted over a period of 5 years directly from the beneficiaries. We have considered the submissions of the Petitioner and calculated IoL based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. IoL has been worked out as follows:

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



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

36. The details of IoL calculated in respect of the Combined Assets are as follows:

(₹ in lakh)

Combined Asset (Asset-1 and Asset-2)						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Gross Normative Loan	5457.08	5659.82	5753.63	5771.70	5791.92
B	Cumulative Repayments up to Previous Year	555.22	952.23	1358.74	1768.63	2179.80
C	Net Loan-Opening (A-B)	4901.86	4707.59	4394.89	4003.07	3612.12
D	Addition due to ACE	202.73	93.81	18.07	20.22	0.00
E	Repayment during the year	397.01	406.51	409.89	411.18	411.86
F	Net Loan-Closing (C+D-E)	4707.59	4394.89	4003.07	3612.12	3200.26
G	Average Loan [(A+F)/2]	4804.72	4551.24	4198.98	3807.60	3406.19
H	Weighted Average Rate of Interest on Loan (in %)	9.167	9.160	9.166	9.168	9.168
I	Interest on Loan (GxH)	440.46	416.87	384.89	349.09	312.28

(₹ in lakh)

Combined Asset (Asset-3 to Asset-11)						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Gross Normative Loan	62528.36	64479.72	65078.27	65652.28	66076.47
B	Cumulative Repayments up to Previous Year	4015.01	8646.96	13365.03	18122.11	22915.97
C	Net Loan-Opening (A-B)	58513.35	55832.76	51713.24	47530.18	43160.51
D	Addition due to ACE	1951.36	598.55	574.01	424.19	48.15
E	Repayment during the year	4631.95	4718.07	4757.08	4793.86	4810.94
F	Net Loan-Closing (C+D-E)	55832.76	51713.24	47530.18	43160.51	38397.72
G	Average Loan [(A+F)/2]	57173.05	53773.00	49621.71	45345.34	40779.11
H	Weighted Average Rate of Interest on Loan (in %)	9.177	9.144	9.115	9.058	9.040
I	Interest on Loan (GxH)	5246.80	4916.97	4522.85	4107.28	3686.41

37. The details of IoL allowed in respect of the Combined Asset (Asset-1 and Asset-2) vide order dated 21.3.2016 in Petition No. 16/TT/2015, and for Combined Asset (Asset-3 to Asset-11) vide order dated 27.12.2019 in Petition



No. 234/TT/2018, claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

(₹ in lakh)						
Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset (Asset-1 and Asset-2)	Allowed vide order dated 21.3.2016 in Petition No. 16/TT/2015	452.87	442.69	404.73	366.55	328.28
	Claimed by the Petitioner in the instant petition	439.51	415.93	383.95	348.14	311.33
	Approved after truing up	440.46	416.87	384.89	349.09	312.28
Combined Asset (Asset-3 to Asset-11)	Allowed vide order dated 27.12.2019 in Petition No. 234/TT/2018	5246.90	4929.95	4545.07	4162.54	3753.13
	As claimed by the Petitioner in the instant petition	5224.34	4892.40	4496.20	4078.61	3655.58
	Approved after truing up in this order	5246.80	4916.97	4522.85	4107.28	3686.41

Return on Equity ("RoE")

38. The Petitioner has claimed RoE in respect of the Combined Assets 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 the following effective tax rates for 2014-19 tariff period:

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

39. The Commission, vide order dated 27.4.2020 in Petition No. 274/TT/2019, had 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 the rate of RoE for trueing up of the tariff of 2014-19 period in terms of the provisions of the 2014 Tariff Regulations.

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

40. The Petitioner has also requested the Commission to allow it to claim the differential tariff on account of the trueed-up RoE based on effective tax rate calculated on completion of Income Tax Assessment/ Re-assessment for 2014-15, 2015-16, 2016-17, 2017-18 and 2018-19 on receipt of the respective assessment orders, directly from the beneficiaries, on year-to-year basis as provided under the 2014 Tariff Regulations.

41. We have considered the submissions of the Petitioner. RoE allowed in respect of the Combined Assets is as follows:

(₹ in lakh)

Combined Asset (Asset-1 and Asset-2)						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Equity	2338.75	2425.64	2465.84	2473.58	2482.25
B	Addition due to ACE	86.89	40.21	7.74	8.67	0.00
C	Closing Equity (A+B)	2425.64	2465.84	2473.58	2482.25	2482.25
D	Average Equity [(A+B)/2]	2382.19	2445.74	2469.71	2477.91	2482.25
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (Pre-tax)	19.610	19.705	19.705	19.705	19.758
H	Return on Equity (Pre-tax)	467.15	481.93	486.66	488.27	490.44



(₹ in lakh)

Combined Asset (Asset-3 to Asset-11)						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Equity	26439.27	27275.56	27532.08	27778.09	27959.88
B	Addition due to ACE	836.29	256.52	246.01	181.79	20.64
C	Closing Equity (A+B)	27275.56	27532.08	27778.09	27959.88	27980.51
D	Average Equity [(A+B)/2]	26857.42	27403.82	27655.08	27868.98	27970.19
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	20.961	21.342	21.342	21.342	21.549
G	Rate of Return on Equity (Pre-tax)	19.610	19.705	19.705	19.705	19.758
H	Return on Equity (Pre-tax)	5266.74	5399.92	5449.43	5491.58	5526.35

42. The details of RoE allowed in respect of the Combined Asset (Asset-1 and Asset-2) vide order dated 21.3.2016 in Petition No. 16/TT/2015 and in respect of the Combined Asset (Asset-3 to Asset-11) vide order dated 27.12.2019 in Petition No. 234/TT/2018, as claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

(₹ in lakh)						
Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset (Asset-1 and Asset-2)	Allowed vide order dated 21.3.2016 in Petition No. 16/TT/2015	477.87	502.45	502.45	502.45	502.45
	As claimed by the Petitioner in the instant petition	467.17	481.96	486.68	488.30	490.44
	Approved after truing up in this order	467.15	481.93	486.66	488.27	490.44
Combined Asset (Asset-3 to Asset-11)	Allowed vide order dated 27.12.2019 in Petition No. 234/TT/2018	5266.74	5373.89	5423.16	5476.81	5506.35
	As claimed by the Petitioner in the instant petition	5317.80	5451.23	5500.74	5542.90	5577.52
	Approved after truing up in this order	5266.74	5399.92	5449.43	5491.58	5526.35

Operation & Maintenance Expenses ("O&M Expenses")



43. The O&M Expenses claimed by the Petitioner in respect of the Combined Assets are as follows:

Combined Asset (Asset-1 and Asset-2)						
Transmission Lines						
Sl. No.	Name of the Line	Single Circuit / Double Circuit	Number of Sub-Conductors	Line Length km		
1	LILO of 1 st Ckt. of 400 kV Bawana-Bahadurgarh – Hissar Line at Bhiwani Sub-station	Double Circuit	2	13.325		
Sl. No.	400 kV Sub-station bay					
1	Bhiwani: ICT-1 & ICT-2 Bay					
Sl. No.	220 kV Sub-station bay					
1	Bhiwani: ICT-1 & ICT-2 Bay					
O&M Expenses						
		2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station						
220 kV						
Number of bays		8	8	8	8	8
400 kV						
Number of bays		2	2	2	2	2
Transmission lines						
Double Circuit (D/C) Twin/Triple Conductor (km)		13.325	13.325	13.325	13.325	13.325
Total O&M Expense (₹ in lakh)		467.70	483.22	499.28	515.81	532.96

Combined Asset (Asset-3 to Asset-11)				
Transmission lines				
Sl. No.	Name of Line	Single Circuit / Double Circuit	No of Sub- Conductors	Line Length km
1	LILO of 400 kV D/C Bareilly – Mandola at Meerut	Double Circuit	2	111.107
2	400 kV D/C LILO of Hissar- Bawana Line at Bhiwani	Double Circuit	2	15.515
3	400 kV S/C (Bundled Conductor) Meerut-Bhiwani Line	Single Circuit	4	173.692
Sl. No.	400 kV Sub-station bay			
1	Meerut: Bareilly-1 & 2			
2	Meerut: Mandola 1 & 2			



Sl. No.	400 kV Sub-station bay				
3	Bhiwani: ICT-I & II Bay				
4	Bhiwani: Bahadurgarh Bay				
5	Bhiwani: Bhiwani (BBMB) Bay				
6	Bhiwani: Bawana Bay				
7	Bhiwani: Hissar Bay				
Sl. No.	765 kV Sub-station bay				
1	Bhiwani: ICT-I& II Bay				
2	Bhiwani: Moga Bay				
3	Bhiwani: Bus Reactor 1 & 2				
4	Bhiwani: Jattikara Bay				
5	Bhiwani: Meerut Bay				
6	Meerut: Bhiwani Bay				
7	Meerut: Meerut L/R _Bhiwani_Bhiwani				
O&M Expenses					
	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station					
765 kV					
Number of bays	9	9	9	9	9
400 kV					
Number of bays	10	10	10	10	10
Transmission lines					
S/C (Bundle Conductor- 4 sub-conductor) (km)	173.692	173.692	173.692	173.692	173.692
Double Circuit (Twin/Triple Conductor) (km)	126.622	126.622	126.622	126.622	126.622
Total O&M Expenses (₹ in lakh)	1557.56	1609.45	1662.76	1718.06	1774.98

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

Combined Asset (Asset-1 and Asset-2)						
Element	UoM	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
220 kV Sub-station	₹ lakh/bay	42.21	43.61	45.06	46.55	48.10
D/C Twin/Triple Conductor	₹ lakh/km	0.71	0.73	0.76	0.78	0.81



Combined Asset (Asset-3 to Asset-11)						
Element	UoM	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
765 kV Sub-station	₹ lakh/bay	84.42	87.22	90.12	93.11	96.20
D/C Twin/Triple Conductor	₹ lakh/km	0.71	0.73	0.76	0.78	0.81
S/C (Bundle Conductor- 4 sub-conductor)	₹ lakh/km	0.61	0.63	0.65	0.67	0.69

45. The Petitioner has submitted that it has inadvertently considered line length of LILO of Hissar-Bawana Line at Bhiwani with respect to Asset-6 of 7.7575 km instead of actual length of 15.515 km in Petition No. 234/TT/2018. In the instant Petition the Petitioner has corrected the said line length.

46. We have considered the submissions of the Petitioner. The Petitioner has not submitted any documentary evidence to show that the actual line length of LILO of Hissar-Bawana Line at Bhiwani is 15.515 km. The Petitioner is directed to submit CEA Energization Certificate/any other relevant document to show that the line length of Hissar-Bawana Line at Bhiwani is 15.515 km, pertaining to Asset-6, at the time of truing up of 2019-24 tariff period. The O&M Expenses approved in respect of Combined Assets under Regulation 29(3) of the 2014 Tariff Regulations are as follows:

(₹ in lakh)

Combined Asset (Asset-1 and Asset-2)					
Details	2014-15	2015-16	2016-17	2017-18	2018-19
2 Numbers of 400 kV Sub-station bays	120.60	124.60	128.74	133.02	137.42
8 Numbers of 220 kV Sub-station bays	337.68	348.88	360.48	372.40	384.80
13.325 km D/C Twin/Triple Conductor transmission line	9.42	9.74	10.06	10.39	10.74
Total	467.70	483.22	499.28	515.81	532.96



(₹ in lakh)

Combined Asset (Asset-3 to Asset-11)					
Details	2014-15	2015-16	2016-17	2017-18	2018-19
10 Numbers of 400 kV Sub-station bays	603.00	623.00	643.70	665.10	687.10
9 Numbers of 765 kV Sub-station bays	759.78	784.98	811.08	837.99	865.80
126.622 km D/C Twin/Triple Conductor transmission line	89.52	92.56	95.60	98.77	102.06
173.692 km S/C Bundle Conductor 4 sub-conductors	105.26	108.90	112.38	116.20	120.02
Total	1557.56	1609.45	1662.76	1718.06	1774.98

47. The details of O&M Expenses allowed in respect of the Combined Asset- (Asset-1 and Asset-2) vide order dated 21.3.2016 in Petition No. 16/TT/2015, and in respect of the Combined Asset (Asset-3 to Asset-11) vide order dated 27.12.2019 in Petition No. 234/TT/2018, claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

(₹ in lakh)

Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset (Asset-1 and Asset-2)	Allowed vide order dated 21.3.2016 in Petition No. 16/TT/2015.	467.70	483.22	499.28	515.81	532.96
	Claimed by the Petitioner in the instant petition	467.70	483.22	499.28	515.81	532.96
	Approved after truing up in this order	467.70	483.22	499.28	515.81	532.96
Combined Asset (Asset-3 to Asset-11)	Allowed vide order dated 27.12.2019 in Petition No. 234/TT/2018	1552.07	1603.77	1656.90	1712.00	1768.73
	Claimed by the Petitioner in the instant petition	1557.56	1609.44	1662.76	1718.05	1774.98
	Approved after truing up in this order	1557.56	1609.45	1662.76	1718.06	1774.98

Interest on Working Capital ("IWC")



48. The Petitioner has claimed IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations.

49. IWC allowed in respect of the Combined Assets is as follows:

(₹ in lakh)

Combined Asset (Asset-1 and Asset-2)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Working Capital for O&M Expenses (O&M Expenses for one month)	38.98	40.27	41.61	42.98	44.41
Working Capital for Maintenance Spares (15% of O&M Expenses)	70.16	72.48	74.89	77.37	79.94
Working Capital for Receivables (Equivalent to two months of annual fixed cost/annual transmission charges)	304.70	307.55	306.30	303.60	300.82
Total	413.83	420.30	422.80	423.95	425.18
Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
Interest of Working Capital	55.87	56.74	57.08	57.23	57.40

(₹ in lakh)

Combined Asset (Asset-3 to Asset-11)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Working Capital for O&M Expenses (O&M Expenses one month)	129.80	134.12	138.56	143.17	147.91
Working Capital for Maintenance Spares (15% of O&M Expenses)	233.63	241.42	249.41	257.71	266.25
Working Capital for Receivables (Equivalent to two months of annual fixed cost /annual transmission charges)	2856.29	2846.56	2803.84	2756.16	2703.26
Total	3219.72	3222.10	3191.81	3157.04	3117.42
Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
Interest of Working Capital	434.66	434.98	430.89	426.20	420.85

50. The details of IWC allowed in respect of the Combined Asset (Asset-1 and Asset-2) vide order dated 21.3.2016 in Petition No. 16/TT/2015, and for Combined Asset (Asset-3 to Asset-11) vide order dated 27.12.2019 in Petition



No. 234/TT/2018, claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

(₹ in lakh)						
Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset (Asset-1 and Asset-2)	Allowed vide order dated 21.3.2016 in Petition No. 16/TT/2015	56.50	58.05	58.06	58.10	58.16
	Claimed by the Petitioner in the instant petition	55.85	56.72	57.06	57.21	57.38
	Approved after truing up in this order	55.87	56.74	57.08	57.23	57.40
Combined Asset (Asset-3 to Asset-11)	Allowed vide order dated 27.12.2019 in Petition No. 234/TT/2018	434.36	434.37	430.48	427.04	422.03
	Claimed by the Petitioner in the instant petition	435.87	436.15	432.02	427.28	421.88
	Approved after truing up in this order	434.66	434.98	430.89	426.20	420.85

Approved Annual Fixed Charges for 2014-19 Tariff Period

51. Accordingly, Annual Fixed Charges (AFC) approved in respect of the Combined Assets after truing-up of tariff for 2014-19 period are as follows:

(₹ in lakh)					
Combined Asset (Asset-1 and Asset-2)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	397.01	406.51	409.89	411.18	411.86
Interest on Loan	440.46	416.87	384.89	349.09	312.28
Return on Equity	467.15	481.93	486.66	488.27	490.44
O & M Expenses	467.70	483.22	499.28	515.81	532.96
Interest on Working Capital	55.87	56.74	57.08	57.23	57.40
Total	1828.18	1845.28	1837.80	1821.58	1804.94



(₹ in lakh)

Combined Asset (Asset-3 to Asset-11)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	4631.95	4718.07	4757.08	4793.86	4810.94
Interest on Loan	5246.80	4916.97	4522.85	4107.28	3686.41
Return on Equity	5266.74	5399.92	5449.43	5491.58	5526.35
O&M Expenses	1557.56	1609.45	1662.76	1718.06	1774.98
Interest on Working Capital	434.66	434.98	430.89	426.20	420.85
Total	17137.71	17079.39	16823.02	16536.98	16219.53

52. The details of AFC allowed for Combined Asset (Asset-1 and Asset-2) vide order dated 21.3.2016 in Petition No. 16/TT/2015, and for Combined Asset (Asset-3 to Asset-11) vide order dated 27.12.2019 in Petition No. 234/TT/2018, claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

(₹ in lakh)

Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset (Asset-1 and Asset-2)	Allowed vide order dated 21.3.2016 in Petition No. 16/TT/2015	1856.22	1903.48	1881.59	1859.98	1838.92
	Claimed by the Petitioner in the instant petition	1827.24	1844.34	1836.86	1820.64	1803.98
	Approved after truing up in this order	1828.18	1845.28	1837.80	1821.58	1804.94
Combined Asset (Asset-3 to Asset-11)	Allowed vide order dated 27.12.2019 in Petition No. 234/TT/2018	17132.08	17060.07	16812.71	16582.70	16280.56
	Claimed by the Petitioner in the instant petition	17191.49	17131.35	16872.93	16584.84	16265.05
	Approved after truing up in this order	17137.71	17079.39	16823.02	16536.98	16219.53

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2019-24 TARIFF PERIOD

53. The Petitioner has combined all the transmission assets into single Combined Asset. The Petitioner has also submitted combined tariff forms in



respect of Combined Asset. Accordingly, as per proviso (i) of Regulation 8(1) of 2019 Tariff Regulations, single tariff for the Combined Asset has been worked out for the 2019-24 tariff period.

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

(₹ in lakh)					
Particulars	2019-20	2020-21	201-22	2022-23	2023-24
Depreciation	5250.07	5219.96	5219.27	5219.27	5219.27
Interest on Loan	3494.33	3018.50	2549.59	2079.05	1607.80
Return on Equity	5772.45	5776.16	5777.57	5777.57	5777.57
Interest on Working Capital	324.81	321.67	318.48	315.43	311.78
O&M Expenses	2443.90	2529.12	2617.94	2710.77	2804.72
Total	17285.56	16865.41	16482.85	16102.09	15721.14

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

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M expenses	203.66	210.76	218.16	225.90	233.73
Maintenance Spares	366.59	379.37	392.69	406.62	420.71
Receivables	2125.28	2079.30	2032.13	1985.19	1932.93
Total	2695.53	2669.43	2642.98	2617.71	2587.37
Rate of Interest on working capital (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	324.81	321.67	318.48	315.43	311.78

Effective Date of Commercial Operation (E-COD)

56. The Petitioner has claimed E-COD of the Combined Asset as 19.3.2013. Based on the trued-up admitted capital cost and actual COD of all the individual transmission assets, E-COD has been worked out as follows:



Computation of E-COD						
Assets	Actual COD	Admitted Capital Cost as on 31.3.2019	Weight of the cost (in %)	Number of Days from last COD	Weighted Days	E-COD (Latest COD – Total weighted Days)
Combined Asset (Asset-1 and Asset-2)	8.9.2012	8274.17	8.08	209.00	16.89	19.3.2013
Combined Asset (Asset-3 to Asset-11)	5.3.2013	94105.14	91.92	0.00	0.00	

57. E-COD is used to determine the lapsed life of the project as a whole which works out as six (6) year as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD).

Weighted Average Life (“WAL”)

58. Life as defined in Regulation 33 of the 2019 Tariff Regulations has been considered for determination of WAL.

59. The Combined Asset may have multiple elements such as land, building, transmission line, sub-station and PLCC and each element may have different span of life. Therefore, the concept of WAL has been used as the useful life of the project as a whole.

60. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as stipulated in the 2019 Tariff Regulations. The element-wise life as defined in the 2014 Tariff Regulations prevailing at the time of actual COD of individual assets has been ignored for this purpose. Life as defined in the 2019 Tariff Regulations has been considered for determination of WAL. Accordingly, WAL of the Combined Asset has been worked out as 29 years and the same is as follows:



Admitted Capital Cost as on 31.3.2019				
Particulars	Combined Asset Cost	Life as per 2019 Regulation (Years) (2)	Weighted Cost (3)=[(1)x(2)]	Weighted Average Life of Asset (in years) (4)=[(3)/(1)]
	(₹ in lakh) (1)			
Building	2458.73	25	61468.25	
Transmission Line	44780.98	35	1567334.30	
Sub-station	51718.48	25	1292962.00	
PLCC	547.45	15	8211.75	
Leasehold Land	0.00	25	0.00	
IT Equipment and software	233.93	7	1559.53	
Total	99739.57		2931535.83	29.39 years rounded off to 29 years

61. WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. for 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed in the preceding paragraphs, E-COD of the Combined Asset is 19.3.2013 and lapsed life of the project as a whole, works out as six (6) years as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 29 years.

Capital Cost

62. 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.*

(1) *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 Asset-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.

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

(a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;

(b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;

(c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;

(d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;

(e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and

(f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries."



(3) *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.

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

(a) The Asset-forming part of the project, but not in use, as declared in the tariff petition;

(b) De-capitalised Asset-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 asset.

(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."

63. The capital cost of ₹102405.83 lakh in respect of the Combined Asset has been considered as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

Initial Spares

64. As stated in the relevant portion of this order above, Initial Spares for 2009-14 and 2014-19 period were allowed on the basis of cost of individual assets. The transmission assets covered in the transmission project have been combined during 2019-24 tariff period, and, therefore, Initial Spares are allowed on the basis



of overall project cost in terms of the APTEL's judgement dated 14.9.2019 in Appeal No. 74 of 2017.

65. Accordingly, Initial Spares allowed for 2019-24 tariff period are as follows:

Sub-station		(₹ in lakh)				
	Capital Cost claimed	Norms as per 2009 Tariff Regulations	Initial Spares claimed	Initial Spares admissible	Initial Spares allowed during 2009-14	Initial Spares allowed on Combined Asset
		(in %)				
Asset-2	7199.9	2.50	72.65	184.61	72.65	20.69*
Asset-3	1469.79	2.50	36.21	37.69	36.21	
Asset-4	1469.79	2.50	36.21	37.69	36.21	
Asset-5	18729.09	2.50	376.95	468.69	376.95	
Asset-6	1648.5	2.50	24.16	42.27	24.16	
Asset-7	1939.41	2.50	36.08	49.73	36.08	
Asset-8	10232.56	2.50	233.28	262.37	233.28	
Asset-9	10068.5	2.50	208.04	258.17	208.04	
Asset-10	5110.94	2.50	118.67	131.05	118.67	
Asset-11	195.33	2.50	25.06	4.37	4.37	
Combined Asset	58063.81		1167.31	1476.64	1146.62	

* Additional Initial Spares of (₹1167.31-₹1146.62=₹20.69) are allowed for Sub-station of the Combined Asset.

Transmission Line		(₹ in lakh)				
Assets	Capital Cost claimed	Norms as per 2009 Tariff Regulations	Initial Spares Claimed	Initial Spares admissible	Initial Spares allowed during 2014-19	Initial Spares allowed on Combined Asset
		(in %)				
Asset-1	1218.54	0.75	0	9.21	0	5.83*
Asset-6	1555.13	0.75	12.24	11.66	11.66	
Asset-8	28922.06	0.75	222.13	216.88	216.88	
Combined Asset	31695.73		234.37	237.75	228.54	

* Additional Initial Spares of (₹ 234.37-228.54=₹5.83) are allowed for Transmission Line of the Combined Asset



66. Thus, in line with the APTEL's judgement dated 14.9.2019 in Appeal No. 74 of 2017, additional Initial Spares of ₹20.69 lakh for sub-station and ₹5.83 lakh for transmission line are admissible and the same have been allowed.

67. Capital cost considered in respect of the Combined Asset as on 1.4.2019 is as follows:

(₹ in lakh)		
Total Capital Cost (as on 31.3.2019)	Additional Initial Spares allowed (as on 1.4.2014) in terms of the APTEL's judgement dated 14.9.2019	Total Capital Cost (as on 1.4.2019)
102379.31	26.52	102405.83

Additional Capital Expenditure ("ACE")

68. Regulation 24 and Regulation 25 of the 2019 Tariff Regulations provide as follows:

"24. Additional Capitalization within the original scope and up to 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 ACE 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.”*

69. The Petitioner has claimed ACE in respect of the individual transmission assets during 2019-24 period in accordance with Regulation 25(1)(d) of 2019 Tariff Regulations and the same is as follows:



(₹ in lakh)

Assets	Apportioned Approved Cost as per RCE	Capital Cost as on 31.3.2019	ACE		Total estimated cost as on 31.3.2024
			2019-20	2020-21	
Asset-1	1477.46	1438.77	0.00	0.00	1438.77
Asset-2	7008.3	6835.41	0.00	0.00	6835.41
Combined Asset (Asset-1 and Asset-2)	8485.76	8274.18	0.00	0.00	8274.18
Asset-3	8137.57	7922.28	0.00	25.00	7947.28
Asset-4	8392.29	8170.43	0.00	25.00	8195.43
Asset-5	18797.29	18713.23	77.09	0.00	18790.32
Asset-6	3247.30	3203.63	0.00	0.00	3203.63
Asset-7	2010.07	1939.41	0.00	0.00	1939.41
Assets-8	39217.99	38862.88	4.45	0.00	38867.33
Assets-9	10148.36	10065.54	0.00	0.00	10065.54
Assets-10	5153.04	5110.94	0.00	0.00	5110.94
Assets-11	215.33	143.34	0.00	0.00	143.34
Combined Asset (Asset-3 to Asset-11)	95319.24	94131.68	81.54	50.00	94263.22
Combined Asset (Asset-1 to Asset-11)	103805.00	102405.86	81.54	50.00	102537.40

70. We have considered the submissions of the Petitioner. ACE in the case of Asset-3, Asset-4, Asset-5 and Asset-8 claimed during 2019-20 and 2020-21 is on account of balance and retention payments due to un-discharged liability for works executed before the cut-off date and is allowed under Regulation 25(1)(d) of the 2019 tariff Regulations which is subject to true-up. ACE in respect of the Combined Asset is considered as follows:

(₹ in lakh)

Regulations	ACE	
	2019-20	2020-21
Regulation 25(1)(d) of the 2019 Tariff Regulations	81.54	50.00



Capital cost for 2019-24 tariff period

71. Accordingly, the capital cost of the Combined Asset considered for 2019-24 tariff period, subject to truing-up, is as follows:

(₹ in lakh)		
Capital Cost allowed as on 1.4.2019	ACE allowed for 2019-24 period	Total Estimated Completion Cost up to 31.3.2024
102405.83	131.54	102537.37

72. Against the overall apportioned approved capital cost as per RCE of ₹103805.00 lakh, the estimated project cost of the Combined Asset as on 31.3.2024 is within the apportioned approved cost as per RCE.

Debt-Equity Ratio

73. Regulation 18 of the 2019 Tariff Regulations provide 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 utilized 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.

(6) Any expenditure incurred for the emission control system during the tariff period as may be admitted by the Commission as additional capital expenditure for determination of supplementary tariff, shall be serviced in the manner specified in clause (1) of this Regulation.”

74. The details of debt-equity ratio considered in respect of the Combined Asset for the purpose of tariff for 2019-24 tariff period is as follows:

Combined Asset	(₹ in lakh)			
	Capital Cost as on 1.4.2019 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	71935.18	70.25	72027.26	70.24
Equity	30470.65	29.75	30510.11	29.76
Total	102405.83	100.00	102537.37	100.00

Depreciation

75. 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 upto 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 de-capitalized asset during its useful services.

(9) Where the emission control system is implemented within the original scope of the generating station and the date of commercial operation of the generating station or unit thereof and the date of operation of the emission control system are the same, depreciation of the generating station or unit thereof including the emission control system shall be computed in accordance with Clauses (1) to (8) of this Regulation.

(10) Depreciation of the emission control system of an existing or a new generating station or unit thereof where the date of operation of the emission control system is subsequent to the date of commercial operation of the generating station or unit thereof, shall be computed annually from the date of operation of such emission control system based on straight line method, with salvage value of 10%, over a period of-

- a) twenty five years, in case the generating station or unit thereof is in operation for fifteen years or less as on the date of operation of the emission control system; or*
- b) balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more than fifteen years as on the date of operation of the emission control system; or*
- c) ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof has completed its useful life.*

76. IT equipment has been considered as a part of the Gross Block and depreciated using WAROD. WAROD has been worked out, placed as Annexure-2 to this order, 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 nil, i.e. IT asset has been considered as 100 per cent depreciable. Depreciation has been worked out considering ACE as on 31.3.2019 and accumulated depreciation up to 31.3.2019. Depreciation allowed in respect of the Combined Asset is as follows:



(₹ in lakh)						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Gross Block	102405.83	102487.37	102537.37	102537.37	102537.37
B	Addition during 2019-24 period due to projected ACE	81.54	50.00	0.00	0.00	0.00
C	Closing Gross Block (A+B)	102487.37	102537.37	102537.37	102537.37	102537.37
D	Average Gross Block [(A+C)/2]	102446.60	102512.37	102537.37	102537.37	102537.37
E	Average Gross Block (90% depreciable assets)	99572.93	99638.70	99663.70	99663.70	99663.70
F	Average Gross Block (100% depreciable assets)	233.93	233.93	233.93	233.93	233.93
G	Depreciable value (excluding IT equipment and software) (E*90%)	89615.64	89674.83	89697.33	89697.33	89697.33
H	Depreciable value of IT equipment and software	233.93	233.93	233.93	233.93	233.93
I	Total Depreciable Value (G+H)	89849.57	89908.76	89931.26	89931.26	89931.26
J	Weighted average rate of Depreciation (WAROD) (in %)	5.12	5.12	5.12	5.12	5.12
K	Lapsed useful life at the beginning of the year (Year)	6	7	8	9	10
L	Balance useful life at the beginning of the year (Year)	23	22	21	20	19
M	Depreciation during the year (D*J)	5250.08	5253.05	5254.37	5254.37	5251.23
N	Aggregate Cumulative Depreciation at the end of the year	35568.65	40821.70	46076.06	51330.43	56581.66
O	Remaining Aggregate Depreciable Value at the end of the year (I-N)	54280.92	49087.06	43855.20	38600.83	33349.60

Interest on Loan (“IoL”)

77. Regulation 32 of the 2019 Tariff Regulations provide 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 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.

(5a) *The rate of interest on loan for installation of emission control system shall be the weighted average rate of interest of actual loan portfolio of the emission control system or in the absence of actual loan portfolio, the weighted average rate of interest of the generating company 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”.*

78. We have considered the submissions of the Petitioner. The weighted average rate of IoL has been considered on the basis of the 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. In view of the above, IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed in respect of the Combined Asset is as follows:

		(₹ in lakh)				
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Gross Normative Loan	71935.18	71992.26	72027.26	72027.26	72027.26
B	Cumulative Repayments up to Previous Year	30318.57	35568.65	40821.70	46076.06	51330.43
C	Net Loan-Opening (A-B)	41616.62	36423.62	31205.57	25951.20	20696.83
D	Addition due to ACE	57.08	35.00	0.00	0.00	0.00
E	Repayment during the year	5250.08	5253.05	5254.37	5254.37	5251.23
F	Net Loan-Closing (C+D-E)	36423.62	31205.57	25951.20	20696.83	15445.60
G	Average Loan [(A+F)/2]	39020.12	33814.59	28578.38	23324.02	18071.22
H	Weighted Average Rate of Interest on Loan (in %)	9.0437	9.0241	9.0260	9.0284	9.0282
I	Interest on Loan (GxH)	3528.88	3051.45	2579.48	2105.80	1631.51

Return on Equity ("RoE")

79. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provide 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 on account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%.

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.”

(3) The return on equity in respect of additional capitalization on account of emission control system shall be computed at the base rate of one year marginal cost of lending rate (MCLR) of the State Bank of India as on 1st April of the year in which the date of operation (ODe) occurs plus 350 basis point, subject to ceiling of 14%.”

“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.”

80. RoE allowed in respect of the Combined Asset under Regulation 30 of the 2019 Tariff Regulation is as follows:

		(₹ in lakh)				
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Equity	30470.65	30495.11	30510.11	30510.11	30510.11
B	Addition due to ACE	24.46	15.00	0.00	0.00	0.00
C	Closing Equity (A+B)	30495.11	30510.11	30510.11	30510.11	30510.11
D	Average Equity [(A+B)/2]	30482.88	30502.61	30510.11	30510.11	30510.11
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782
H	Return on Equity (Pre-tax)	5725.29	5729.00	5730.41	5730.41	5730.41

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

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



Combined Asset					
Transmission lines					
Sl. No.	Name of Line	Single Circuit / Double Circuit	Number of Sub-Conductors	Line Length km	
1	1 st LILO of 00 kV D/C Bawana-Bahadurgarh – Hissar Line at Bhiwani Sub-station	Double Circuit	2	13.325	
2	LILO of 400 kV D/C Bareilly-Mandola at Meerut	Double Circuit	2	111.107	
3	LILO of Hissar-Bawana Line at Bhiwani	Double Circuit	2	15.515	
4	Meerut-Bhiwani Line	Single Circuit	4	173.692	
Sl. No.	400 kV Sub-station bay				
1	Bhiwani: ICT-1 & ICT-2 Bay				
2	Meerut: Bareilly-1 & 2				
3	Meerut: Mandola 1 & 2				
4	Bhiwani: ICT-I & ICT-II Bay				
5	Bhiwani: Bahadurgarh Bay				
6	Bhiwani: Bhiwani (Bbmb) Bay				
7	Bhiwani: Bawana Bay				
8	Bhiwani: Hissar Bay				
Sl. No.	220 kV Sub-station bay				
1	Bhiwani: Line-I to VI Bay				
2	Bhiwani: ICT-1 & ICT-2 Bay				
Sl. No.	765 kV ICT				
1	Bhiwani: Bhiwani ICT-I & ICT-II				
Sl. No.	400 kV ICT				
1	Bhiwani: ICT-1 & ICT-2 Bay				
Sl. No.	765 kV Sub-station bay				
1	Bhiwani: ICT-I & ICT-II Bay				
2	Bhiwani: Moga Bay				
3	Bhiwani: Bus Reactor 1 & 2				
4	Bhiwani: Jattikara Bay				
5	Bhiwani: Meerut Bay				
6	Meerut: Bhiwani Bay				
7	Meerut: Meerut L/R _Bhiwani_Bhiwani				
O&M Expenses					
	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station					
220 kV					
Number of bays	8	8	8	8	8
400 kV					



Number of bays	12	12	12	12	12
765 kV					
Number of bays	9	9	9	9	9
Transmission lines					
S/C Bundle Conductor – 4-sub-conductors (km)	173.692	173.692	173.692	173.692	173.692
D/C Twin/Triple Conductor (km)	139.947	139.947	139.947	139.947	139.947
Transformer					
765 kV (MVA)	2000	2000	2000	2000	2000
400 kV (MVA)	630	630	630	630	630
PLCC					
Original project cost (₹ in lakh)	547.45	547.45	547.45	547.45	547.45
Total O&M Expense (₹ in lakh)	2437.06	2522.05	2610.60	2703.19	2796.87

82. Regulation 35(3)(a) and Regulation 35(4) of the 2019 Tariff Regulations provide as follows:

(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 (Rs 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 (Rs 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 (Rs 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	2.319	2.401	2.485	2.572	2.662



<i>four or more sub-conductor)</i>					
<i>Multi Circuit (Twin & Triple Conductor)</i>	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
<i>HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)</i>	834	864	894	925	958
<i>Gazuwaka HVDC Back-to-Back station (Rs. Lakh per 500 MW)</i>	1,666	1,725	1,785	1,848	1,913
<i>500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)</i>	2,252	2,331	2,413	2,498	2,586
<i>±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)</i>	2,468	2,555	2,645	2,738	2,834
<i>±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)</i>	1,696	1,756	1,817	1,881	1,947
<i>±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh)(3000 MW)</i>	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 (2500 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.”*

83. 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.

84. We have considered the submissions of the Petitioner. O&M Expenses have been worked out as per the norms specified in the 2019 Tariff Regulations and the same is as follows:

	(₹ in lakh)				
Details	2019-20	2020-21	2021-22	2022-23	2023-24
9 (Nine) numbers of 765 kV Sub-station bays	405.09	419.40	434.07	449.37	465.12
12 (Twelve) numbers of 400 kV Sub-station bays	385.80	399.36	413.40	427.92	442.92
8 (Eight) numbers of 220 kV Sub-station bays	180.08	186.40	192.96	199.68	206.72



Details	2019-20	2020-21	2021-22	2022-23	2023-24
2000 MVA of 765 kV Transformer	982.00	1016.00	1052.00	1090.00	1128.00
630 MVA of 400 kV Transformer	225.54	233.73	241.92	250.74	258.93
173.692 km S/C Bundle Conductor -4 sub conductor	131.14	135.65	140.52	145.38	150.59
139.947 km D/C Twin/Triple Conductor	123.29	127.63	132.11	136.73	141.49
Total	2432.94	2518.18	2606.98	2699.82	2793.77

Interest on Working Capital (“IWC”)

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

“34. Interest on Working Capital: (1) *The working capital shall cover:*

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

(i) Receivables equivalent to 45 days of annual 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. Definition - *In these regulations, unless the context otherwise requires:-*

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



86. The Petitioner has submitted that it has computed IWC for 2019-24 period considering the bank rate as on 1.4.2019. IWC has been 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) for 2019-20, Rate of Interest (RoI) for 2020-21 onwards has been considered as 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points), whereas, RoI for 2021-22 onwards has been considered 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 allowed thereon in respect of the Combined asset are as follows:

(₹ in lakh)					
Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for O&M Expenses (Equivalent to annualized O&M Expenses for one month)	202.75	209.85	217.25	224.98	232.81
Working Capital for Maintenance Spares (Equivalent to 15% of O&M Expenses)	364.94	377.73	391.05	404.97	419.07
Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	2122.30	2077.58	2027.84	1980.55	1927.59
Total Working Capital	2689.98	2665.16	2636.13	2610.51	2579.47
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
Interest on working capital	324.14	299.83	276.79	274.10	270.84

Annual Fixed Charges for 2019-24 Tariff Period

87. Annual Fixed Charges (AFC) allowed in respect of the Combined Asset for 2019-24 tariff period are as follows:



(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	5250.08	5253.05	5254.37	5254.37	5251.23
Interest on Loan	3528.88	3051.45	2579.48	2105.80	1631.51
Return on Equity	5725.29	5729.00	5730.41	5730.41	5730.41
O&M Expenses	2432.94	2518.18	2606.98	2699.82	2793.77
Interest on Working Capital	324.14	299.83	276.79	274.10	270.84
Total	17261.34	16851.50	16448.02	16064.49	15677.76

Annual Lease Rent

88. The Petitioner in the instant petition has submitted that as per Haryana State R&R Policy, the following amount is payable as annuity for 2014-19 tariff period to the landowners:

(₹ in lakh)

Year	Amount
2014-15	22.05 (Actual)
2015-16	22.76 (Actual)
2016-17	0.00 (Actual)
2017-18	23.35 (Actual)
2018-19	32.97 (Actual)

89. The Petitioner has submitted that the Commission vide order dated 27.12.2019 in Petition No. 234/TT/2018 has allowed recovery of annual lease rent from the Respondents on monthly basis for the remaining lease period. The Petitioner in the instant true-up petition has submitted the details of the annual lease rent paid during 2009-14 and 2014-19 tariff periods duly certified by the Auditor and the same is as follows:

(₹ in lakh)

Year	Amount
2011-12	57.92
2012-13	34.46
2013-14	5.60
2014-15	22.05
2015-16	22.76
2016-17	0.00
2017-18	23.35
2018-19	32.97



90. Further, the Petitioner has submitted that out of total annuity of ₹1278.32 lakh, annuity of ₹1079.20 lakh has to be paid for the next twenty-five years.

91. The Petitioner has prayed for allowing the recovery of annual lease rent for 2014-19 tariff period and for remaining 25 years as prayed for.

92. We have considered the submissions of the Petitioner. The Commission vide order dated 27.12.2019 in Petition No. 234/TT/2018 had allowed the reimbursement of annuity payments to be recovered from the beneficiaries directly. Relevant excerpts of order dated 27.12.2019 in Petition No. 234/TT/2018 are as follows:

"84. We have considered the submissions of the Petitioner and noted that in the review petition no. 11/RP/2015 in petition no. 99/TT/2012 (covering the Asset-1 to Asset-8 of the instant petition), the Commission has allowed the review on these grounds. The relevant extracts of the Order dated 2.9.2015 is reproduced below:

"10. We have considered the submissions made by learned counsel for the petitioner, BRPL and documents available on record. The Commission in its order dated 16.7.2007 in Review Petition No. 73/2007 has allowed annuity payment for Dhaulinganga transmission system to be recovered from respondents. The relevant extract from the order is as follows: -

"12. We are satisfied that the petitioner is to pay lease rent to the State Government on annual basis @ Rs. 230.67 lakh. The amount of lease rent paid for the first year has already been capitalized. We direct that the amount payable during the next 29 years will be recovered by the petitioner from the respondent on monthly basis for the remaining lease period, that is, 29 years, while raising the bills for the transmission charges for the transmission line approved by the Commission. The amount recovered shall be regularized on production of evidence for payment of the lease rent by the petitioner to the State Government."

11. As per the above decision, the petitioner was allowed to recover the lease rent on annuity basis. Though the petitioner had made a similar claim in this petition with regard to the payment of annuity to the landowners over a period of 31 years in its affidavit dated 17.10.2014 which was also taken note of in RoP dated 13.11.2014, the said information could not be considered while passing the impugned order. This in our view is an error apparent on the face of record and accordingly, the review is allowed on this ground."

85. Accordingly, the Petitioner is entitled to recover the amount of annual lease rent from the respondent on monthly basis for the remaining lease period, that is, 27 years, while raising the bills for the transmission charges for the transmission



line approved by the Commission. The amount recovered shall be regularized on production of evidence for payment of the lease rent by the Petitioner.”

93. The Petitioner has submitted the computation of annuity payment duly certified by the Auditor in the instant petition. Accordingly, the annuity payments made up to 2018-19 are allowed to be recovered from the beneficiaries. Thereafter, from 2019-20 onward, the Petitioner shall claim the payments directly from the beneficiaries for the remaining annuity payments after submitting proper proof of payments.

Filing Fee and Publication Expenses

94. 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 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 and RLDC Fees and Charges

95. 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

96. 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 Respondents 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.

97. 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

98. 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.

99. We have considered the above submissions of Petitioner. The Petitioner has claimed consolidated security expenses for all the transmission assets owned by it 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 and the Commission and has approved security expenses from 1.4.2019 to 31.3.2024. 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

100. 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

101. 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. With effect from 1.11.2020, the 2010 Sharing Regulations has been repealed and sharing of transmission charges is governed by the provisions of the 2020 Sharing Regulations. Accordingly, the liabilities of DICs for arrears of transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and Sharing Regulations and shall be recovered from the concerned DICs through Bill 2 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 provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

102. To summarise:

- a) The trued-up AFC allowed in respect of the Combined Assets for 2014-19 tariff period are as follows:

(₹ in lakh)

Combined Asset (Asset-1 and Asset-2)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	1828.18	1845.28	1837.80	1821.58	1804.94



(₹ in lakh)

Combined Asset (Asset-3 to 11)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
AFC	17137.71	17079.39	16823.02	16536.98	16219.53

b) AFC allowed in respect of the Combined Asset for 2019-24 tariff period in the instant order are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset	17261.34	16851.50	16448.02	16064.49	15677.76

103. Annexure-I and Annexure-II given hereinafter form part of the order.

104. This order disposes of Petition No. 680/TT/2020 in terms of the above discussion and findings.

sd/-
(P. K. Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(P.K. Pujari)
Chairperson



2014-19

Annexure-I

Combined Asset -
(Asset-1 and Asset-2) -
True-Up

(₹ in lakh)

Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE 2014-19					Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land	376.12	0.00	0.00	0.00	0.00	0.00	376.12	0.00	0.00	0.00	0.00	0.00	0.00
Building	108.73	94.48	79.02	7.92	8.05	0.00	298.20	3.34	5.21	8.11	9.56	9.83	9.96
Transmission Line	1431.49	0.00	0.00	0.00	7.28	0.00	1438.77	5.28	75.58	75.58	75.58	75.77	75.97
Sub Station	5819.68	195.14	55.00	17.89	13.56	0.00	6101.27	5.28	312.43	319.03	320.96	321.79	322.15
PLCC	59.81	0.00	0.00	0.00	0.00	0.00	59.81	6.33	3.79	3.79	3.79	3.79	3.79
Total	7795.83	289.62	134.02	25.81	28.89	0.00	8274.17		397.01	406.51	409.89	411.18	411.86
Weighted Average Rate of Depreciation (in %)									5.00	4.99	4.98	4.98	4.98
Average Gross Block (₹ in lakh)									7940.64	8152.46	8232.38	8259.73	8274.17



2014-19

**Combined Asset
(Asset-3 to Asset-11)
True-Up**

(₹ in lakh)

Particulars	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE 2014-19					Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land	2263.62	0.00	0.00	0.00	0.00	0.00	2263.62	0.00	0.00	0.00	0.00	0.00	0.00
Building	992.32	549.02	492.48	47.54	46.51	32.66	2160.53	3.34	42.31	59.71	68.72	70.29	71.62
Transmission Line	41815.86	590.60	110.76	507.24	317.75	0.00	43342.21	5.28	2223.47	2241.99	2258.30	2280.08	2288.47
Sub Station	43194.00	1641.53	247.97	262.10	235.48	36.13	45617.21	5.28	2323.98	2373.86	2387.33	2400.46	2407.63
PLCC	469.68	6.50	2.08	3.14	6.24	0.00	487.64	6.33	29.94	30.21	30.37	30.67	30.87
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34	0.00	0.00	0.00	0.00	0.00
IT Equipment and software	232.15	0.00	1.78	0.00	0.00	0.00	233.93	15.00	12.26	12.30	12.35	12.35	12.35
Total	88967.63	2787.65	855.07	820.02	605.98	68.79	94105.14		4631.95	4718.07	4757.08	4793.86	4810.94
Weighted Average Rate of Depreciation (in %)									5.13	5.12	5.11	5.11	5.11
Average Gross Block (₹ in lakh)									90361.46	92182.82	93020.36	93733.36	94070.75



Determination
combined assets

Particulars	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE 2014-19					Admitted Capital Cost as on 1.4.2024 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations				
		2019- 20	2020- 21	2021- 22	2022- 23	2023- 24			2019-20	2020-21	2021-22	2022-23	2023-24
Land	2639.74	0.00	0.00	0.00	0.00	0.00	2639.74	0.00	0.00	0.00	0.00	0.00	0.00
Building	2458.73	52.30	0.00	0.00	0.00	0.00	2511.03	3.34	82.99	83.87	83.87	83.87	83.87
Transmission Line	44786.81	0.00	50.00	0.00	0.00	0.00	44836.81	5.28	2364.74	2366.06	2367.38	2367.38	2367.38
Sub Station	51739.17	29.24	0.00	0.00	0.00	0.00	51768.41	5.28	2732.60	2733.37	2733.37	2733.37	2733.37
PLCC	547.45	0.00	0.00	0.00	0.00	0.00	547.45	6.33	34.65	34.65	34.65	34.65	34.65
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34	0.00	0.00	0.00	0.00	0.00
IT Equipment and software	233.93	0.00	0.00	0.00	0.00	0.00	233.93	5.28	35.09	35.09	35.09	35.09	31.96
Total	102405.83	81.54	50.00	0.00	0.00	0.00	102537.37		5250.08	5253.05	5254.37	5254.37	5251.23
Weighted Average Rate of Depreciation (in %)									5.12%	5.12%	5.12%	5.12%	5.12%
Average Gross Block (₹ in lakh)									102446.60	102512.37	102537.37	102537.37	102537.37

