

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 84/TT/2020

Coram:

Shri P. K. Pujari, Chairperson

Shri I. S. Jha, Member

Shri Arun Goyal, Member

Date of Order:08.02.2021

In the Matter of:

Approval under Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations 1999 and truing up of transmission tariff of the 2014-19 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 in respect of Combined Assets consisting of **Asset-I:** Pole-I of +/- 500 kV, 2500 MW Balia-Bhiwadi HVDC bipole; **Asset-II:** Pole-II of +/- 500 kV, 2500 MW Balia-Bhiwadi HVDC bipole; **Asset- III:** LILO of Kahalgaon-Patna 400 kV D/C (Quad) line at Barh Sub-station; **Asset-IV:** 765 kV S/C Seoni-Bina Transmission Line and **Asset-V:** Barh-Balia 400 kV D/C Quad Transmission line along-with associated bays at Balia Sub-station covered under the Barh Transmission System in the Northern, Eastern and Western Region.

And in the Matter of:

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

.....**Petitioner**

Vs

Eastern Region Beneficiaries:

1. Bihar State Power (Holding) Company Ltd.,
(Formerly Bihar State Electricity Board -BSEB),
Vidyut Bhavan, Bailey Road, Patna-800001.
2. West Bengal State Electricity Distribution Company Ltd.,
Bidyut Bhawan, Bidhan Nagar,
Block DJ, Sector-II, Salt Lakecity,
Calcutta-700091.



3. Grid Corporation of Orissa Ltd.,
Shahid Nagar, Bhubaneswar-751007.
4. Jharkhand State Electricity Board,
In Front of Main Secretariat,
Doranda, Ranchi-834002.
5. Damodar Valley Corporation,
DVC Tower, Maniktala,
Civic Centre, VIP Road, Calcutta-700054.
6. Power Department,
Government of Sikkim, Gangtok-737101.

Northern Region and Western Region Beneficiaries

1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd.,
Vidyut Bhawan, Vidyut Marg, Jaipur-302005.
2. Ajmer Vidyut Vitran Nigam Ltd.,
400 kV GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur- 302005.
3. Jaipur Vidyut Vitran Nigam Ltd.,
400 kv GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur-302005.
4. Jodhpur Vidyut Vitran Nigam Ltd.,
400 Kv GSS Building (Ground Floor), Ajmer Road,
Heerapura, Jaipur-302005.
5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171004.
6. Punjab State Power Corporation Ltd.,
Thermal Shed Tia, Near 22 Phatak,
Patiala-147001.
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula (Haryana)-134109.
8. Power Development Department,
Government of Jammu & Kashmir,
Mini Secretariat, Jammu.
9. Uttar Pradesh Power Corporation Ltd.,
(Formerly Uttar Pradesh State Electricity Board)
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226001.



10. Delhi Transco Ltd.,
Shakti Sadan,
Kotla Road, New Delhi-110002.
11. BSES Yamuna Power Ltd,
BSES Bhawan, Nehru Place,
New Delhi.
12. BSES Rajdhani Power Ltd.,
BSES Bhawan, Nehru Place,
New Delhi.
13. North Delhi Power Ltd.,
Power Trading & Load Dispatch Group,
Cennet Building, Adjacent To 66/11 kV Pitampura-3,
Grid Building, Near PP Jewellers,
Pitampura, New Delhi-110034.
14. Chandigarh Administration,
Sector-9, Chandigarh.
15. Uttarakhand Power Corporation Ltd.,
Urja Bhawan, Kanwali Road,
Dehradun.
16. North Central Railway,
Allahabad.
17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110002.
18. Madhya Pradesh Audyogik Kendra,
Vikas Nigam (Indore) Ltd.,
3/54, Press Complex, Agra-Bombay Road,
Indore-452008.
19. Chhattisgarh State Electricity Board,
P.O.Sunder Nagar, Dangania, Raipur
Chhatisgaarh-492013.
20. Electricity Department,
Administration of Dadra Nagar Haveli,
U.T., Silvassa-396230.
21. Electricity Department,
Administration of Daman & Diu,
Daman-396210.
22. Electricity Department,
Government of Goa, Vidyut Bhawan,
Panaji, Near Mandvi Hotel, Goa-403001.



23. Gujarat Urja Vikas Nigam Ltd.,
Sardar Patel Vidyut Bhawan,
Race Course Road,
Vadodara-390007.

24. Maharashtra State Electricity Distribution Co. Ltd.,
Prakashgad, 4th Floor,
Andheri (East), Mumbai-400052.

25. Madhya Pradesh Power Management Company Ltd.,
Shakti Bhawan, Rampur,
Jabalpur-482008.

26. National Thermal Power Corporation,
4th Floor, 06th Core,
NTPC Bhawan, Scope Complex,
Institutional Area , Lodhi Road, Delhi-110003.

...Respondent(s)

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

For Respondent: Shri R. B. Sharma, Advocate, BRPL

ORDER

The instant petition has been filed by Power Grid Corporation of India Ltd. (hereinafter referred to as the “Petitioner”), a deemed transmission licensee, for truing up of transmission tariff of the 2014-19 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and for determination of tariff of the 2019-24 tariff period under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of following assets under the “Barh Transmission System in the Northern, Eastern and Western Region” (hereinafter referred to as ‘the transmission system’):



Asset-I: Pole-I of + 500 kV, 2500 MW Ballia – Bhiwadi HVDC Bipole;

Asset-II: Pole-II of + 500 kV, 2500 MW Ballia – Bhiwadi HVDC Bipole;

Asset-III: LILO of Kahalgaon-Patna 400 kV D/C (Quad) line at Barh Sub-station;

Asset-IV: 765 kV S/C Seoni-Bina Transmission Line; and

Asset-V: Barh-Ballia 400 kV D/C (Quad) line along-with associated bays at Ballia Sub-station.

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

“1) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 10.2 and 11.0 above.

2) Approve the Completion cost and additional capitalization incurred during 2014-19.

3) Allow the Petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 10.2 and 11.0 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 11.6 above.

8) Allow the petition to claim initial spares on overall project basis.

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

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 the Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice."

Background

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

a) The Investment Approval (IA) for the transmission system was accorded by the Ministry of Power, Government of India vide letter dated 12.12.2005 at an estimated cost of ₹377945 lakh including IDC of ₹17941 lakh. Further, Revised Cost Estimate (RCE) of the transmission system was approved by the Board of Directors of the Petitioner vide Memorandum Ref. C/CP/RCE dated 23.1.2012 for ₹428259.00 lakh including an IDC of ₹41326.00 lakh (based on 1st Quarter 2011 price level).

b) The scope of work covered under the transmission system i.e. "Barh Transmission System in the Northern, Eastern and Western Region" is as under:

Transmission line

- i. LILO of Bina - Nagda at Shujalpur
- ii. LILO of Kahalgaon-Patna 400 kV D/C (Quad) line at Barh
- iii. Barh-Ballia 400 kV D/C (Quad) line
- iv. Ballia-Bhiwadi 2500 MW± 500 kV HVDC Bipole line
- v. Seoni-Bina 765 kV S/C line (to be initially charged at 400 kV)
- vi. Two nos. 66 kV Earth Electrode lines (one each at Ballia and Bhiwadi 02 conductors of Twin Moose for each line)

Sub-stations

- i. Ballia 400 kV Sub-station Extension
- ii. Bhiwadi 400/220 kV Sub-station Extension
- iii. Seoni 400 kV Sub-station Extension
- iv. Bina 400 kV Switching Station Extension
- v. Ballia and Bhiwadi Converter Stations including Earth Electrode Stations and Repeater Stations
- vi. Barh 400 kV Switchyard extension (NTPC) – Provision of Power Line Carrier Communication.

c) The entire scope covered in the transmission scheme is completed and all the assets are covered in the instant petition.



d) The date of commercial operation of the assets along with the time over-run covered in the instant petition are as under:

Particulars	Asset	SCOD	COD	Time over-run	Time over-run condoned
Combined Asset-I	Asset-I	1.10.2009	1.9.2010	11 months	11 months
	Asset-II	1.10.2009	1.7.2012	33 months	21 months
Combined Asset-II	Asset-III	1.10.2010	1.11.2009	Nil	-
	Asset-IV	1.10.2010	1.4.2010	Nil	-
	Asset-V	1.10.2009	1.9.2011*	23 Months [#]	17 months

*The Commission vide order dated 30.6.2015 in Petition No. 267/2010 and 227/TT/2013 re-determined the COD as 1.9.2011 for Asset-V.

[#]The Commission also directed NTPC to bear the IDC and IEDC for 6 months i.e. from 1.7.2010 to 31.12.2010.

e) The Commission vide order dated 30.6.2015 in Petition No. 267/2010 and Petition No. 227/TT/2013, revised final transmission tariff based on the admitted capital cost of ₹73594.00 lakh as on COD in respect of Asset-V. Additional Capital Expenditure of ₹300.70 lakh and ₹400 lakh for the years 2012-13 and 2013-14 respectively was disallowed and restricted to revised approved apportioned cost i.e. ₹73594.00 lakh.

f) The tariff from COD to 31.3.2014 for the transmission assets was allowed vide order dated 20.1.2014 in Petition No. 150/TT/2013; order dated 4.2.2014 in Petition No. 96/TT/2012; order dated 18.2.2014 in Petition No. 152/TT/2013; order dated 8.6.2011 in Petition No. 238/2010; and order dated 30.6.2015 in Petition Nos. 267/2010 and 227/TT/2013 in accordance with the 2009 Tariff Regulations. Further, the tariff for the 2009-14 tariff period was trued up and tariff for the 2014-19 tariff period was allowed vide order dated 30.3.2016 in Petition No. 31/TT/2015 (Asset-I, Asset-II, Asset-III and Asset-IV) and order dated 31.10.2017 in Petition No. 91/TT/2017 (Asset-V). The Petitioner has claimed the trued up transmission tariff as under:

(₹ in lakh)						
Asset	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-I	Annual Fixed Charges (AFC) approved vide order dated 30.3.2016 in Petition No.	34691.14	34994.23	34883.25	34789.51	34715.41



	31/TT/2015					
	Claimed by the Petitioner based on true-up in the instant petition	34673.65	35170.75	35913.17	36159.10	36871.57
Asset-III	AFC approved <i>vide</i> order dated 30.3.2016 in Petition No. 31/TT/2015	2899.54	2809.31	2719.14	2629.07	2539.07
	Claimed by the Petitioner based on true-up in the instant petition	2912.84	2827.60	2736.89	2646.83	2559.78
Asset-IV	AFC approved <i>vide</i> order dated 30.3.2016 in Petition No. 31/TT/2015	5546.19	5489.74	5430.96	5374.34	5319.42
	Claimed by the Petitioner based on true-up in the instant petition	5568.07	5551.27	5607.90	5578.83	5599.78
Asset-V	AFC approved <i>vide</i> order dated 31.10.2017 in Petition No. 91/TT/2017	11788.69	11478.26	11169.77	10863.23	10557.87
	Claimed by the Petitioner based on true-up in the instant petition	11796.25	11532.04	11321.58	11053.24	10848.70

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

5. The Petitioner has served the petition on the Respondents and notice has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No suggestions/ objections have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. Notice dated 12.3.2020 directing the beneficiaries/ Respondents to file reply in the matter were also posted on Commission's website. BSES Rajdhani Power Limited



(BRPL), Respondent No. 12, has filed its reply *vide* affidavit dated 12.3.2020 wherein it has raised the issues of OPGW, capital cost as on 1.4.2014, proposed Additional Capital Expenditure (ACE), Return on Equity (RoE), adoption of Indian Accounting Standard 101, computation of income tax, Deferred Tax Liability, recovery of tax on truing-up exercise of RoE, applicability and recovery of GST, Interest on Working Capital (IWC), recovery of security expenses, passing of tax benefits to consumers and recovery of application filing fee and expenses. Uttar Pradesh Power Corporation Ltd. (UPPCL), Respondent No. 9, has filed its reply *vide* affidavit dated 1.6.2020, in which issues like capital cost as on 1.4.2014, proposed ACE during the 2014-19 tariff period, consideration of presumptive MAT rate for grossing up of RoE, error in O&M Expenses for Asset-IV, capital spares and reimbursement of license fees have been raised. Madhya Pradesh Power Management Company Ltd. (MPPMCL), Respondent No. 25, has filed its reply *vide* affidavit dated 17.3.2020, in which issues of grossing up of RoE, effect of CGST and proposed ACE for 2019-20 in Asset-I have been raised. Maharashtra State Electricity Distribution Company Ltd. (MSEDCL), Respondent No. 24, has filed its reply *vide* affidavit dated 19.3.2020, in which issues like effective tax rate for grossing up of RoE, interest on loan, effect of GST and additional taxes have been raised. The Petitioner *vide* affidavits dated 18.3.2020, 24.6.2020, 22.6.2020, and 22.6.2020 has filed rejoinders to the reply of BRPL, UPPCL, MPPMCL and MSEDCL respectively. The issues raised by the Respondents and the clarifications given by the Petitioner have been dealt in the relevant paragraphs of this order. The hearing in this matter was held on 24.6.2020 through video conference and the order was reserved.

6. This order is issued considering the submissions made by the Petitioner in the Petition affidavits dated 12.12.2019, 12.3.2020 and 13.7.2020, BRPL's reply *vide*



affidavit dated 12.3.2020, MPPMCL's reply *vide* affidavit dated 17.3.2020, MSEDCL's reply *vide* affidavit dated 19.3.2020, UPPCL's reply *vide* affidavit dated 1.6.2020 and the Petitioner's rejoinders *vide* affidavits dated 18.3.2020, 22.6.2020, 22.6.2020 and 24.6.2020 respectively.

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

8. BRPL has submitted that representation of consumer's interest and their participation in the tariff determination proceedings is an integral part of the hearing. Referring to Regulation 18 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, BRPL has submitted that some Association, Forum or body Corporate recognized by the Commission may be asked to represent the interest of consumers during hearings of the instant petition. BRPL has further submitted that one of the said agencies may be instructed to represent the consumer's interest in the instant case and the same is also provided for in section 94(3) of the Electricity Act, 2003.

9. We have considered the above submissions of the BRPL. In terms of Regulations 3(6) and (8) of Central Electricity Regulatory Commission (Procedure for Making of Application for Determination of Tariff, Publication of Application and Other Related Matters) Regulations, 2004 (hereinafter referred to as 'the 2004 Application Regulations'). Accordingly, the Petitioner has published Notice in the newspapers and *vide* affidavit dated 27.2.2020 has submitted that it has carried out the publication of the present tariff application in the newspapers dated 2.1.2020 in various languages. Further, the instant petition has been uploaded on the Petitioner's website. The Notice



published in newspaper contained a statement that the application made for determination of tariff is posted on the website of the applicant and the address of the website has also been given. The said Notice contained a statement that “suggestions or objections, if any, on the tariff proposals for determination of tariff may be filed by any person including the beneficiary in the Office of the Secretary, Central Electricity Regulatory Commission with a copy to the applicant at its Corporate Office within 30 days of publication of the notice. No suggestions/objections with regard to the present tariff petitions were received by the Commission before listing of the present petition for hearing. In view of the above, we are of the view that there is no need to engage any agency to represent the interest of consumers.

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

10. The details of the trued up transmission charges claimed by the Petitioner in respect of the transmission assets are as under:

(₹ in lakh)

Combined Asset-I					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	13442.81	13541.15	13544.02	13549.71	13585.16
Interest on Loan	2622.16	2664.65	3217.08	3257.16	3633.80
Return on Equity	15306.79	15487.84	15483.20	15489.57	15570.39
Interest on Working Capital	857.17	873.36	895.41	906.69	928.94
O&M Expenses	2444.72	2603.75	2773.46	2955.97	3153.28
Total	34673.65	35170.75	35913.17	36159.10	36871.57

(₹ in lakh)

Asset-III					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	958.20	958.20	958.20	958.20	958.20
Interest on Loan	757.41	667.12	576.81	486.51	396.21
Return on Equity	1067.97	1072.86	1072.32	1072.32	1075.20
Interest on Working Capital	67.49	65.63	63.66	61.70	59.81
O&M Expenses	61.77	63.79	65.90	68.10	70.36



Total	2912.84	2827.60	2736.89	2646.83	2559.78
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(₹ in lakh)

Asset-IV					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	2173.20	2173.20	2173.20	2173.20	2173.20
Interest on Loan	540.37	502.38	548.66	509.19	511.96
Return on Equity	2422.02	2433.12	2431.89	2431.89	2438.43
Interest on Working Capital	134.66	134.60	136.19	135.88	136.69
O&M Expenses	297.82	307.97	317.96	328.67	339.50
Total	5568.07	5551.27	5607.90	5578.83	5599.78

(₹ in lakh)

Asset-V					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	3926.59	3926.59	3926.59	3926.59	3926.59
Interest on Loan	2836.27	2545.04	2328.26	2052.03	1825.98
Return on Equity	4377.75	4397.83	4395.60	4395.60	4407.42
Interest on Working Capital	277.33	271.78	267.45	261.84	257.67
O&M Expenses	378.31	390.80	403.68	417.18	431.04
Total	11796.25	11532.04	11321.58	11053.24	10848.70

11. The details of Interest on Working Capital (IWC) claimed by the Petitioner in respect of the transmission assets are as under:

(₹ in lakh)

Combined Asset-I					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	203.73	216.98	231.12	246.33	262.77
Maintenance Spares	366.71	390.56	416.02	443.40	472.99
Receivables	5778.94	5861.79	5985.53	6026.52	6145.26
Total Working Capital	6349.38	6469.33	6632.67	6716.25	6881.02
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	857.17	873.36	895.41	906.69	928.94

(₹ in lakh)

Asset-III					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	5.15	5.32	5.49	5.68	5.86
Maintenance Spares	9.27	9.57	9.89	10.22	10.55



Receivables	485.47	471.27	456.15	441.14	426.63
Total Working Capital	499.89	486.16	471.53	457.04	443.04
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	67.49	65.63	63.66	61.70	59.81

(₹ in lakh)

Asset-IV					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	24.82	25.66	26.50	27.39	28.29
Maintenance Spares	44.67	46.20	47.69	49.30	50.93
Receivables	928.01	925.21	934.65	929.80	933.30
Total Working Capital	997.50	997.07	1,008.84	1,006.49	1,012.52
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	134.66	134.60	136.19	135.88	136.69

(₹ in lakh)

Asset-V					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses	31.53	32.57	33.64	34.77	35.92
Maintenance Spares	56.75	58.62	60.55	62.58	64.66
Receivables	1966.04	1922.01	1886.93	1842.21	1808.12
Total Working Capital	2054.32	2013.20	1981.12	1939.56	1908.70
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	277.33	271.78	267.45	261.84	257.67

Effective Date of Commercial Operation (E-COD) of the Combined Asset-I

12. The Petitioner has stated that E-COD of the Combined Asset-I works out to 1.1.2011. Based on the capital cost, as on 31.3.2014, of Asset-I and Asset-II, the E-COD works out as under:

Asset	Capital Cost as on 31.3.2014 (₹ in lakh)	COD	No. of days from COD of Asset from COD of Project	Weight of cost (%)	Weighted days
Asset-I	215010.26	1.9.2010	669	83.38	557.82
Asset-II	42856.25	1.7.2012	0	16.62	0.00
Total	257866.51			100	557.94
Effective COD (latest COD less weighted days)– 21.12.2010					



Weighted Average Life (WAL) of Combined Asset-I

13. The Petitioner has submitted that the capital cost of the sub-station approved for Combined Asset-I as on COD and thereafter for the 2014-19 tariff period included the cost of IT equipment. However, the IT equipment cost has been separated from the sub-station cost while filing the petition for truing-up of tariff of the 2014-19 tariff period.

14. As discussed in subsequent paragraphs of this order, since Asset-I and Asset-II are combined on 1.4.2014, WAL has to be determined considering the admitted capital cost as on 1.4.2014. Hence, the capital cost of IT equipment, as submitted by the Petitioner is considered and adjusted from the sub-station cost as approved as on 1.4.2014 *vide* order dated 30.3.2016 in Petition No. 31/TT/2015. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2014, after adjusting the capital cost of IT equipment from sub-station and their respective useful life as stipulated in the 2014 Tariff Regulations. Accordingly, WAL of the Combined Asset-I has been considered as 28 years as under:

Particulars	Capital Cost as on 31.3.2014 (₹ in lakh)[#] (1)	Life (in years) (2)	Weighted Cost (₹ in lakh) (3) = (1) x (2)	Weighted Avg. Life of Combined Asset-I (in years) (4) = (3)/ (1)
Building & Civil Works	10678.05	25	266951.25	
Transmission Line	88445.67	35	3095598.45	
Sub-station	154808.27	25	3870206.75	
PLCC	577.38	15	8660.70	
IT Equipment (Incl. Software)	629.42	6	3776.52	
Total	255138.79		7245193.67	28.397 (rounded off to 28 years)

[#] Total capital cost as on 31.3.2014 is ₹257866.51 lakh which includes cost of land of ₹2727.72 lakh which is not considered for weighted average life of the assets.



Capital Cost as on 1.4.2019

15. The details of RCE approved apportioned capital cost, capital cost as on 1.4.2014, actual ACE incurred during the 2014-19 tariff period and capital cost as on 31.3.2019 as claimed by the Petitioner are as under:

(₹ in lakh)

Asset	RCE Approved Apportioned Capital Cost	Capital Cost 31.3.2014	Actual ACE during the 2014-19 period	Total Capital Cost as on 31.3.2019
Combined Asset-I	297949.00	258149.46	5107.18	263256.64
Asset-III	18407.00	18140.06	NIL	18140.06
Asset-IV	41559.66	41138.29	NIL	41138.29
Asset-V	77131.03	74356.70	NIL	74356.70
Total	435046.70	391784.51	5107.18	396891.69

16. BRPL has submitted that the Petitioner in the petition has not claimed the capital cost as per order dated 31.3.2016 in Petition No. 31/TT/2015 and has adopted some values for the Asset I & II and Asset-III and Asset-IV as on 31.3.2014 which are not in accordance with the provisions of Regulation 9(3)(a) of the 2014 Tariff Regulations, which prescribes that the capital cost of an existing project shall include capital cost admitted by Commission prior to 1.4.2014 duly trued up by excluding liability, if any, as on 1.4.2014. Thus, the values adopted by Petitioner is more than the values allowed by the Commission and accordingly the same may be disallowed by the Commission being opposed to Tariff Regulations. In response, the Petitioner has submitted that the difference in claimed and actual cost is only due to adding back of initial spares and the same is added back as per APTEL judgement dated 14.9.2019 in petition no. 74 of 2017.

17. We have considered the submissions of the Petitioner and BRPL. It is observed that the estimated completion cost of the transmission assets as on 31.3.2019



including ACE is within the RCE approved apportioned capital cost. Therefore, there is no cost over-run.

Initial Spares

18. Regulation 8 of the 2009 Tariff Regulations provides that Initial Spares shall be capitalized as a percentage of the original project cost, subject to following ceiling norms:

- “(iv) Transmission System
 (a) Transmission line: 0.75%
 (b) Transmission sub-station: 2.5%
 (c) Series Compensation devices and HVDC Station: 3.5%”*

19. The Petitioner has claimed the following Initial Spares for the transmission assets and prayed to revise the Initial Spares allowed earlier in light of the judgement of the Appellate Tribunal for Electricity (APTEL) dated 14.9.2019 in Appeal No. 74 of 2017 as under:

Asset	Capital Cost as on cut-off date (₹ in lakh) (A)	Initial Spares Claimed by the Petitioner (₹ in lakh) (B)	Ceiling limit (%) (C)	Initial Spares worked out by the Petitioner
				$D = [(A-B)*C/(100-C)]$ (₹ in lakh)
For Transmission line				
Combined Asset-I	88445.67	946.29	0.75	661.2
Asset-III	18063.91	173.00	0.75	135.2
Asset-IV	38936.63	0.00	0.75	294.23
Asset-V	73186.85	407.86	0.75	549.97
Total	218633.06	1527.15		1640.6
For Sub-station				
Combined Asset-I	173704.32	4836.94	3.50 (HVDC)	6124.72
Asset-III	38.37	0.00	2.50	0.98
Asset-IV	2098.31	202.42	2.50	48.61
Asset-V	1169.85	20.99	2.50	29.46
Total	177010.85	5060.35		6203.78



20. BRPL has submitted that the APTEL's judgment in Appeal No. 74 of 2017 is not applicable in the instant case since the said judgment pertains to true up of 2009-14 tariff period. In response, the Petitioner vide affidavit dated 18.3.2020 has submitted that the said judgment has allowed the appeal of the Petitioner and has held that Initial Spares have to be seen as a percentage of total project cost and not individual asset costs. The Petitioner has submitted that Initial Spares were deducted during 2009-14 tariff period and hence the Initial Spares disallowed during 2009-14 are added in the opening capital cost as on 1.4.2014.

21. We have considered the submission of the Petitioner and BRPL. APTEL in its judgement dated 14.9.2019 in Appeal No. 74 of 2017 observed that the Commission for the purpose of prudence check may restrict the Initial Spares to the cost of the individual asset and later at the time of truing up allow Initial Spares as per the ceiling limits on the overall project cost. The relevant portion of the said judgement is extracted here as under:

"18.13. 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."

22. Similar issue was raised by the Respondent BRPL in Petition No. 168/TT/2020. The Commission disposed of the objection of the Respondent vide order dated 3.2.2021 and held as under:

"22. APTEL was conscious of the fact that some of the assets in Transmission System associated with Kudankulam Atomic Power Project were put into commercial operation in the 2004-09 and 2009-14 tariff periods and still allowed revision of Initial Spares for the assets put into commercial operation in the 2004-09 and 2009-14 at the time of truing up of the tariff of the 2009-14 tariff period. Moreover, we are of the view that the generic principle laid down by the APTEL in judgement dated 14.9.2019 is that the Commission for the purpose of prudence check may initially restrict the Initial Spares based on individual ceiling limits, but subsequently allow Initial Spares as per the ceiling



limits on the overall project cost basis at the time of truing up and it cannot be restricted to any particular tariff period. Therefore, we are not able to agree with the BRPL's contention that the Initial Spares allowed for the instant assets for the 2009-14 tariff period cannot be revised at the stage of truing up of the tariff of the 2014-19 tariff period."

23. Therefore, Initial Spares are allowed on the basis of the overall project cost in the 2019-24 tariff period when the transmission assets are combined as Combined Asset-I and Combined Asset-II and the overall project cost is arrived at.

Capital Cost

24. The capital cost of the transmission assets has been allowed in accordance with Regulation 9(3) of the 2014 Tariff Regulations. The Commission *vide* order dated 30.3.2016 in Petition No. 31/TT/2015 and order dated 31.10.2017 in Petition No. 91/TT/2017 approved the transmission tariff for the transmission assets for the 2014-19 tariff period based on the admitted capital cost of ₹257866.52 lakh, ₹18102.28 lakh, ₹40987.13 lakh and ₹74356.70 lakh as on 31.3.2014 for Combined Asset-I & II, Asset-III, Asset-IV and Asset-V respectively, and projected ACE of ₹6698.67 lakh and ₹51.50 lakh during the 2014-19 tariff period for the Combined Asset-I and Asset-IV as shown under:

(₹ in lakh)			
Assets	Admitted Capital Cost as on 1.4.2014	Admitted ACE 2014-19	Total Capital Cost as on 31.3.2019
Combined Asset-I	257866.52	6698.67	264656.19
Asset-IV	40987.13	51.50	41038.63

25. The Petitioner has claimed the capital cost as on 1.4.2014 after including the excess Initial Spares disallowed *vide* order dated 30.3.2016 in Petition No. 31/TT/2015 and order dated 31.10.2017 in Petition No. 91/TT/2017. The capital cost as on 1.4.2014 as claimed by the Petitioner in the instant petition is as under:



(₹ in lakh)

Assets	Capital Cost Claimed as on 1.4.2014
Combined Asset-I	258149.46
Asset-III	18140.06
Asset-IV	41138.29
Asset-V	74356.70

26. UPPCL and BRPL have submitted that the Petitioner has claimed higher capital cost for the Combined Asset-I, Asset-III and Asset-IV as on 31.3.2014 as against the approved cost *vide* order dated 31.3.2016 in Petition No. 31/TT/2015. Further, BRPL has prayed to disallow the Petitioner's claim and to allow the capital cost as on 1.4.2014 in accordance with Regulation 9(3) of the 2014 Tariff Regulations. In response, the Petitioner has submitted that the variation in claimed cost *vis-à-vis* the admitted cost as on 31.3.2014 is on account of adding back the Initial Spares as per APTEL's judgement in Petition No. 74 of 2017.

27. We have considered the submissions of the Petitioner and the Respondents, BRPL and UPPCL. The Petitioner has proposed to combine the assets in the 2019-24 tariff period, although Asset-I and Asset-II are being combined in 2014-19 period. Considering that the assets are being combined during 2019-24 period, the excess Initial Spares as claimed by the Petitioner shall be allowed in the 2019-24 tariff period. Therefore, the capital cost as on 1.4.2014 has been considered by deducting the excess Initial Spares from the capital cost as on 1.4.2014 claimed by the Petitioner.

(₹ in lakh)

Assets	Capital Cost Claimed as on 1.4.2014	Excess Initial Spares Disallowed	Capital Cost as on 1.4.2014
Combined Asset-I	258149.46	282.95	257866.51
Asset-III	18140.06	37.78	18102.28
Asset-IV	41138.29	151.16	40987.13
Asset-V	74356.70	0.00	74356.70



Additional Capital Expenditure (ACE)

28. The Commission *vide* order dated 30.3.2016 in Petition No. 31/TT/2015 had allowed ACE of ₹6698.67 lakh and ₹51.50 lakh during the 2014-19 tariff period for the Combined Asset-I and Asset-IV respectively towards balance and retention payments for the works executed within the cut-off date.

29. The Petitioner has claimed ACE of ₹5107.18 lakh for Combined Asset-I during the 2014-19 tariff period on account of balance and retention payments due to un-discharged liability for works executed within the cut-off date in accordance with Regulation 14(1)(i) and 14(3)(v) of the 2014 Tariff Regulations and has not claimed ACE for Asset-III, Asset-IV and Asset-V. The Petitioner has submitted the justification for ACE claimed beyond the cut-off date as under:

Srl. No.	Package	Year	Agency	Amount (₹ in lakh)	Remarks
1	Sub-station Supply & Erection	2014-15	BHEL and Siemens	3634.91	Balance & retention payment covered under Regulation 14(3)(v)
2	Sub-station Supply & Erection	2014-15	Land payment	42.15	
3	Sub-station Supply & Erection	2015-16	BHEL and Siemens	71.48	Balance & retention payment covered under Regulation 14(3)(v)
4	Sub-station Supply & Erection	2016-17		37.22	
5	Sub-station Supply & Erection	2017-18		178.23	
6	Sub-station Supply & Erection	2018-19		1143.19	

30. ACE claimed by the Petitioner has been allowed under Regulation 14(1)(i) and 14(3)(v) of the 2014 Tariff Regulations as it is towards balance and retention payments. The details of the capital cost as on 1.4.2014, ACE allowed during the



2014-19 tariff period and capital cost as on 31.3.2019 for the transmission assets are as under:

(₹ in lakh)

Assets	Capital Cost as on 1.4.2014	ACE allowed during					Total Capital Cost as on 31.3.2019
		2014-15	2015-16	2016-17	2017-18	2018-19	
Combined Asset-I	257866.51	3677.06	71.48	37.22	178.23	1143.19	262973.69
Asset-III	18102.28	0.00	0.00	0.00	0.00	0.00	18102.28
Asset-IV	40987.13	0.00	0.00	0.00	0.00	0.00	40987.13
Asset-V	74356.70	0.00	0.00	0.00	0.00	0.00	74356.70

Debt-Equity ratio

31. The Petitioner has claimed Debt-Equity ratio of 70:30 for the capital cost as on COD and for ACE post-COD. The debt and equity allowed for individual assets for determination of tariff for the period ending 31.3.2014 has been considered as opening debt and equity of the project as on 1.4.2014. The Debt-Equity ratio of 70:30 has been considered for ACE allowed during the 2014-19 period in accordance with Regulation 19(3) of the 2014 Tariff Regulations.

32. The details of the Debt-Equity ratio allowed in respect of Combined Asset-I, Asset-III, Asset-IV and Asset-V as on 1.4.2014 and as on 31.3.2019 are as under:

<u>Combined Asset-I</u>	Capital Cost as on 1.4.2014 (₹ in lakh)	(%)	ACE 2014-19 (₹ in lakh)	(%)	Total Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	180506.56	70.00	3575.03	70.00	184081.58	70.00
Equity	77359.95	30.00	1532.15	30.00	78892.11	30.00
Total	257866.51	100.00	5107.18	100.00	262973.69	100.00
<u>Asset-III</u>	Capital Cost as on 1.4.2014 (₹ in lakh)	(%)	ACE 2014-19 (₹ in lakh)	(%)	Total Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	12671.60	70.00	0.00	70.00	12671.60	70.00
Equity	5430.69	30.00	0.00	30.00	5430.69	30.00



Total	18102.28	100.00	0.00	100.00	18102.28	100.00
<u>Asset-IV</u>	Capital Cost as on 1.4.2014 (₹ in lakh)	(%)	ACE 2014-19 (₹ in lakh)	(%)	Total Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	28690.99	70.00	0.00	70.00	28690.99	70.00
Equity	12296.14	30.00	0.00	30.00	12296.14	30.00
Total	40987.13	100.00	0.00	100.00	40987.13	100.00
<u>Asset-V</u>	Capital Cost as on 1.4.2014 (₹ in lakh)	(%)	ACE 2014-19 (₹ in lakh)	(%)	Total Capital Cost as on 31.3.2019 (₹ in lakh)	(%)
Debt	52049.69	70.00	0.00	70.00	52049.69	70.00
Equity	22307.01	30.00	0.00	30.00	22307.01	30.00
Total	74356.70	100.00	0.00	100.00	74356.70	100.00

Interest on Loan (IoL)

33. The Petitioner has claimed the weighted average rate of IoL, based on its actual loan portfolio and rate of interest. MSEDCL submitted that while calculating the IoL, Weighted Average Rate of Interest (WAROI) should be considered but the Petitioner has considered the rate of interest on loan on annual basis for the period under consideration. In response, the Petitioner has submitted that WAROI is only considered for calculating the tariff as mentioned in Form 9E on annual basis. The Petitioner has further submitted that the methodology for computation of WAROI has already been submitted in Petition No. 435/TT/2019. UPPCL has submitted that since the Petitioner has already negotiated loan portfolios bearing fixed yearly rate of interest, the Petitioner's prayer regarding imposition of floating rate of interest is premature.

34. We have considered the submissions of the Petitioner, MSEDCL and UPPCL. IoL has been calculated based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. IoL allowed in respect of the transmission assets is as under:



(₹ in lakh)

Combined Asset-I					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	180506.56	183080.50	183130.54	183156.59	183281.35
Cumulative Repayments upto Previous Year	42320.92	55687.04	69150.93	82617.69	96090.14
Net Loan-Opening	138185.64	127393.46	113979.61	100538.90	87191.21
Additions	2573.94	50.04	26.05	124.76	800.23
Repayment during the year	13366.12	13463.89	13466.76	13472.45	13507.33
Net Loan-Closing	127393.46	113979.61	100538.90	87191.21	74484.11
Average Loan	132789.55	120686.53	107259.25	93865.06	80837.66
WAROI on Loan (%)	1.9723	2.2064	2.9992	3.4727	4.5035
Interest on Loan	2618.97	2662.80	3216.89	3259.64	3640.55

(₹ in lakh)

Asset-III					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	12671.60	12671.60	12671.60	12671.60	12671.60
Cumulative Repayments upto Previous Year	4179.21	5135.41	6091.62	7047.82	8004.02
Net Loan-Opening	8492.39	7536.19	6579.98	5623.78	4667.58
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	956.20	956.20	956.20	956.20	956.20
Net Loan-Closing	7536.19	6579.98	5623.78	4667.58	3711.37
Average Loan	8014.29	7058.08	6101.88	5145.68	4189.47
WAROI on Loan (%)	9.4207	9.4203	9.4197	9.4188	9.4176
Interest on Loan	755.00	664.89	574.78	484.66	394.55

(₹ in lakh)

Asset-IV					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	28690.99	28690.99	28690.99	28690.99	28690.99
Cumulative Repayments upto Previous Year	8542.80	10708.02	12873.24	15038.47	17203.69
Net Loan-Opening	20148.19	17982.97	15817.75	13652.53	11487.31
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	2165.22	2165.22	2165.22	2165.22	2165.22
Net Loan-Closing	17982.97	15817.75	13652.53	11487.31	9322.08
Average Loan	19065.58	16900.36	14735.14	12569.92	10404.69
WAROI on Loan (%)	2.8192	2.9562	3.7018	4.0259	4.8876
Interest on Loan	537.49	499.60	545.47	506.05	508.54



(₹ in lakh)

Asset-V					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	52049.69	52049.69	52049.69	52049.69	52049.69
Cumulative Repayments upto Previous Year	10092.23	14018.82	17945.40	21871.99	25798.58
Net Loan-Opening	41957.46	38030.87	34104.29	30177.70	26251.11
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	3926.59	3926.59	3926.59	3926.59	3926.59
Net Loan-Closing	38030.87	34104.29	30177.70	26251.11	22324.52
Average Loan	39994.17	36067.58	32140.99	28214.40	24287.82
WAROI on Loan (%)	7.0917	7.0563	7.2439	7.2730	7.5181
Interest on Loan	2836.25	2545.05	2328.25	2052.02	1825.99

35. Accordingly, IoL approved vide orders dated 30.3.2016 in Petition No. 31/TT/2015, and 31.10.2017 in Petition No. 91/TT/2017, claimed by the Petitioner in the instant petition and trued up RoE and allowed in this order are as under:

(₹ in lakh)

Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-I	Approved vide order dated 30.3.2016 in Petition No. 31/TT/2015	2575.41	2335.31	2051.78	1771.88	1495.92
	Claimed by the Petitioner in the instant petition	2622.16	2664.65	3217.08	3257.16	3633.80
	Allowed after true-up in this order	2618.97	2662.80	3216.89	3259.64	3640.55
Asset-III	Approved vide order dated 30.3.2016 in Petition No. 31/TT/2015	755.01	664.89	574.78	484.66	394.55
	Claimed by the Petitioner in the instant petition	757.41	667.12	576.81	486.51	396.21
	Allowed after true-up in this order	755.00	664.89	574.78	484.66	394.55
Asset-IV	Approved vide order dated 30.3.2016 in Petition No.	534.83	466.32	398.55	332.15	267.29



	31/TT/2015					
	Claimed by the Petitioner in the instant petition	540.37	502.38	548.66	509.19	511.96
	Allowed after true-up in this order	537.49	499.60	545.47	506.05	508.54
Asset-V	Approved vide order dated 31.10.2017 in Petition No. 91/TT/2017	2832.24	2515.91	2201.08	1887.51	1574.72
	Claimed by the Petitioner in the instant petition	2836.27	2545.04	2328.26	2052.03	1825.98
	Allowed after true-up in this order	2836.25	2545.05	2328.25	2052.02	1825.99

Return on Equity (RoE)

36. The Petitioner is entitled to RoE for the transmission assets in terms of Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at Minimum Alternate Tax (MAT) rates and has claimed the following effective tax rates for the 2014-19 tariff period as under:

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

37. BRPL has submitted that the information regarding Income Tax Assessment submitted by the Petitioner is in respect of the entire PGCIL and not in respect of the tax on the transmission business in respect of the Northern Region. Accordingly, the said information is not relevant information for the purposes of effective tax rate. BRPL has submitted that on the basis of the financial statements of the Petitioner in public domain, BRPL has worked out the effective tax rate of the Petitioner which stands at



8.70% for 2014-15 and 'NIL' in 2015-16, 2016-17, 2017-18, and 2018-19. BRPL has submitted that the actual tax rate applicable to the transmission licensee was to be trued up along with truing up of tariff to be determined in accordance with Regulation 6 of the 2009 Tariff Regulations and based on the truing up of tariff if the recovered tariff exceeded the tariff approved, the Petitioner should have refunded to beneficiaries along with simple interest. BRPL has submitted that infrastructure transmission companies have been allowed huge tax benefits under the Income Tax Act, 1961 (hereinafter referred to as "1961 Act") in the form of Tax Holiday for enterprises engaged in infrastructure development etc. as per Section 80IA of the 1961 Act and other benefits like higher depreciation allowed in initial years. BRPL has submitted that the Petitioner has already stated on affidavit that the effective tax rate is zero and accordingly the effective tax rate for the earlier tariff period (2009-14) would also be zero since the benefits of the tax holiday under Section 80 IA of the 1961 Act and other benefits like the higher depreciation etc. were also be applicable during in earlier tariff period. Regulation 49 of the 2014 Tariff Regulations restricts the claim of tax amount only to deferred tax liabilities up to 31.3. 2009 whenever it will materialize. BRPL has also submitted that the claims of deferred tax are required to be adjusted for the tariff period 2004-09.

38. In response, the Petitioner *vide* affidavit dated 18.3.2020 has submitted that it has claimed DTL during the 2009-14 tariff period only for the DTL up to 31.3.2009 and materialised. Further, the DTL amount billed/ materialised is not considered while grossing up the RoE. The Petitioner has submitted that it has been paying tax under the provisions of section 115JB of the Income tax Act, 1961 (MAT provisions) and its taxable income is derived as per the MAT provisions from the "Profit Before Tax" as



reported in the financial statements. The Petitioner has further submitted that during FY 2014-15 to FY 2018-19, the Petitioner was liable to pay tax under the provisions of section 115JB of the Income tax Act, 1961, i.e., the entire income of the company was liable to be taxed at Minimum Alternate Tax ('MAT') rate. Therefore, all the income from all streams of business were taxable at a uniform tax rate. The effective tax rate computed by the Respondent is based on the consolidated financial statements of the Company whereas income tax return is filed for the Company on the basis of standalone financial statements. Tax returns of the subsidiaries and joint ventures are filed separately as individual entities.

39. MPPMCL has submitted that the Petitioner has grossed up RoE on the basis of actual taxes paid during 2016-17 and 2017-18 and has not placed on record the assessment orders for 2016-17 and 2017-18. For 2018-19, it has grossed up RoE and has not claimed the effective tax rate based on actual taxes paid for 2018-19. MPPMCL have further submitted that the Petitioner has neither submitted copy of assessment order for the 2014-15 and 2015-16 period nor the audited accounts in respect of actual taxes paid during 2016-17 and 2017-18. In the absence of these essential documents, it is not possible to scrutinize the claim of the Petitioner in a proper way.

40. In response, the Petitioner *vide* affidavit dated 22.6.2020 has submitted that the income tax assessment order has been issued by the Income Tax Department for 2014-15, 2015-16 and 2016-17 and that the Income Tax returns have been filed with the Income Tax Department for the years 2017-18 and 2018-19. The basis of year-wise effective tax rate has been mentioned in the petition and grossed up ROE has been trued up accordingly for the 2014-19 period. The Petitioner has further submitted



that the assessment orders of 2014-15, 2015-16 and 2016-17 have already been submitted in the instant petition. For the 2017-18 and 2018-19, the effective tax rate is calculated based on the applicable MAT rate (i.e. MAT 18.50% + Surcharge 12.00% + Cess 4%), for the purpose of grossing up of RoE rate.

41. MSEDCL has submitted that the Petitioner had submitted grossed up RoE on the basis of actual taxes paid during 2016-17 and 2017-18 and the Petitioner had not submitted the assessment order for 2016-17 and 2017-18. For 2018-19, the claimed grossed up RoE is not on the basis of actual taxes paid for the year. MSEDCL has further submitted that the Petitioner has neither submitted the copy of the assessment order for the FY 2014-15 and 2015-16 nor the audited accounts in respect of actual taxes paid for 2016-17 and 2017-18.

42. In response to MSEDCL's reply, the Petitioner *vide* affidavit dated 22.6.2020 has clarified that it has submitted effective tax rates for all the years of the 2014-19 tariff period. Further, the Petitioner has submitted that from 2014-15 to 2018-19, the Petitioner was liable to pay tax under the provisions of Section 115JB of the Income Tax Act, 1961, i.e., the entire income of the Petitioner company was liable to be taxed at MAT rate. Therefore, income from all streams of business is taxable at a uniform tax rate. The Petitioner has submitted that while computing the adjusted book profits liable to be taxed as income under the MAT provisions, no specific deduction/ exemption/ relief was claimed/ allowed for any specific stream of income. Hence, inclusion/ exclusion of non-transmission income do not impact the computation of effective tax rate used for the purpose of grossing up of RoE. The Petitioner has further submitted that the Income Tax assessment of the Petitioner had been completed and Assessment orders had been issued by the Income Tax Department



for the years 2014-15, 2015-16 and 2016-17 and that the Income Tax returns have been filed with the Income Tax Department for the years 2017-18 and 2018-19. The basis of year wise effective tax rate and grossed up RoE for the 2014-19 period has already been submitted as a part of the instant petition. Further, assessment orders of 2014-15, 2015-16 and 2016-17 have been filed by the Petitioner *vide* affidavit dated 12.3.2020 in reply to Technical Validation letter.

43. UPPCL submitted that the RoE in respect of all the assets covered under this petition is not based on the MAT rates approved by Income Tax authority. In response, the Petitioner has submitted that the tariff for each year of the tariff period 2014-19 is being determined by the Commission considering the effective Tax Percentage to arrive at Grossed up RoE.

44. We have considered the submissions of the Petitioner and the Respondents, BRPL, MSEDCL, MPPMCL and UPPCL. The Commission *vide* order dated 24.1.2021 in Petition No. 136/TT/2020 has already dealt with the concerns of the Respondents.

The relevant paragraphs of the order are extracted as under:

“52. We have considered the contentions of BRPL and UPPCL and the clarifications given by the Petitioner. BRPL has contended that details of the income tax submitted by the Petitioner are in respect of the Petitioner’s company as a whole and it does not pertain to the transmission business in Northern Region. The Petitioner has clarified that every registered company has only one single PAN and it has to file one single return and the Petitioner cannot file income tax separately for each region. BRPL has contended that as per the information available in public domain, the Petitioner has to pay the effective tax rate for 2014-15 @8.70% and for the period 2015-19, it is zero and that the excess recovery made by the Petitioner should be returned to the beneficiaries along with simple interest as provided in Regulation 6 of the 2009 Tariff Regulations. The Petitioner has clarified that the effective tax rate was shown as zero for the period 2015-19 inadvertently due to technical reasons and the Petitioner has paid income tax for the said period. The Petitioner has also clarified that as per the provisions of the 1961 Act, tax has to be computed under normal provisions of Income Tax Rules, 1962 and as per MAT provisions under the section 115JB of the 1961 Act and the assessee will have to pay tax higher of the two. As per the submission, during the tariff period 2014-19, the Petitioner calculated the income tax under regular provisions of the 1961 Act (with tax rates of 33.99% to 34.944%) and the tax was worked out to be lower than the tax payable under MAT rates due to deductions under section 80IA and availability



of accelerated depreciation under Income Tax. Thus, the Petitioner has been assessed and paid tax under MAT. We are satisfied with the clarifications given by the Petitioner and convinced that the Petitioner has acted prudently and has complied with the provisions of the 1961 Act and the provisions of the tariff regulations.

53. As regards UPPCL's contention that the grossed up rate of RoE for the period 2016-17 to 2018-19 is not based on the MAT rates approved by the Income Tax Authorities, it is observed that the effective rate of tax considered by the Petitioner for 2014-15, 2015-16 and 2016-17 are based on Assessment Orders issued by Income Tax authorities and the effective rate of tax considered for 2017-18 and 2018-19 are based on the Income Tax returns filed for the purpose of grossing up the RoE rate of respective years. In view of the clarification given by the Petitioner, we are of the view that there is no merit in the contention of UPPCL."

45. The Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rates for the Petitioner based on the notified MAT. The relevant paragraphs of the order dated 27.4.2020 are extracted as under:

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

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

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

"



46. The same MAT rates as considered in order dated 27.4.2020 in Petition No. 274/TT/2019 are considered for the purpose of grossing up of rate of RoE for truing up of the tariff of the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations, as under:

Year	Notified MAT rates (inclusive of surcharge & cess) (in %)	Base rate of RoE (in %)	Grossed up RoE (Base Rate/1-t) (in %)
2014-15	20.961	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

47. The Petitioner has claimed RoE for the 2014-19 tariff period after grossing up the RoE of 15.50% with Effective Tax rates (based on MAT rates) each year as per the above said Regulation. RoE is trued up on the basis of the MAT rate applicable in the respective years. The following tables show asset-wise RoE allowed in the instant petition followed by RoE approved earlier, claimed by the Petitioner in the instant petition and trued up in this order:

(₹ in lakh)

Combined Asset-I					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	77359.95	78463.07	78484.52	78495.68	78549.15
Additions	1103.12	21.44	11.17	53.47	342.96
Closing Equity	78463.07	78484.52	78495.68	78549.15	78892.11
Average Equity	77911.51	78473.79	78490.10	78522.42	78720.63
RoE (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	21.342	21.342	21.342	21.549
Rate of RoE (%)	19.610	19.705	19.705	19.705	19.758
RoE	15278.80	15463.62	15466.84	15473.20	15553.23

(₹ in lakh)

Asset-III					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	5430.69	5430.69	5430.69	5430.69	5430.69



Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	5430.69	5430.69	5430.69	5430.69	5430.69
Average Equity	5430.69	5430.69	5430.69	5430.69	5430.69
RoE (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	21.342	21.342	21.342	21.549
Rate of RoE (%)	19.610	19.705	19.705	19.705	19.758
RoE	1064.98	1070.14	1070.14	1070.14	1072.97

(₹ in lakh)

Asset-IV					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	12296.14	12296.14	12296.14	12296.14	12296.14
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	12296.14	12296.14	12296.14	12296.14	12296.14
Average Equity	12296.14	12296.14	12296.14	12296.14	12296.14
RoE (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	21.342	21.342	21.342	21.549
Rate of RoE (%)	19.610	19.705	19.705	19.705	19.758
RoE	2411.33	2423.01	2423.01	2423.01	2429.41

(₹ in lakh)

Asset-V					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	22307.01	22307.01	22307.01	22307.01	22307.01
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	22307.01	22307.01	22307.01	22307.01	22307.01
Average Equity	22307.01	22307.01	22307.01	22307.01	22307.01
RoE (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
MAT Rate for respective year (%)	20.961	21.342	21.342	21.342	21.549
Rate of RoE (%)	19.610	19.705	19.705	19.705	19.758
RoE	4374.50	4395.70	4395.70	4395.70	4407.31

48. Accordingly, details of RoE approved vide earlier orders dated 30.3.2016 in Petition No. 31/TT/2015 and 31.10.2017 in Petition No. 91/TT/2017, claimed by the Petitioner in the instant petition and tried up and allowed RoE in this order for the 2014-19 tariff period are as follows:

(₹ in lakh)

Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
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Combined Asset-I	Approved vide order dated 30.3.2016 in Petition No. 31/TT/2015	15367.33	15564.37	15564.37	15564.37	15564.37
	Claimed by the Petitioner in the instant petition	15306.79	15487.84	15483.20	15489.57	15570.39
	Allowed after true-up in this order	15278.80	15463.62	15466.84	15473.20	15553.23
Asset-III	Approved vide order dated 30.3.2016 in Petition No. 31/TT/2015	1064.96	1064.96	1064.96	1064.96	1064.96
	Claimed by the Petitioner in the instant petition	1067.97	1072.86	1072.32	1072.32	1075.20
	Allowed after true-up in this order	1064.98	1070.14	1070.14	1070.14	1072.97
Asset-IV	Approved vide order dated 30.3.2016 in Petition No. 31/TT/2015	2412.79	2414.30	2414.30	2414.30	2414.30
	Claimed by the Petitioner in the instant petition	2422.02	2433.12	2431.89	2431.89	2438.43
	Allowed after true-up in this order	2411.33	2423.01	2423.01	2423.01	2429.41
Asset-V	Approved vide order dated 31.10.2017 in Petition No. 91/TT/2017	4374.40	4374.40	4374.40	4374.40	4374.40
	Claimed by the Petitioner in the instant petition	4377.75	4397.83	4395.60	4395.60	4407.42
	Allowed after true-up in this order	4374.50	4395.70	4395.70	4395.70	4407.31

Depreciation

49. The Petitioner's claim towards depreciation in this petition was found to be higher than the depreciation allowed for the transmission assets in the order dated 30.3.2016 in Petition No. 31/TT/2015 and order dated 31.10.2017 in Petition No. 91/TT/2017. The Petitioner has neither given any justification for claiming higher depreciation than that was allowed earlier in order dated 15.3.2016 nor made any specific prayer for allowing higher depreciation in this petition. Similar issue had come



up in Petition No. 19/TT/2020 wherein the Commission vide order dated 9.5.2020 decided as under:

“31. We have considered the submissions of the Petitioner. The instant assets were put into commercial operation during the 2009-14 period and the tariff from the respective CODs to 31.3.2014 was allowed vide orders dated 30.8.2012 and 9.5.2013 in Petition No.343/2010 and Petition No. 147/TT/2011 respectively. Further, the tariff of the 2009- 14 period was trued up and tariff for the 2014-19 period was allowed vide order dated 25.2.2016 in Petition No.10/TT/2015. The Petitioner did not claim any capital expenditure towards “IT Equipment” in the above said three petitions where tariff for the instant assets for the 2009-14 period was allowed, tariff of the 2009-14 period was trued up and tariff for 2014-19 period was allowed even though there was a clear provision in the 2009 Tariff Regulations and 2014 Tariff Regulations providing depreciation @15% for IT Equipment. Having failed to make a claim as per the 2009 Tariff Regulations(the period during which COD of assets was achieved), the Petitioner has now, at the time of truing up of the tariff allowed for the 2014-19 period has apportioned a part of the capital expenditure to “IT Equipment”. The Petitioner has adopted similar methodology not only in this but in some of the other petitions listed along with the instant petition on 26.2.2020. It is observed that the Petitioner has for the first time apportioned a part of the capital expenditure towards IT Equipment and has claimed depreciation under the head “IT Equipment” @15% at the time of truing up of the tariff of 2014-19 period. Regulation 8(1) of the 2014 Tariff Regulations provides for truing up of the capital expenditure including the additional capital expenditure, incurred up to 31.3.2019, admitted by the Commission after prudence check. We are of the view that scope of truing up exercise is restricted to truing up of the capital expenditure already admitted and apportionment or reapportionment of the capital expenditure cannot be allowed at the time of truing up. Therefore, we are not inclined to consider the Petitioner’s prayer for apportionment of capital expenditure towards IT Equipment and allowing depreciation @ 15% from 1.4.2014 onwards. Accordingly, the depreciation @ 5.28% has been considered for IT Equipment as part of the sub-station up to 31.3.2019 while truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @ 15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations.”

50. In line with above decision, the depreciation @5.28% has been considered for IT Equipment as part of the sub-station up to 31.3.2019 while truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations. WAROD allowed is placed at Annexure-1 to this order. The gross Block



during the 2014-19 tariff period has been depreciated at WAROD (Annexure-1 to this order). WAROD has been allowed after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations. The following tables show asset-wise trued up depreciation allowed in the instant petition followed by depreciation approved in earlier orders and claimed by the Petitioner in the instant petition as under:

(₹ in lakh)

Combined Asset-I					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	257866.51	261543.57	261615.05	261652.27	261830.50
ACE	3677.06	71.48	37.22	178.23	1143.19
Closing Gross Block	261543.57	261615.05	261652.27	261830.50	262973.69
Average Gross Block	259705.04	261579.31	261633.66	261741.39	262402.10
Freehold Land	2750.28	2772.84	2772.84	2772.84	2772.84
WAROD (%)	5.15	5.15	5.15	5.15	5.15
Balance useful life of the asset at the beginning of the year	25	24	23	22	21
Elapsed life	3	4	5	6	7
Aggregated Depreciable Value	231259.29	232925.83	232974.74	233071.69	233666.33
Combined Depreciation during the year	13366.12	13463.89	13466.76	13472.45	13507.33
Aggregate Cumulative Depreciation	55687.04	69150.93	82617.69	96090.14	109597.47
Remaining Aggregate Depreciable Value	175572.25	163774.90	150357.05	136981.56	124068.86

(₹ in lakh)

Asset-III					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	18102.28	18102.28	18102.28	18102.28	18102.28
ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	18102.28	18102.28	18102.28	18102.28	18102.28
Average Gross Block	18102.28	18102.28	18102.28	18102.28	18102.28
WAROD (%)	5.28	5.28	5.28	5.28	5.28
Balance useful life of the asset at the beginning of the year	31	30	29	28	27
Elapsed life	4	5	6	7	8
Aggregated Depreciable Value	16292.06	16292.06	16292.06	16292.06	16292.06



Depreciation during the year	956.20	956.20	956.20	956.20	956.20
Aggregate Cumulative Depreciation	5135.41	6091.62	7047.82	8004.02	8960.23
Remaining Aggregate Depreciable Value	11156.64	10200.44	9244.24	8288.03	7331.83

(₹ in lakh)

Asset-IV					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	40987.13	40987.13	40987.13	40987.13	40987.13
ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	40987.13	40987.13	40987.13	40987.13	40987.13
Average Gross Block	40987.13	40987.13	40987.13	40987.13	40987.13
WAROD	5.28	5.28	5.28	5.28	5.28
Balance useful life of the asset at the beginning of the year	30	29	28	27	26
Elapsed life	4	5	6	7	8
Aggregated Depreciable Value	36888.42	36888.42	36888.42	36888.42	36888.42
Depreciation during the year	2165.22	2165.22	2165.22	2165.22	2165.22
Aggregate Cumulative Depreciation	10708.02	12873.24	15038.47	17203.69	19368.91
Remaining Aggregate Depreciable Value	26180.40	24015.18	21849.95	19684.73	17519.51

(₹ in lakh)

Asset-V					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	74356.70	74356.70	74356.70	74356.70	74356.70
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	74356.70	74356.70	74356.70	74356.70	74356.70
Average Gross Block	74356.70	74356.70	74356.70	74356.70	74356.70
Weighted Average Rate of Depreciation (WAROD) (%)	5.28	5.28	5.28	5.28	5.28
Balance useful life of the asset at the beginning of the year	33	32	31	30	29
Elapsed life	2	3	4	5	6
Aggregated Depreciable Value	66921.03	66921.03	66921.03	66921.03	66921.03
Depreciation during the year	3926.59	3926.59	3926.59	3926.59	3926.59
Aggregate Cumulative Depreciation	14018.82	17945.40	21871.99	25798.58	29725.17
Remaining Aggregate Depreciable Value	52902.21	48975.63	45049.04	41122.45	37195.86



51. The details of the depreciation approved *vide* earlier orders dated 30.3.2016 in Petition No. 31/TT/2015 and 31.10.2017 in Petition No. 91/TT/2017, claimed by the Petitioner in this petition and trued up and allowed in the instant order for the 2014-19 tariff period are shown in the table as under:

(₹ in lakh)

Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-I	Approved <i>vide</i> order dated 30.3.2016 in Petition No. 31/TT/2015	13446.12	13621.41	13621.41	13621.41	13621.41
	Claimed by the Petitioner in the instant petition	13442.81	13541.15	13544.02	13549.71	13585.16
	Allowed after true-up in this order	13366.12	13463.89	13466.76	13472.45	13507.33
Asset-III	Approved <i>vide</i> order dated 30.3.2016 in Petition No. 31/TT/2015	956.20	956.20	956.20	956.20	956.20
	Claimed by the Petitioner in the instant petition	958.20	958.20	958.20	958.20	958.20
	Allowed after true-up in this order	956.20	956.20	956.20	956.20	956.20
Asset-IV	Approved <i>vide</i> order dated 30.3.2016 in Petition No. 31/TT/2015	2166.58	2167.94	2167.94	2167.94	2167.94
	Claimed by the Petitioner in the instant petition	2173.20	2173.20	2173.20	2173.20	2173.20
	Allowed after true-up in this order	2165.22	2165.22	2165.22	2165.22	2165.22
Asset-V	Approved <i>vide</i> order dated 31.10.2017 in Petition No. 91/TT/2017	3926.57	3926.57	3926.57	3926.57	3926.57
	Claimed by the Petitioner in the instant petition	3926.59	3926.59	3926.59	3926.59	3926.59
	Allowed after true-up in this order	3926.59	3926.59	3926.59	3926.59	3926.59



Operation & Maintenance Expenses (O&M Expenses)

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

Assets	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-I	2444.72	2603.75	2773.46	2955.97	3153.28
Asset-III	61.77	63.79	65.90	68.10	70.36
Asset-IV	297.82	307.97	317.96	328.67	339.50
Asset-V	378.31	390.80	403.68	417.18	431.04

53. The Petitioner has claimed the higher O&M Expenses for Asset-III as against the approved O&M Expenses by the Commission in order dated 30.3.2016 in Petition No. 31/TT/2015, considering the multiple circuit portion of 6.748 km. UPPCL has submitted that the O&M Expenses for Asset-III claimed by the Petitioner does not match with the O&M Expenses approved by the Commission *vide* order dated 30.3.2016 in Petition No. 31/TT/2015. In response, the Petitioner has submitted that the O&M Expenses claimed in the instant petition for the 2014-19 tariff period are in accordance with the norms specified in the 2014 Tariff Regulations.

54. We have considered the submissions of the Petitioner and UPPCL. Asset-III is a D/C Quad transmission line (multi circuit transmission line) and it was put into commercial operation in the 2009-14 tariff period. As there was no provision for O&M Expenses for D/C Quad transmission line in the 2009 Tariff Regulations, O&M Expenses were allowed as per the norms specified for D/C Bundled Conductor for the 2009-14 tariff period. However, the 2014 Tariff Regulations provides for O&M Expenses for multiple circuit transmission lines but inadvertently the norms specified in the 2009 Tariff Regulations were considered for the 2014-19 period in order dated 30.3.2016 in Petition No. 31/TT/2015. Therefore, O&M Expenses are allowed for



Asset-III as per the norms specified in the 2014 Tariff Regulations for multi-circuit transmission lines. The O&M Expenses allowed as per the norms specified in the 2014 Tariff Regulations are as under:

Combined Asset-I

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses					
Sub-station (1 nos. of 500 kV HVDC bay at Balia-Bhivandi HVDC Bipole)					
No. of bays	1	1	1	1	1
Norms (₹ lakh)	1537	1666	1805	1955	2119
Transmission line (Balia-Bhiwadi 2500 MW± 500 kV HVDC bipole line)					
S/C (Bundle Conductor-4 sub-conductor) (km)	113.800	113.800	113.800	113.800	113.800
Norms (₹ lakh/km)	0.606	0.627	0.647	0.669	0.691
D/C Bundled (4 or more sub conductors) (km)	789.786	789.786	789.786	789.786	789.786
Norms (₹ lakh/km)	1.062	1.097	1.133	1.171	1.210
Total O&M Expense (₹ in lakh)	2444.72	2603.75	2773.46	2955.97	3153.28

Asset-III

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses					
Transmission line (400 kV D/C (Quad) line at Barh Sub-station)					
D/C Bundled (4 or more sub conductors) (km)	46.317	46.317	46.317	46.317	46.317
Norms (₹ lakh/km)	1.062	1.097	1.133	1.171	1.21
M/C Bundled (4 or more sub conductors) (km)	6.748	6.748	6.748	6.748	6.748
Norms (₹ lakh/km)	1.863	1.925	1.989	2.055	2.123
Total O&M Expense (₹ in lakh)	61.76	63.80	65.90	68.10	70.37

Asset-IV

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses					
Sub-station Bays (2 nos. of 400 kV bays at Seoni-Bina)					
No. of bays	2	2	2	2	2
Norms (₹ lakh/Bay)	60.3	62.3	64.37	66.51	68.71



Transmission line (765 kV S/C Seoni-Bina Transmission Line)					
S/C (Bundle Conductor-4 sub-conductor) (km)	292.450	292.450	292.450	292.450	292.450
Norms (₹ lakh/km)	0.606	0.627	0.647	0.669	0.691
Total O&M Expense (₹ in lakh)	297.82	307.97	317.96	328.67	339.50

Asset-V

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M Expenses					
Sub-station Bays (2 nos of bays at Balia Sub-station)					
400 kV					
No. of bays	2	2	2	2	2
Norms (₹ lakh/Bay)	60.3	62.3	64.37	66.51	68.71
Transmission line (Barh-Balia 400 kV D/C Quad Transmission line)					
D/C Bundled (4 or more sub conductors) (km)	242.664	242.664	242.664	242.664	242.664
Norms (₹ lakh/km)	1.062	1.097	1.133	1.171	1.21
Total O&M Expense (₹ in lakh)	378.31	390.80	403.68	417.18	431.04

55. The details of the O&M Expenses approved *vide* earlier orders dated 30.3.2016 in Petition No. 31/TT/2015 and 31.10.2017 in Petition No. 91/TT/2017, claimed by the Petitioner in the instant petition and trued up O&M allowed in this order in respect of transmission assets are as under:

(₹ in lakh)						
Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-I	Approved <i>vide</i> order dated 30.3.2016 in Petition No. 31/TT/2015	2444.72	2603.75	2773.46	2955.97	3153.28
	Claimed by the Petitioner in the instant petition	2444.72	2603.75	2773.46	2955.97	3153.28
	Allowed after true-up in this order	2444.72	2603.75	2773.46	2955.97	3153.28
Asset-III	Approved <i>vide</i> order dated 30.3.2016 in Petition No. 31/TT/2015	56.36	58.21	60.12	62.14	64.21
	Claimed by the Petitioner in the instant petition	61.77	63.79	65.90	68.10	70.36
	Allowed after true-up in	61.76	63.80	65.90	68.10	70.37



	this order					
Asset-IV	Approved <i>vide</i> order dated 30.3.2016 in Petition No. 31/TT/2015	297.82	307.97	317.96	328.67	339.50
	Claimed by the Petitioner in the instant petition	297.82	307.97	317.96	328.67	339.50
	Allowed after true-up in this order	297.82	307.97	317.96	328.67	339.50
Asset-V	Approved <i>vide</i> order dated 31.10.2017 in Petition No. 91/TT/2017	378.31	390.80	403.68	417.18	431.04
	Claimed by the Petitioner in the instant petition	378.31	390.80	403.68	417.18	431.04
	Allowed after true-up in this order	378.31	390.80	403.68	417.18	431.04

Interest on Working Capital (IWC)

56. IWC for the 2014-19 tariff period has been allowed as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and is tabulated as under:

(₹ in lakh)

Combined Asset-I					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	203.73	216.98	231.12	246.33	262.77
Maintenance Spares	366.71	390.56	416.02	443.40	472.99
Receivables	5760.55	5844.17	5969.53	6010.98	6130.22
Total Working Capital	6330.98	6451.71	6616.67	6700.70	6865.98
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
IWC	854.68	870.98	893.25	904.59	926.91

(₹ in lakh)

Asset-III					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	5.15	5.32	5.49	5.68	5.86
Maintenance Spares	9.26	9.57	9.88	10.22	10.56
Receivables	484.21	470.08	455.09	440.11	425.63
Total Working Capital	498.62	484.97	470.47	456.00	442.05
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
IWC	67.31	65.47	63.51	61.56	59.68



(₹ in lakh)

Asset-IV					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	24.82	25.66	26.50	27.39	28.29
Maintenance Spares	44.67	46.19	47.69	49.30	50.93
Receivables	924.34	921.65	931.23	926.39	929.82
Total Working Capital	993.83	993.51	1005.42	1003.08	1009.03
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
IWC	134.17	134.12	135.73	135.42	136.22

(₹ in lakh)

Asset-V					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	31.53	32.57	33.64	34.76	35.92
Maintenance Spares	56.75	58.62	60.55	62.58	64.66
Receivables	1965.48	1921.65	1886.94	1842.22	1808.10
Total Working Capital	2053.76	2012.83	1981.14	1939.56	1908.68
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
IWC	277.26	271.73	267.45	261.84	257.67

57. The details of IWC approved vide earlier orders dated 30.3.2016 in Petition No. 31/TT/2015 and 31.10.2017 in Petition No. 91/TT/2017, IWC claimed by the Petitioner in the instant petition and as trued up IWC allowed in the instant order in respect of transmission assets for the 2014-19 tariff period are tabulated as under:

(₹ in lakh)

Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-I	Approved vide order dated 30.3.2016 in Petition No. 31/TT/2015	857.56	869.39	872.24	875.88	880.42
	Claimed by the Petitioner in the instant petition	857.17	873.36	895.41	906.69	928.94
	Allowed after true-up in this order	854.68	870.98	893.25	904.59	926.91
Asset-III	Approved vide order dated 30.3.2016 in Petition No. 31/TT/2015	67.01	65.04	63.07	61.11	59.15
	Claimed by the Petitioner in the instant petition	67.49	65.63	63.66	61.70	59.81
	Allowed after true-up in this order	67.31	65.47	63.51	61.56	59.68



Asset-IV	Approved <i>vide</i> order dated 30.3.2016 in Petition No. 31/TT/2015	134.17	133.22	132.21	131.28	130.38
	Claimed by the Petitioner in the instant petition	134.66	134.60	136.19	135.88	136.69
	Allowed after true-up in this order	134.17	134.12	135.73	135.42	136.22
Asset-V	Approved <i>vide</i> order dated 31.10.2017 in Petition No. 91/TT/2017	277.16	270.57	264.04	257.56	251.13
	Claimed by the Petitioner in the instant petition	277.33	271.78	267.45	261.84	257.67
	Allowed after true-up in this order	277.26	271.73	267.45	261.84	257.67

Approved Annual Fixed Charges for the 2014-19 Tariff Period

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

(₹ in lakh)

Combined Asset-I					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	13366.12	13463.89	13466.76	13472.45	13507.33
Interest on Loan	2618.97	2662.80	3216.89	3259.64	3640.55
Return on Equity	15278.80	15463.62	15466.84	15473.20	15553.23
Interest on Working Capital	854.68	870.98	893.25	904.59	926.91
O&M Expenses	2444.72	2603.75	2773.46	2955.97	3153.28
Total	34563.28	35065.04	35817.19	36065.85	36781.30

(₹ in lakh)

Asset-III					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	956.20	956.20	956.20	956.20	956.20
Interest on Loan	755.00	664.89	574.78	484.66	394.55
Return on Equity	1064.98	1070.14	1070.14	1070.14	1072.97
Interest on Working Capital	67.31	65.47	63.51	61.56	59.68
O&M Expenses	61.76	63.80	65.90	68.10	70.37
Total	2905.26	2820.51	2730.53	2640.67	2553.77

(₹ in lakh)



Asset-IV					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	2165.22	2165.22	2165.22	2165.22	2165.22
Interest on Loan	537.49	499.60	545.47	506.05	508.54
Return on Equity	2411.33	2423.01	2423.01	2423.01	2429.41
Interest on Working Capital	134.17	134.12	135.73	135.42	136.22
O&M Expenses	297.82	307.97	317.96	328.67	339.50
Total	5546.04	5529.92	5587.39	5558.37	5578.90

(₹ in lakh)

Asset-V					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	3926.59	3926.59	3926.59	3926.59	3926.59
Interest on Loan	2836.25	2545.05	2328.25	2052.02	1825.99
Return on Equity	4374.50	4395.70	4395.70	4395.70	4407.31
Interest on Working Capital	277.26	271.73	267.45	261.84	257.67
O&M Expenses	378.31	390.80	403.68	417.18	431.04
Total	11792.91	11529.87	11321.67	11053.33	10848.60

59. Accordingly, Annual Transmission Charges approved earlier vide orders dated 30.3.2016 in Petition No. 31/TT/2015 and 31.10.2017 in Petition No. 91/TT/2017, as claimed by the Petitioner and as allowed after truing up in the instant order is as under:

(₹ in lakh)

Assets	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-I	Approved <i>vide</i> order dated 30.3.2016 in Petition No. 31/TT/2015	34691.14	34994.23	34883.25	34789.51	34715.41
	Claimed by the Petitioner in the instant petition	34673.65	35170.75	35913.17	36159.10	36871.57
	Allowed after true-up in this order	34563.28	35065.04	35817.19	36065.85	36781.30
Asset-III	Approved <i>vide</i> order dated 30.3.2016 in Petition No. 31/TT/2015	2899.54	2809.31	2719.14	2629.07	2539.07
	Claimed by the Petitioner in the instant petition	2912.84	2827.60	2736.89	2646.83	2559.78
	Allowed after true-up in this order	2905.26	2820.51	2730.53	2640.67	2553.77



Asset-IV	Approved <i>vide</i> order dated 30.3.2016 in Petition No. 31/TT/2015	5546.19	5489.74	5430.96	5374.34	5319.42
	Claimed by the Petitioner in the instant petition	5568.07	5551.27	5607.90	5578.83	5599.78
	Allowed after true-up in this order	5546.04	5529.92	5587.39	5558.37	5578.90
Asset-V	Approved <i>vide</i> order dated 31.10.2017 in Petition No. 91/TT/2017	11788.69	11478.26	11169.77	10863.23	10557.87
	Claimed by the Petitioner in the instant petition	11796.25	11532.04	11321.58	11053.24	10848.70
	Allowed after true-up in this order	11792.91	11529.87	11321.67	11053.33	10848.60

DETERMINATION OF ANNUAL FIXED CHARGES FOR THE 2019-24 TARIFF PERIOD

60. The Petitioner has combined Assets-III, IV and V that are AC systems, into Combined Asset-II. Accordingly, tariff for the Combined Asset-I (HVDC system), and Combined Asset-II (AC system), is allowed for the 2019-24 tariff period.

61. The Petitioner has claimed following annual transmission charges for the Combined Asset-I and Combined Asset-II for the 2019-24 tariff period:

(₹ in lakh)

Combined Asset-I					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	13638.38	13620.90	13620.90	13620.90	4485.64
Interest on Loan	3111.93	2504.23	1879.73	1264.03	859.35
Return on Equity	14888.37	14943.28	14943.28	14943.28	14943.28
Interest on Working Capital	599.45	596.63	591.66	587.03	446.96
O&M Expenses	2837.57	2936.86	3038.95	3145.63	3255.32
Total	35075.70	34601.90	34074.52	33560.87	23990.55

(₹ in lakh)

Combined Asset-II



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	7057.99	7057.99	7057.99	7057.99	1475.45
Interest on Loan	2094.61	1565.08	1042.80	547.07	286.04
Return on Equity	7529.77	7529.77	7529.77	7529.77	7529.77
Interest on Working Capital	283.60	277.48	270.79	264.54	177.27
O&M Expenses	750.99	776.96	804.26	832.35	861.45
Total	17716.96	17207.28	16705.61	16231.72	10329.98

62. The Petitioner has claimed the following IWC for the Combined Asset-I and Combined Asset-II for the 2019-24 tariff period:

(₹ in lakh)

Combined Asset-I					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	236.46	244.74	253.25	262.14	271.28
Maintenance Spares	425.64	440.53	455.84	471.84	488.30
Receivables	4312.59	4265.99	4200.97	4137.64	2949.66
Total Working Capital	4974.69	4951.26	4910.06	4871.62	3709.24
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	599.45	596.63	591.66	587.03	446.96

(₹ in lakh)

Combined Asset-II					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	62.58	64.75	67.02	69.36	71.79
Maintenance Spares	112.65	116.54	120.64	124.85	129.22
Receivables	2178.32	2121.45	2059.60	2001.17	1270.08
Total Working Capital	2353.55	2302.74	2247.26	2195.38	1471.09
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	283.60	277.48	270.79	264.54	177.27

Effective Date of Commercial Operation (E-COD) of the Combined Asset -II

63. E-COD of Combined Asset-I has already been determined in the 2014-19 tariff period as 21.12.2010. The Petitioner has claimed E-COD of the Combined Asset-II as 1.5.2010. However, E-COD has been calculated and allowed as 25.12.2010 based on the capital cost as on 31.3.2019 of Asset-III, Asset-IV and Asset-V as under:



Asset	Capital Cost as on 31.3.2019 (₹ in lakh)	COD	No. of days from COD of Asset from COD of Project	Weight of cost (%)	Weighted days
Asset-III	18102.28	1.11.2009	669	13.57	90.75
Asset-IV	40987.13	1.4.2010	518	30.71	159.10
Asset-V	74356.70	1.9.2011	0	55.72	0.00
Total	133446.12			100.00	249.85
Effective COD (latest COD less weighted days) - 25.12.2010					

Weighted Average Life (WAL) of the Combined Asset - II

64. WAL of Combined Asset-I has already been determined in the 2014-19 tariff period. WAL of combined Asset-II has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective useful life as specified in the 2019 Tariff Regulations. Accordingly, WAL of the Combined Asset-II has been worked out as 35 years as under:

Particulars	Capital Cost as on 31.3.2019 (₹ in lakh) (1)	Life (in years) (2)	Weighted Cost (₹ in lakh) (3) = (1) x (2)	Weighted Avg. Life of Asset (in years) (4) = (3)/ (1)
Building & Civil Works	0.00	25	0.00	
Transmission Line	130187.39	35	4556558.81	
Sub Station	3062.77	25	76569.31	
PLCC	195.95	15	2939.25	
IT Equipment (Incl. Software)	0.00	6	0.00	
Total	133446.12		4636067.37	34.741 (rounded off to 35 years)

Capital Cost as on 1.4.2019

65. Regulation 19 of the 2019 Tariff Regulations provides as under:

“19. Capital Cost: (1) The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.



(2) *The Capital Cost of a new project shall include the following:*

- (a) *The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;*
- (b) *Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;*
- (c) *Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;*
- (d) *Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;*
- (e) *Capitalised initial spares subject to the ceiling rates in accordance with these regulations;*
- (f) *Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;*
- (g) *Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;*
- (h) *Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;*
- (i) *Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (j) *Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;*
- (k) *Capital expenditure on account of biomass handling equipment and facilities, for co-firing;*
- (l) *Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*
- (m) *Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*
- (n) *Expenditure on account of change in law and force majeure events; and*
- (o) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*

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

- (a) *Capital cost admitted by the Commission prior to 1.4.2019 duly 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 renovation and modernisation as admitted by this Commission in accordance with these regulations;*
- (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 upto the receiving end of*



- generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*
- (f) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*
- (4) *The capital cost in case of existing or new hydro generating station shall also include:*
- (a) *cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and*
- (b) *cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.*
- (5) *The following shall be excluded from the capital cost of the existing and new projects:*
- (a) *The assets forming part of the project, but not in use, as declared in the tariff petition;*
- (b) *De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:*
- Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be de-capitalised only after its redeployment;*
- Provided further that unless shifting of an asset from one project to another is of permanent nature, there shall be no de-capitalization of the concerned assets.*
- (c) *In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;*
- (d) *Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and*

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."

66. The Petitioner has claimed the capital cost of ₹263256.64 lakh and ₹133635.05 lakh as on 31.3.2019 for the Combined Asset-I and Combined Asset-II respectively as per the Auditor Certificates/ Management Certificate dated 23.9.2014, 31.7.2019, 18.11.2019 and 23.9.2019. However, the capital cost of ₹262973.69 lakh and



₹133446.12 lakh as on 31.3.2019 has been allowed for the Combined Asset-I and Combined Asset-II respectively and the same has been considered as the opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

Initial Spares

67. As discussed above, the assets covered in the project are combined as Combined Asset-I and Combined Asset-II and the overall project cost is arrived at in the 2019-24 tariff period and therefore Initial Spares are allowed during the 2019-24 tariff period on the basis of the overall project cost as per the APTEL's judgement dated 14.9.2019 in Appeal No. 74 of 2017. The capital cost is considered as on cut-off date and is based on the Auditor Certificates and cost allowed by the Commission in order dated 30.3.2016 in Petition No. 31/TT/2015 and order dated 31.10.2017 in Petition No. 91/TT/2017.

68. Accordingly, Initial Spares allowed in the 2019-24 tariff period are as under:

Asset	Capital Cost as on cut-off date (₹ in lakh) (A)	Initial Spares Claimed (₹ in lakh) (B)	Ceiling limit (%) (C)	Initial Spares worked out	Initial Spares Allowed (₹ in lakh) (E)	Initial Spares allowed earlier (₹ in lakh) (F)	Excess Initial Spares Allowed (₹ in lakh)
				$D = [(A-B) \cdot C / (100-C)]$			
For Combined Asset-I							
For Transmission line							
Asset-I	88728.62	946.29	0.75	663.34	663.34	663.34	0.00
Asset-II	0.00	0.00	0.75	0.00	0.00	0.00	0.00
Total	88728.62	946.29		663.34	663.34	663.34	0.00
For Sub-station (HVDC)							
Asset-I	124311.91	4069.76	3.50	4361.11	4069.76	4069.76	0.00
Asset-II	43209.27	767.27	3.50	1539.35	767.27	767.27	0.00
Total	167521.18	4837.03		5900.46	4837.03	4837.03	0.00
For Combined Asset-II							
For Transmission line							
Asset-III	18067.72	173.00	0.75	135.22	173.00	135.22	37.78
Asset-IV	38933.34	0.00	0.75	294.21	0.00	0.00	0.00
Asset-V	73186.85	407.86	0.75	549.97	407.86	407.86	0.00



Total	130187.91	580.86		979.40	580.86	543.08	37.78
For Sub-station							
Asset-III	38.37	0.00	2.50	0.98	0.00	0.00	0.00
Asset-IV	2201.66	202.42	2.50	51.26	60.71	51.26	9.45
Asset-V	1169.85	20.99	2.50	29.46	20.99	20.99	0.00
Total	3409.88	223.41		81.70	81.70	72.25	9.45

Thus, in compliance with APTEL's judgement dated 14.9.2019 in Appeal No. 74 of 2017, additional initial spares of ₹47.23 lakh (₹37.38 lakh plus ₹9.25 lakh for the Combined Asset-II) have been allowed.

69. Capital cost as on 1.4.2019 allowed after adding Initial Spares is as under:

(₹ in lakh)

Asset	Combined Capital Cost as on 31.3.2019	Additional Initial Spares allowed as per APTEL judgement dated 14.9.2019	Combined Capital Cost as on 1.4.2019
Combined Asset-I	262973.69	0.00	262973.69
Combined Asset-II	133446.12	47.23	133493.34

70. The trued up capital cost of ₹262973.69 lakh and ₹133493.34 lakh for the Combined Asset-I and Combined Asset-II respectively is considered as admitted capital cost as on 1.4.2019 for working out tariff for 2019-24 tariff period.

Additional Capital Expenditure (ACE)

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

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

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

(a) Undischarged liabilities recognized to be payable at a future date;

(b) Works deferred for execution;

(c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;



- (d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;
- (e) Change in law or compliance of any existing law; and
- (f) Force Majeure events:

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

(2) *The generating company or the transmission licensee, as the case may be shall submit the details of works asset wise/work wise included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution.*

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

(1) *The 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.”*

72. As per the Auditor Certificate dated 18.11.2019, the Petitioner has claimed ₹1949.14 lakh as ACE for the Combined Asset-I during the 2019-24 tariff period on account of balance and retention payments due to un-discharged liability for works



executed within the cut-off date. The details of balance and retention payments is as under:

Srl. No.	Package	Year	Agency	Amount (₹ in lakh)	Remarks
1	Sub-station Supply & Erection	2019-20	BHEL and Siemens	1949.14	Balance & retention payment covered under Regulation 25(1) (d)

73. As regards the balance expenditure of ₹1047.78 lakh under arbitration, the Petitioner has submitted that Jyoti Structures Ltd. has challenged the arbitral award under section 34 of Arbitration and Conciliation Act, 1996 on the ground that award is patently illegal being in conflict with the public policy of India and the award is perverse being contrary to the facts and evidence on records etc. The matter is pending before the Hon'ble Delhi High Court with case Reference No. OMP (Comm.) No. 397/2016 dated 20.5.2016. The Petitioner also submitted that the tariff is not being claimed on balance expenditure of ₹1047.78 lakh in the instant petition and has sought liberty to approach the Commission after paying or incurring the balance expenditure for its admission and consequential tariff revision during 2019-24 tariff period. The Petitioner has claimed the capital cost for the Combined Asset as on 31.3.2024 as under:

Assets	Total Capital Cost as on 1.4.2019	(₹ in lakh)	
		Projected ACE 2019-20	Total Capital Cost as on 31.3.2024
Combined Asset-I	263256.64	1949.14	265205.78
Combined Asset-II	133635.05	0.00	133635.05

74. The Petitioner has further submitted that no ACE is expected beyond 2023-24 on account of un-discharged liability/ balance and retention payments other than what is claimed in the instant petition.



75. MPPMCL submitted that the Petitioner has claimed ACE of ₹1949.14 lakh during 2019-20 in respect of Combined Asset-I without any supporting documents. In response, the Petitioner has submitted that the supporting document has already been provided with *vide* affidavit dated 12.3.2020 in response to the TV (Technical Validation) letter.

76. We have considered the submissions of the Petitioner and MPPMCL. It is observed that the Petitioner has claimed ACE for the 2019-24 tariff period pertains to balance and retention payments to BHEL and Siemens pending due to contract closure. Hence, ACE claimed by the Petitioner is allowed under Regulation 25(1)(d) of the 2019 Tariff Regulations as it is towards liability for works executed prior to the cut-off date. As regards the Petitioner's prayer for grant of liberty to approach the Commission for grant of ACE of ₹1047.78 lakh after settlement of the arbitration proceedings pending before the Hon'ble Delhi High Court, any claim made by the Petitioner in future will be considered as per law.

77. Accordingly, ACE for the 2019-24 tariff period and capital cost as on 31.3.2024 as approved by the Commission is as under:

Assets	Total Capital Cost as on 1.4.2019	Projected ACE	Total Capital Cost as on 31.3.2024
		2019-20	
Combined Asset-I	262973.69	1949.14	264922.83
Combined Asset-II	133493.34	0.00	133493.34
Total	396467.03	1949.14	398416.17

78. The total capital cost as on 31.3.2024 of ₹398416.17 lakh is within the approved apportioned capital cost of ₹435046.70 lakh.



Debt-Equity ratio

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

“18. Debt-Equity Ratio: (1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

- i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:*
- ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:*
- iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.*

Explanation-The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system."

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

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

Provided that in case of a generating station or a transmission system including communication system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in excess of 30% shall not be taken into account for tariff computation;

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

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

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff,



and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.”

80. The Petitioner has claimed Debt-Equity ratio of 70:30 for ACE for the 2019-24 tariff period. We have considered the Debt-Equity ratio of 70:30 for ACE for the 2019-24 tariff period. The details of the debt and equity allowed for the purpose of tariff for the 2019-24 tariff period is as under:

Combined Asset-I

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	%	ACE for 2019-24 (₹ in lakh)	%	Capital Cost as on 31.3.2024 (₹ in lakh)	%
Debt	184081.58	70.00	1364.40	70.00	185445.98	70.00
Equity	78892.11	30.00	584.74	30.00	79476.85	30.00
Total	262973.69	100.00	1949.14	100.00	264922.83	100.00

Combined Asset-II

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	%	ACE for 2019-24 (₹ in lakh)	%	Capital Cost as on 31.3.2024 (₹ in lakh)	%
Debt	93445.34	70.00	0.00	70.00	93445.34	70.00
Equity	40048.00	30.00	0.00	30.00	40048.00	30.00
Total	133493.34	100.00	0.00	100.00	133493.34	100.00

Return on Equity (RoE)

81. Regulations 30 and 31 of the 2019 Tariff Regulations provide as under:

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

(2) *Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of-river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of-river generating station with pondage:*

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system

Provided further that:



- i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;
- ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;
- iii. in case of a thermal generating station, with effect from 1.4.2020:
 - a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;
 - b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

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

“31. Tax on Return on Equity. (1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

Rate of pre-tax return on equity = 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.”

82. The Petitioner has submitted that MAT rate is applicable to the Petitioner. MSEDCL has submitted that the Petitioner has calculated the RoE considering the MAT @18.5% for the whole period under consideration but it has been already declared that for 2019-20, the MAT rate is 15%. Thus, it would change the Effective Tax Rate. This would in turn affect the grossed-up ROE rate and thereby the entire truing-up for the period under consideration. In response, the Petitioner has submitted that the RoE has been calculated @18.782% after grossing up RoE with MAT rate of 17.472% (15% plus applicable Surcharge and Health and Education Cess) based on the formula given in Regulation 31(2) of the 2019 Tariff Regulations. Therefore, the Petitioner prayed to allow the cost and tariff as claimed in the instant petition.

83. UPPCL has submitted that the gross rate of Return on Equity for the 2019-24 period is same as that of the rate ending in 2019-20 which is not based on MAT rates approved by the Income Tax authorities.

84. We have considered the submissions of the Petitioner, MSEDCL and UPPCL. Accordingly, the MAT rate applicable in 2019-20 has been considered for the purpose



of RoE, which shall be tried up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for the Combined Asset-I and Combined Asset-II is as under:

(₹ in lakh)

Combined Asset-I					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	78892.11	79476.85	79476.85	79476.85	79476.85
Additions	584.74	0.00	0.00	0.00	0.00
Closing Equity	79476.85	79476.85	79476.85	79476.85	79476.85
Average Equity	79184.48	79476.85	79476.85	79476.85	79476.85
RoE (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Rate of RoE (%)	18.782	18.782	18.782	18.782	18.782
RoE	14872.04	14926.95	14926.95	14926.95	14926.95

(₹ in lakh)

Combined Asset-II					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	40048.00	40048.00	40048.00	40048.00	40048.00
Additions	0.00	0.00	0.00	0.00	0.00
Closing Equity	40048.00	40048.00	40048.00	40048.00	40048.00
Average Equity	40048.00	40048.00	40048.00	40048.00	40048.00
RoE (Base Rate) (%)	15.50	15.50	15.50	15.50	15.50
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472
Rate of RoE (%)	18.782	18.782	18.782	18.782	18.782
RoE	7521.62	7521.62	7521.62	7521.62	7521.62

Interest on Loan (IoL)

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

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

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

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



capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio after providing appropriate accounting adjustment for interest capitalized:

Provided that if there is no actual loan for a particular year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered;

Provided further that if the generating station or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

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

86. MSEDCL has submitted that while calculating IoL, WAROI should be considered but the Petitioner has considered the rate of interest on loan on annual basis for the whole period under consideration. This has led to major burden on the tariff in this control period. Hence, prudence check must be done for determining interest on loan for the period under consideration. The Petitioner, in response, has submitted that while calculating the tariff, WAROI is used as mentioned in Form 9E on annual basis for the whole period under consideration. Therefore, the Petitioner requested to allow the cost and tariff as claimed in the instant petition.

87. We have considered the submissions of the Petitioner and MSEDCL. WAROI has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed to allow the change in interest rate due to floating rate of interest applicable, if any, during the 2019-24 tariff period at the time of true up. Accordingly, the floating



rate of interest, if any, shall be considered at the time of true up. Therefore, IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed for the Combined Asset-I and Combined Asset-II is as under:

(₹ in lakh)

Combined Asset-I					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	184081.58	185445.98	185445.98	185445.98	185445.98
Cumulative Repayments upto Previous Year	109597.47	123249.90	136953.79	150657.68	164361.57
Net Loan-Opening	74484.11	62196.08	48492.19	34788.30	21084.41
Additions	1364.40	0.00	0.00	0.00	0.00
Repayment during the year	13652.43	13703.89	13703.89	13703.89	4477.42
Net Loan-Closing	62196.08	48492.19	34788.30	21084.41	16606.99
Average Loan	68340.10	55344.14	41640.25	27936.36	18845.70
WAROI on Loan (%)	4.5657	4.5357	4.5196	4.5193	4.5429
IoL	3120.22	2510.23	1881.97	1262.53	856.13

(₹ in lakh)

Combined Asset-II					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	93445.34	93445.34	93445.34	93445.34	93445.34
Cumulative Repayments upto Previous Year	58054.30	65104.81	72155.31	79205.82	86256.33
Net Loan-Opening	35391.04	28340.53	21290.03	14239.52	7189.01
Additions	0.00	0.00	0.00	0.00	0.00
Repayment during the year	7050.51	7050.51	7050.51	7050.51	1473.38
Net Loan-Closing	28340.53	21290.03	14239.52	7189.01	5715.64
Average Loan	31865.79	24815.28	17764.77	10714.27	6452.33
WAROI on Loan (%)	6.5638	6.2972	5.8598	5.0949	4.4204
IoL	2091.59	1562.67	1040.99	545.88	285.22

Depreciation

88. Regulation 33 of the 2019 Tariff Regulations provides as under:

*"33. **Depreciation:** (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element there of including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be*



computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.

(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 decapitalized asset during its useful services.”

89. The IT equipment has been considered as a part of the Gross Block and depreciated using WAROD (as placed in Annexure-2 to this order). WAROD has been worked out after taking into account the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered as NIL, i.e. IT asset has been considered as 100 per cent depreciable. The depreciation has been allowed considering the ACE as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The depreciation allowed for the transmission assets is as under:

(₹ in lakh)

Combined Asset-I					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation					
Opening Gross Block	262973.69	264922.83	264922.83	264922.83	264922.83
ACE	1949.14	0.00	0.00	0.00	0.00
Closing Gross Block	264922.83	264922.83	264922.83	264922.83	264922.83
Average Gross Block	263948.26	264922.83	264922.83	264922.83	264922.83
Freehold Land	2772.84	2772.84	2772.84	2772.84	2772.84
WAROD (%)	5.17	5.17	5.17	5.17	Spreading
Balance useful life at the beginning of the year	20	19	18	17	16
Elapsed life	8	9	10	11	12
Aggregate Depreciable value	235123.17	236000.28	236000.28	236000.28	236000.28
Combined Depreciation during the year	13652.43	13703.89	13703.89	13703.89	4477.42
Aggregated Cumulative Depreciation	123249.90	136953.79	150657.68	164361.57	168838.99
Remaining Aggregated Depreciable Value	111873.27	99046.49	85342.60	71638.71	67161.29



(₹ in lakh)

Combined Asset-II					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation					
Opening Gross Block	133493.34	133493.34	133493.34	133493.34	133493.34
ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	133493.34	133493.34	133493.34	133493.34	133493.34
Average Gross Block	133493.34	133493.34	133493.34	133493.34	133493.34
WAROD (%)	5.28	5.28	5.28	5.28	Spreading
Balance useful life at the beginning of the year	27	26	25	24	23
Elapsed life	8	9	10	11	12
Aggregate Depreciable value	120144.01	120144.01	120144.01	120144.01	120144.01
Depreciation during the year	7050.51	7050.51	7050.51	7050.51	1473.38
Aggregated Cumulative Depreciation	65104.81	72155.31	79205.82	86256.33	87729.70
Remaining Aggregated Depreciable Value	55039.20	47988.70	40938.19	33887.68	32414.31

Operation & Maintenance Expenses (O&M Expenses)

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

“35. Operation and Maintenance Expenses:

...

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<i>Norms for sub-station Bays (₹ Lakh per bay)</i>					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
<i>Norms for Transformers (₹ Lakh per MVA)</i>					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
<i>Norms for AC and HVDC lines (₹ Lakh per km)</i>					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578



Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
<i>Norms for HVDC stations</i>					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC Bipole scheme (₹ Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC Bipole scheme (₹ Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Ballia HVDC Bipole scheme (₹ Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC Bipole scheme (₹ Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;*
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;*
- iii. the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);*
- iv. the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M*



expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme;

- v. the O&M expenses of ± 800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ± 800 kV, Bishwanath-Agra HVDC bi-pole scheme; and
- vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.

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

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

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

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

91. The O&M Expenses claimed by the Petitioner for the transmission assets for the 2019-24 tariff period are as under:

	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses (₹ in lakh)					
Combined Asset-I	2837.57	2936.86	3038.95	3145.63	3255.32
Combined Asset-II	750.99	776.96	804.26	832.35	861.45

92. The Petitioner has claimed O&M Expenses separately for the 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. The relevant portions of the order dated 24.1.2021 in Petition No.126/TT/2020 are extracted hereunder:

“103. Thus, although PLCC equipment is a communication system, it has been considered as a part of sub-station, as it is used both for protection and communication. Therefore, we are of the considered view that rightly, it was not considered for separate O&M Expenses while framing norms of O&M for 2019-24 tariff period. While specifying norms for bays and transformers, O&M Expenses for PLCC have been included within norms for O&M Expenses for sub-station. Norms of O&M Expenses @2% of the capital cost in terms of Regulation 35(4) of the 2019 Tariff Regulations have been specified for communication system such as PMU, RMU, OPGW etc. and not for PLCC equipment.”

“105. In our view, granting of O&M Expenses for PLCC equipment @2% of its capital cost under Regulation 35(4) of the 2014 Tariff Regulations under the communication system head would tantamount to granting O&M Expenses twice for PLCC equipment as PLCC equipment has already been considered as part of the sub-station. Therefore, the Petitioner's prayer for grant of O&M Expenses for the PLCC equipment @2% of its capital cost under Regulation 35(4) of the 2014 Tariff Regulations is rejected.

106. The principle adopted in this petition that PLCC is part of sub-station and accordingly no separate O&M Expenses is admissible for PLCC equipment in the 2019-24 tariff period under Regulation 35(4) of the 2019 Tariff Regulations shall be applicable in case of all petitions where similar claim is made by the Petitioner. As already mentioned, the Commission, however, on the basis of the claim made by the Petitioner has inadvertently allowed O&M Expenses for PLCC equipment @2% of its original project cost, which is applicable for other “communication system”, for 2019-24 period in 31 petitions given in Annexure-3 of this order. Therefore, the decision in this order shall also be applicable to all the petitions given in Annexure-3. Therefore, PGCIL is directed to bring this decision to the notice of all the stakeholders in the 31 petitions given in Annexure-3 and also make revised claim of O&M Expenses for PLCC as part of the sub-station at the time of truing up of the tariff allowed for 2019-24 period in respective petitions.”



Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed.

93. Accordingly, the O&M Expenses allowed for the Combined Assets-I and II are as under:

Combined Asset-I					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station Bays (1 no. of 500 kV HVDC bay at Ballia-Bhivandi HVDC Bipole)					
No. of bays	1	1	1	1	1
Norms (₹ lakh)	1696	1756	1817	1881	1947
Transmission line (Ballia-Bhiwadi 2500 MW± 500 kV HVDC Bipole line)					
S/C (Bundle Conductor-4 sub-conductor) (km)	113.800	113.800	113.800	113.800	113.800
Norms (₹ lakh/km)	0.755	0.781	0.809	0.837	0.867
D/C Bundled (4 or more sub conductors) (km)	789.786	789.786	789.786	789.786	789.786
Norms (₹ lakh/km)	1.322	1.368	1.416	1.466	1.517
Total O&M Expenses (₹ in lakh)	282 6.0 2	292 5.3 1	302 7.4 0	313 4.0 8	324 3.7 7

Combined Asset-II					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station Bays (02 nos. of 400 kV bays at Seoni-Bina and 02 nos. of bays at Ballia Sub-station)					
400 kV					
No. of bays	4	4	4	4	4
Norms (₹ lakh/Bay)	60.3	62.3	64.37	66.51	68.71
Transmission line (400 kV D/C (Quad) line at Barh Sub-station, 765 kV S/C Seoni-Bina transmission line and Barh-Ballia 400 kV D/C Quad Transmission line)					
S/C (Bundle Conductor-4 sub-conductor) (km)	292.450	292.450	292.450	292.450	292.450
Norms (₹ lakh/km)	0.755	0.781	0.809	0.837	0.867
D/C Bundled (4 or more sub conductors) (km)	288.981	288.981	288.981	288.981	288.981
Norms (₹ lakh/km)	1.322	1.368	1.416	1.466	1.517
Multi Ckt Bundled with 4 or more sub-conductor (km)	6.748	6.748	6.748	6.748	6.748
Norms (₹ lakh/km)	2.319	2.401	2.485	2.572	2.662
Total O&M Expenses (₹ in lakh)	747.08	773.05	800.36	828.42	857.54



Interest on Working Capital (IWC)

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

“34. Interest on Working Capital

(1)...

- (c) *For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:*
- i. Receivables equivalent to 45 days of fixed cost;*
 - ii. Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and*
 - iii. Operation and maintenance expenses, including security expenses for one month”*

“(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

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

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

“3. Definitions ...

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

95. The Petitioner has submitted that it has computed IWC for the 2019-24 tariff period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, whereas, 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). The components of the working capital and interest allowed thereon are as under:

(₹ in lakh)

Combined Asset-I					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	235.50	243.78	252.28	261.17	270.31
Maintenance Spares	423.90	438.80	454.11	470.11	486.57
Receivables	4311.85	4268.64	4203.19	4139.43	2941.02
Total Working Capital	4971.26	4951.21	4909.58	4870.72	3697.90
ROI (%)	12.05	11.25	11.25	11.25	11.25
Interest on Working Capital	599.04	557.01	552.33	547.96	416.01

(₹ in lakh)

Combined Asset-II					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	62.26	64.42	66.70	69.04	71.46
Maintenance Spares	112.06	115.96	120.05	124.26	128.63
Receivables	2175.49	2116.38	2054.67	1996.37	1266.73
Total Working Capital	2349.80	2296.76	2241.42	2189.67	1466.83
ROI (%)	12.05	11.25	11.25	11.25	11.25
Interest on Working Capital	283.15	258.39	252.16	246.34	165.02

Annual Fixed Charges for the 2019-24 Tariff Period

96. The Annual Fixed Charges allowed for the Combined Assets for the 2019-24 tariff period are as under:

(₹ in lakh)

Combined Asset-I					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	13652.43	13703.89	13703.89	13703.89	4477.42
Interest on Loan	3120.22	2510.23	1881.97	1262.53	856.13
Return on Equity	14872.04	14926.95	14926.95	14926.95	14926.95
Interest on Working Capital	599.04	557.01	552.33	547.96	416.01
O&M Expenses	2826.02	2925.31	3027.40	3134.08	3243.77
Total	35069.74	34623.38	34092.54	33575.41	23920.28

(₹ in lakh)



Combined Asset-II					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	7050.51	7050.51	7050.51	7050.51	1473.38
Interest on Loan	2091.59	1562.67	1040.99	545.88	285.22
Return on Equity	7521.62	7521.62	7521.62	7521.62	7521.62
Interest on Working Capital	283.15	258.39	252.16	246.34	165.02
O&M Expenses	747.08	773.05	800.36	828.42	857.54
Total	17693.95	17166.23	16665.63	16192.76	10302.77

Filing Fee and the Publication Expenses

97. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses. BRPL has submitted that though the Commission can allow filing fee and publication expenses at its discretion under Regulation 70(1) of the 2019 Tariff Regulations, but the exercise of such discretion is a judicial discretion in the adjudication of tariff for which no justification has been filed by the Petitioner. BRPL also referred to the Commission's order dated 11.9.2008 in Petition No. 129 of 2005 where it declined the claim of Central Power Sector undertakings for allowing the reimbursement of the application filing fee. In response, the Petitioner vide affidavit dated 18.3.2020 has submitted that it has requested for reimbursement of expenditure by the beneficiaries towards petition filing fee and publication expense, in terms of Regulation 70(1) of the 2019 Tariff Regulations. Further, the Petitioner also placed reliance on the Commission's order dated 28.3.2016 in Petition No. 137/TT/2015 where it allowed the recovery of petition filing fee and expenditure for publication of notices from beneficiaries on *pro-rata* basis.

98. We have considered the submissions of the Petitioner and BRPL. Regulation 70(1) of the 2019 Tariff Regulations provides for reimbursement of filing fees and publication paid by the Petitioner. Accordingly, the Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the



present petition, directly from the beneficiaries on *pro rata* basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

Licence Fee & RLDC Fees and Charges

99. UPPCL has submitted that the licence fee is onus of the Petitioner. In response, the Petitioner has submitted that the Regulation 70(3) and (4) of the 2019 Tariff Regulations authorize the Petitioner to bill and recover licensee fee from the beneficiaries. License fee is to be reimbursed directly by beneficiaries as per manner specified in Tariff Regulations.

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

Goods and Services Tax

101. The Petitioner has submitted that, if GST is levied at any rate and at any 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.

102. BRPL, MSEDCL and MPPMCL have submitted that the demand of the Petitioner is premature and need not be considered at this juncture. MSEDCL further submitted that the Petitioner has already raised same prayer in Petition No. 40/TT/2018 and the Commission *vide* order dated 15.11.2018 observed that the



Petitioner's prayer is pre-mature and accordingly rejected the said prayer. In response, the Petitioner has submitted that currently transmission of electricity by an electric transmission utility is exempt from GST. Hence, the transmission charges currently charged are exclusive of GST. Further, if GST is levied at any rate and at any point of time in future, the same shall be borne and additionally paid by the Respondents to the Petitioner and the same shall be charged and billed separately. We have considered the submission of the Petitioner, BRPL, MSEDCL and MPPMCL. Since GST is not levied on transmission service at present, we are of the view that Petitioner's prayer is premature.

Security Expenses

103. The Petitioner has submitted that security expenses for the transmission assets are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and the consequential IWC. The Petitioner has requested to consider the actual security expenses incurred during 2018-19 for claiming estimated security expenses for 2019-20 which shall be subject to true up at the end of the year based on the actuals. The Petitioner has submitted that similar petition for security expenses for 2020-21, 2021-22, 2022-23 and 2023-24 shall be filed on a yearly basis on the basis of the actual expenses of previous year subject to true up at the end of the year on actual expenses. The Petitioner has submitted that the difference, if any, between the estimated security expenses and actual security expenses as the audited accounts may be allowed to be recovered from the beneficiaries on a yearly basis.

104. BRPL has submitted that the approach adopted by the Petitioner towards claim of security expenses does not warrant the need for IWC as the same is claimed in



advance. The Petitioner, in response, has submitted that the expenses are not claimed in the instant petition and shall be claimed separately in a separate petition along with other assets.

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

Capital Spares

106. The Petitioner has sought reimbursement of capital spares at the end of tariff block. UPPCL has submitted that the claim of capital spares at the end of the tariff block is permissible only to the extent of the provision of the concerned tariff regulation which is the ceiling value. Therefore, if the value actual capital spares is more than what is provided in the regulation may not be allowed. In response, the Petitioner has submitted that the capital spares shall be claimed at the end of tariff block as per actual. Accordingly, the Petitioner has not claimed capital spares the instant petition and has informed that the same shall be claimed in a separate petition along with all other assets in accordance with the 2019 Tariff Regulations.

107. We have considered the submissions of the Petitioner and UPPCL. The Petitioner's claim towards capital spares, if any, will be dealt in accordance with the provisions of the 2019 Tariff Regulations.



Recovery of Annuity Payments for Land Compensation

108. The Petitioner has claimed to recover the annuity payments for the land compensation as the additional submission in the reply to the TV letter dated 3.3.2020. The land was acquired for the construction of Earth Electrode Station near village Khatela (Palwal) for 500 kV, 2500 MW Ballia-Bhiwadi HVDC Transmission system converter station and the Petitioner has to pay the annuity payment for 33 years from 2007-08 onwards. The Petitioner has already claimed the annuity payments up to the first half of 2011-12 as the part of capital cost. However, the Petitioner has submitted that it inadvertently missed to claim the annuity payments from 5th instalment onwards though it has already paid the annuity payments of ₹107.05 lakh from 5th instalment to 12th instalment i.e. up to 2018-19. The Petitioner has requested to allow the recovery of annuity payment directly from the beneficiaries. Further, the Petitioner has sought an in-principle approval for the recovery of annuity payments in the future.

109. We have dealt with similar issue of payment of annuity for land compensation *vide* order dated 26.2.2016 in Petition No. 32/TT/2013 and observed as under:

“47. The petitioner has computed the annuity payments to be made on basis of aforesaid clause D(4)(i) and D(4)(ii). The reimbursement of annuity payments is allowed to be recovered from the beneficiaries directly. The petitioner shall directly claim the payments from the beneficiaries along with the proof of payments. The petitioner is directed to file affidavit with regard to details of the payments towards annuity as and when made every year.”

110. In line with the said order, the annuity payments for the land compensation is allowed to be recovered from the beneficiaries directly for the payments done up to 12th instalment i.e. 2018-19. Thereafter, the Petitioner shall directly claim the payments from the beneficiaries along with the proof of payments for the remaining period of the annuity payments.



Sharing of Transmission Charges

111. The billing, collection and disbursement of the transmission charges approved shall be governed by the provisions of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 or the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020, as applicable, as provided in Regulation 43 of the 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

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

	(₹ in lakh)				
Annual Fixed Charges	2014-15	2015-16	2016-17	2017-18	2018-19
Combined Asset-I	34563.28	35065.04	35817.19	36065.85	36781.30
Asset-III	2905.26	2820.51	2730.53	2640.67	2553.77
Asset-IV	5546.04	5529.92	5587.39	5558.37	5578.90
Asset-V	11792.91	11529.87	11321.67	11053.33	10848.60

113. The Annual Fixed Charges allowed for the Combined Asset-I and Combined Asset-II for the 2019-24 tariff period are as under:

	(₹ in lakh)				
Annual Fixed Charges	2019-20	2020-21	2021-22	2022-23	2023-24
Combined Asset-I	35069.74	34623.38	34092.54	33575.41	23920.28
Combined Asset-II	17693.95	17166.23	16665.63	16192.76	10302.77

114. This order disposes of Petition No. 84/TT/2020.

**Sd/
(Arun Goyal)
Member**

**Sd/
(I. S. Jha)
Member**

**Sd/
(P. K. Pujari)
Chairperson**



ANNEXURE-1**DETAILS OF WEIGHTED AVERAGE RATE OF DEPRECIATION FOR THE 2014-19****TARIFF PERIOD****Combined Asset-I**

2014-19 Capital Expenditure	Combined Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	Projected Additional Capitalization (₹ in lakh)					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land - Freehold	2727.72	45.12	0.00	0.00	0.00	0.00	2772.84	0.00%	0.00	0.00	0.00	0.00	0.00
Land - Leasehold	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
Building Civil Works & Colony	10678.05	0.00	0.00	0.00	0.00	0.00	10678.05	3.34%	356.65	356.65	356.65	356.65	356.65
Transmission Line	88445.67	0.00	0.00	0.00	0.00	0.00	88445.67	5.28%	4669.93	4669.93	4669.93	4669.93	4669.93
Sub Station	154808.27	3620.20	71.48	37.22	178.23	1131.45	159846.85	5.28%	8269.45	8366.91	8369.78	8375.47	8410.04
PLCC	577.38	0.00	0.00	0.00	0.00	0.00	577.38	6.33%	36.55	36.55	36.55	36.55	36.55
IT Equipment (Incl. Software)	629.42	11.74	0.00	0.00	0.00	11.74	652.90	5.28%	33.54	33.85	33.85	33.85	34.16
Total	257866.51	3677.06	71.48	37.22	178.23	1143.19	262973.69	Total	13366.12	13463.89	13466.76	13472.45	13507.33
Average Gross Block (₹ in lakh)									259705.04	261579.31	261633.66	261741.39	262402.10
Weighted Average Rate of Depreciation									5.15%	5.15%	5.15%	5.15%	5.15%

Asset-III

2014-19 Capital Expenditure	Combined Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	Projected Additional Capitalization (₹ in lakh)					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land - Freehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
Land - Leasehold	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
Building Civil Works & Colony	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
Transmission Line	18063.91	0.00	0.00	0.00	0.00	0.00	18063.91	5.28%	953.77	953.77	953.77	953.77	953.77
Sub Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00	0.00
PLCC	38.37	0.00	0.00	0.00	0.00	0.00	38.37	6.33%	2.43	2.43	2.43	2.43	2.43
IT Equipment (Incl. Software)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00	0.00
Total	18102.28	0.00	0.00	0.00	0.00	0.00	18102.28	Total	956.20	956.20	956.20	956.20	956.20
Average Gross Block (₹ in lakh)									18102.28	18102.28	18102.28	18102.28	18102.28
Weighted Average Rate of Depreciation									5.28%	5.28%	5.28%	5.28%	5.28%



Asset-IV

2014-19 Capital Expenditure	Combined Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	Projected Additional Capitalization (₹ in lakh)					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land - Freehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
Land - Leasehold	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
Building Civil Works & Colony	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
Transmission Line	38936.63	0.00	0.00	0.00	0.00	0.00	38936.63	5.28%	2055.85	2055.85	2055.85	2055.85	2055.85
Sub Station	1945.63	0.00	0.00	0.00	0.00	0.00	1945.63	5.28%	102.73	102.73	102.73	102.73	102.73
PLCC	104.87	0.00	0.00	0.00	0.00	0.00	104.87	6.33%	6.64	6.64	6.64	6.64	6.64
IT Equipment (Incl. Software)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00	0.00
Total	40987.13	0.00	0.00	0.00	0.00	0.00	40987.13	Total	2165.22	2165.22	2165.22	2165.22	2165.22
Average Gross Block (₹ in lakh)									40987.13	40987.13	40987.13	40987.13	40987.13
Weighted Average Rate of Depreciation									5.28%	5.28%	5.28%	5.28%	5.28%

Asset-V

2014-19 Capital Expenditure	Combined Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	Projected Additional Capitalization (₹ in lakh)					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Land - Freehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00	0.00
Land - Leasehold	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
Building Civil Works & Colony	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
Transmission Line	73186.85	0.00	0.00	0.00	0.00	0.00	73186.85	5.28%	3864.27	3864.27	3864.27	3864.27	3864.27
Sub Station	1117.14	0.00	0.00	0.00	0.00	0.00	1117.14	5.28%	58.98	58.98	58.98	58.98	58.98
PLCC	52.71	0.00	0.00	0.00	0.00	0.00	52.71	6.33%	3.34	3.34	3.34	3.34	3.34
IT Equipment (Incl. Software)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.28%	0.00	0.00	0.00	0.00	0.00
Total	74356.70	0.00	0.00	0.00	0.00	0.00	74356.70	Total	3926.59	3926.59	3926.59	3926.59	3926.59
Average Gross Block (₹ in lakh)									74356.70	74356.70	74356.70	74356.70	74356.70
Weighted Average Rate of Depreciation									5.28%	5.28%	5.28%	5.28%	5.28%



ANNEXURE-2

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

Combined Asset-I

2019-24 Capital Expenditure	Combined Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected Additional Capitalization (₹ in lakh)					Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciati on as per Regulatio ns	Annual Depreciation as per Regulations (₹ in lakh)			
		2019-20	2020-21	2021-22	2022-23	2023-24			2019-20	2020-21	2021-22	2022-23
Land - Freehold	2772.84	0.00	0.00	0.00	0.00	0.00	2772.84	-	0.00	0.00	0.00	0.00
Land - Leasehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00
Building Civil Works & Colony	10678.05	0.00	0.00	0.00	0.00	0.00	10678.05	3.34%	356.65	356.65	356.65	356.65
Transmission Line	88445.67	0.00	0.00	0.00	0.00	0.00	88445.67	5.28%	4669.93	4669.93	4669.93	4669.93
Sub Station	153846.85	1949.14	0.00	0.00	0.00	0.00	161795.99	5.28%	8491.37	8542.83	8542.83	8542.83
PLCC	577.38	0.00	0.00	0.00	0.00	0.00	577.38	6.33%	36.55	36.55	36.55	36.55
IT Equipment (Incl. Software)	652.90	0.00	0.00	0.00	0.00	0.00	652.90	15.00%	97.94	97.94	97.94	97.94
Total	262973.69	1949.14	0.00	0.00	0.00	0.00	264922.83	Total	13652.43	13703.89	13703.89	13703.89
Average Gross Block (₹ in lakh)									263948.26	264922.83	264922.83	264922.83
Weighted Average Rate of Depreciation									5.17%	5.17%	5.17%	5.17%

*Since the asset has completed 12 years of life as on 31.3.2023, the remaining depreciable value of ₹71638.71 lakh as on 31.3.2023 has been spread across the balance useful life of 16 years in accordance with Regulation 33(5) of the 2019 Tariff Regulations. The annual depreciation from 2023-24 onwards is ₹4477.42 lakh.

Combined Asset-II

2019-24 Capital Expenditure	Combined Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected Additional Capitalization (₹ in lakh)					Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciati on as per Regulatio ns	Annual Depreciation as per Regulations (₹ in lakh)			
		2019-20	2020-21	2021-22	2022-23	2023-24			2019-20	2020-21	2021-22	2022-23
Land - Freehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00
Land - Leasehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00
Building Civil Works & Colony	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.34%	0.00	0.00	0.00	0.00
Transmission Line	130225.17	0.00	0.00	0.00	0.00	0.00	130225.17	5.28%	6875.89	6875.89	6875.89	6875.89
Sub Station	3072.22	0.00	0.00	0.00	0.00	0.00	3072.22	5.28%	162.21	162.21	162.21	162.21
PLCC	195.95	0.00	0.00	0.00	0.00	0.00	195.95	6.33%	12.40	12.40	12.40	12.40
IT Equipment (Incl. Software)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.00%	0.00	0.00	0.00	0.00
Total	133493.34	0.00	0.00	0.00	0.00	0.00	133493.34	Total	7050.51	7050.51	7050.51	7050.51
Average Gross Block (₹ in lakh)									133493.34	133493.34	133493.34	133493.34
Weighted Average Rate of Depreciation									5.28%	5.28%	5.28%	5.28%

*Since the asset has completed 12 years of life as on 31.3.2023, the remaining depreciable value of ₹33887.68 lakh as on 31.3.2023 has been spread across the balance useful life of 23 years in accordance with Regulation 33(5) of the 2019 Tariff Regulations. The annual depreciation from 2023-24 onwards is ₹1473.38 lakh.

