

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 79/TT/2020

Coram:

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

Date of Order: 09.02.2021

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 of **Asset-1**: LILO of existing Bangalore- Salem 400 kV S/C Line at Hosur and Extension of 400/220 kV Sub-station at Hosur, **Asset-2**: Nellore-Thiruvalam 400 kV D/C Quad line along with extension of 400/220 kV Sub-station at Nellore & Thiruvalam and 1X50 MVAR line reactor at both ends of each circuit of Nellore-Thiruvalam 400 kV Quad D/C line along with 450 ohms NGR, **Asset-3**: Thiruvalam-Melakottaiyur (Sholinganallur) 400 kV D/C Line along with Bay extension of 400 kV Sub-station at Thiruvalam and Extension of 400/220 kV Sub-station at Melakottaiyur (Sholinganallur), **Asset-4**: 2 Nos. 400 kV 63 MVAR Line Reactors for both circuits of Vijayawada – Nellore 400 kV D/C Transmission Line charged as Bus Reactors at Nellore (AP) Sub-station and **Asset-5**: 400 kV D/C Vijayawada – Nellore Transmission Line and associated bays along with 1 No. 400 kV 63 MVAR Line Reactor at Vijayawada (Nunna) Sub-station and 1 No. 63 MVAR Line Reactor at Vijayawada TPS under “Southern Region System strengthening Scheme- XVIII” in Southern Region.

And in the Matter of:

Power Grid Corporation of India Ltd.,
“Saudamini”, Plot No. 2,
Sector 29, Gurgaon-122001,
Haryana.

....Petitioner

Vs

1. Karnataka Power Transmission Corporation Ltd.,
Kaveri Bhavan,
Bangalore-560 009.



2. Transmission Corporation of Andhra Pradesh Ltd.,
Vidyut Soudha,
Hyderabad-500082
3. Kerala State Electricity Board,
Vaidyuthi Bhavanam,
Pattom, Thiruvananthapuram-695 004.
4. Tamil Nadu Generation and Distribution Corporation Ltd.,
(Formerly Tamilnadu Electricity Board-TNEB)
NPKRR Maaligai, 800, Anna Salai, Chennai- 600 002.
5. Electricity Department,
Government of Pondicherry,
Pondicherry-605001
6. Eastern Power Distribution Company of Andhra Pradesh Ltd.,
P&T Colony,
Seethmmadhara,
Vishakhapatnam, Andhra Pradesh.
7. Southern Power Distribution Company of Andhra Pradesh Ltd.,
Srinivasasa Kalyana Mandapam Backside,
Tiruchanoor Road, Kesavayana Gunta,
Chittoor District, Tirupati-517501, Andhra Pradesh.
8. Central Power Distribution Company of Andhra Pradesh Ltd.,
Corporate Office, Mint Compound,
Hyderabad-500 063, Telangana.
9. Northern Power Distribution Company of Andhra Pradesh Ltd.,
Opp. NIT Petrol Pump, Chaitanyapuri, Kazipet,
Warangal-506004, Telangana.
10. Bangalore Electricity Supply Company Ltd.,
Corporate Office, K. R.Circle,
Bangalore-560001, Karnataka.
11. Gulbarga Electricity Supply Company Ltd.,
Station Main Road,
Gulbarga, Karnataka.
12. Hubli Electricity Supply Company Ltd.,
Navanagar, PB Road,
Hubli, Karnataka.
13. MESCOM Corporate Office,
Paradigm Plaza, AB Shetty Circle,



Mangalore-575001, Karnataka.

14. Chamundeswari Electricity Supply Corporation Ltd.,
927, L J Avenue, Ground Floor, New Kantharaj Urs Road,
Saraswatipuram,
Mysore-570009, Karnataka.
15. Electricity Department,
Government of Goa,
Vidyuti Bhawan, Panaji,
Goa-403001.
16. Transmission Corporation of Telangana Ltd.,
Vidhyut Sudha, Khairatabad,
Hyderabad-500082
17. Tamil Nadu Transmission Corporation,
NPKRR Maaligai, 800, Anna Salai,
Chennai-600002.

...**Respondents**

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

For Respondents : None

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 the tariff for the period from COD to 31.3.2019 under of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and for determination of the tariff for the 2019-24 tariff period under Regulation 8 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of the following assets (hereinafter referred to as ‘the transmission assets/Combined Asset’) under



Southern Region System Strengthening Scheme- XVIII in Southern Region (hereinafter referred to as “the transmission project”):

Asset-1: LILO of existing Bangalore- Salem 400 kV S/C Line at Hosur and Extension of 400/220 kV Sub-station at Hosur,

Asset-2: Nellore-Thiruvalam 400 kV D/C Quad line along with extension of 400/220 kV Sub-station at Nellore & Thiruvalam and 1X50 MVAR line reactor at both ends of each circuit of Nellore-Thiruvalam 400 kV Quad D/C line along with 450 ohms NGR,

Asset-3: Thiruvalam-Melakottaiyur (Sholinganallur) 400 kV D/C Line along with Bay extension of 400 kV Sub-station at Thiruvalam and Extension of 400/220 kV Sub-station at Melakottaiyur (Sholinganallur),

Asset-4: 2 Nos. 400 kV 63 MVAR Line Reactors for both circuits of Vijayawada – Nellore 400 kV D/C Transmission Line charged as Bus Reactors at Nellore (AP) Sub-station and

Asset-5: 400 kV D/C Vijayawada-Nellore Transmission Line and associated bays along with 1 No. 400 kV 63 MVAR Line Reactor at Vijayawada (Nunna) Sub-station and 1 No. 63 MVAR Line Reactor at Vijayawada TPS.

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

“1) Approve the trued up Transmission Tariff for 2009-14, 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 apportioned approved cost as per RCE.

4) 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.

5) 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.

6) 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.

7) 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.

8) 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.

9) Allow the additional RoE of 0.5 % during 2014-19 period as per para 5.5 above.

10) Allow the Initial spares claimed as project as a whole.

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

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

and pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice"

Background

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

a) The Investment Approval (IA) for the transmission project was accorded by the Board of Directors of the Petitioner Company vide Memorandum Ref: C/CP/SRSS-XVIII dated 4.6.2012 at estimated cost of `126326.00 lakh including an IDC of ₹7855.00 lakh. The scope of work covered under "Southern Region System strengthening Scheme- XVIII in Southern Region" is as follows:

Transmission Line:

- a) Vijayada-Nellore 400 kV D/C Line
- b) Nellore-Thiruvallam 400 kV D/C Quad Line



- c) LILO of existing Bangalore-Salem 400 kV S/C Line at Hosur
- d) Thiruvalem- Melakottaiyur (Sholinganallur) 400 kV D/C Line

Sub-station:

- a) Extension of 400/220 kV Sub-station at Vijayawada
- b) Extension of 400/220 kV Sub-station at Nellore (APTRANSCO)
- c) Extension of 400/220 kV Sub-station at Nellore
- d) Extension of 400/220 kV Sub-station at Thiruvalem
- e) Extension of 400/220 kV Sub-station at Hosur
- f) Extension of 400/220 kV Sub-station at Melakottaiyur (Sholinganallur)

Reactive Compensation:

Line Reactors (400 kV)

- a) 1x63 MVAR Line Reactor at both ends of each circuit of Vijayawada-Nellore 400 kV D/C line along with 600 ohms NGR
- b) 1x50 MVAR Line Reactor at both ends of each circuit of Nellore-Thiruvalem 400 kV D/C quad line along with 450 ohms NGR

b) The entire scope under the IA is complete and covered in the instant petition.

4. The project was scheduled to be put into commercial operation within 29 months from the date of IA i.e. by 3.11.2014. The dates of commercial operation of the transmission assets are as follows:

Assets	COD
Asset-1	1.2.2014
Asset-2	16.4.2014
Asset-3	26.7.2014
Asset-4	16.3.2015
Asset-5	8.8.2015

5. The transmission tariff for Asset-1 from its COD to 31.3.2019 was determined vide order dated 24.2.2016 in Petition No. 147/TT/2015. The transmission tariff for Assets-2 and 3 was determined vide order dated 31.5.2016 in Petition No. 108/TT/2014. The transmission tariff for Assets-4 and 5 was determined vide order



dated 30.12.2015 in Petition No. 405/TT/2014 as per the 2014 Tariff Regulations. There was a time over-run of 5 months and 9 months in case of Asset-4 and 5. The Commission vide order dated 30.12.2015 in Petition No. 405/TT/2014 condoned entire time over-run in these assets.

6. The capital cost for Asset-1 was restricted to FR approved apportioned cost vide order dated 24.2.2016 in Petition No. 147/TT/2015. In the instant petition, the Petitioner has submitted RCE of the transmission project approved by the Board of Directors of the Petitioner's Company on 11.3.2016. The Petitioner had filed Petition No. 98/TT/2016 with a prayer to admit the RCE and approve the trued-up tariff for the 2009-14 tariff period. The Commission vide order dated 30.8.2016 rejected Petition No. 98/TT/2016, the relevant portions of the order are as under:

“12. We feel that the petitioner should have started the process of approval of RCE immediately after the completion of the scheme and six months is too long a period for approval of the RCE and there was laxity on the part of the petitioner in getting the RCE approved. As the petitioner has not submitted that RCE even after commissioning all the assets covered in the scheme, the Commission took the conscious decision of not granting the liberty to the petitioner for revising the trued-up tariff after approval of RCE.”

“15. As per the above said Regulation, the petitioner is required to file a truing petition for truing up of the tariff of the 2009-14 period. Further, the petitioner can come up for mid-term truing up as provided in the proviso to Regulation 6(1) and there is no provision for revising the trued-up tariff in the 2009 Tariff Regulations, as submitted by TANGEDCO. In the absence of any provision for revising the trued-up tariff in the 2009 Tariff Regulations we are not able to revise the trued-up tariff of the instant asset.”

“17. Further, the RCE was approved after disposal of the truing up petition on 24.2.2016, we are of the view that a petition cannot be re-opened on the basis of the developments after disposal of the petition. Accordingly, the instant petition seeking revision of the trued petition is rejected and the capital cost of the instant assets is restricted to its approved apportioned cost as held by APTEL in its judgement dated in 28.11.2013 in Appeal No.165 of 2012.”

7. Thereafter, the Petitioner approached the Appellate Tribunal for Electricity (APTEL) by way of Appeal No.147 of 2017. However, vide order dated 19.2.2018 in I. A. No. 123 of 2018 in Appeal No. 147 of 2017, ATPEL granted liberty to the



Petitioner to approach the Commission with a Review Petition and the said appeal was disposed of as withdrawn. Relevant extracts of the said order dated 19.2.2018 is as follows:

“12. For the foregoing reasons, the instant application filed by the Appellant seeking recall of the order dated 10.01.2018 is allowed. Accordingly, the order dated 10.01.2018 passed by this Hon’ble Tribunal is recalled. The Appeal No. 147 of 2017 is disposed of as withdrawn giving liberty to the Appellant to file the Review Petition before the Central Commission within a period of two weeks from the date of receipt of this order. Needless to say that all the contentions raised by both the parties are left open.”

8. Accordingly, Review Petition No. 15/RP/2018 was filed by the Petitioner with a prayer to admit the RCE for the assets in the instant petition and determine the tariff accordingly. The Commission vide order dated 4.4.2019 in Review Petition No. 15/RP/2018 admitted the RCE submitted by the Petitioner and observed as under:

“21. We have given our thoughtful consideration to this contention of the respondent. As we have already observed, tariff determination is a continuous process and it cannot be restricted to a particular period of time. Further, detailed submissions on record show that for filing of RCE in Petition No 147/TT/2015, no deadline was fixed in the proceedings by the Commission. The Petition No. 147/TT/2015 was disposed of vide order dated 24.2.2016. We are in agreement with the Review Petitioner’s contention that in view of the APTEL’s judgment dated 15.3.2017 in Appeal No. 127 of 2015, in cases where the Review Petitioner has failed to place on record any documents before the Commission, it must be given a chance to put up its case with complete facts and supporting documents. In our view, in the present case, the Review Petitioner should be given opportunity to place on record the documents along with supporting documents. Accordingly, we take on record the RCE submitted by the Review Petitioner and the same will be considered at the time of truing up of the 2014-19 tariff.”

9. In respect of Assets- 4 and 5 transmission tariff of the 2014-19 tariff period was approved vide order dated 30.12.2015 in Petition No. 405/TT/2014. The Commission restricted the capital cost of Asset-5 to ₹46695.24 lakh with regard to FR approved apportioned cost and directed the Petitioner to submit the RCE for the assets at the time of truing-up. Capital cost of Asset 4 as on COD was ₹1877.06 lakh which is within the approved apportioned cost.



10. Accordingly, the Petitioner has submitted the RCE along with the instant petition. The same has been considered in the instant petition. However, the Petitioner's prayer for revision of true-up of the 2009-14 tariff period in respect of Asset-1 has not been considered as the true-up of the 2009-14 tariff period has already been done.

11. The Respondents are the transmission and distribution licensees, who are procuring transmission services from the Petitioner, mainly beneficiaries of the Southern Region.

12. The Petitioner has served the petition on the Respondents and notice of this petition has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. General Notice dated 12.3.2020 directing the beneficiaries/ Respondents to file reply in the matter was also posted on the Commission's website. None of the Respondents have filed any reply.

13. The hearing in this matter was held on 22.5.2020 through video conference and the order was reserved.

14. Having heard the representatives of the Petitioner and perused the material on record, we proceed to dispose of the petition. This order is issued considering the submissions made by the Petitioner in its petition accompanied by affidavits dated 21.12.2019, 25.2.2020, 13.3.2020 and 5.6.2020.



Truing up of Annual Fixed Charges for 2014-19 Tariff Period

15. The Petitioner has submitted the information as required under the 2014 Tariff Regulations for truing-up of annual fixed charges for the 2014-19 period. The tariff for the 2014-19 period has been trued-up as discussed in the subsequent paragraphs.

16. The details of the trued-up transmission charges claimed by the Petitioner for the 2014-19 tariff period in respect of the transmission assets are as under:

(₹ in lakh)

Asset-1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	139.60	146.18	147.67	148.00	148.00
Interest on Loan	160.66	154.38	141.71	126.30	112.63
Return on Equity	156.89	165.36	167.42	167.78	168.23
Interest on Working Capital	17.67	18.10	18.14	18.05	18.01
O & M Expenses	129.30	133.59	138.03	142.61	147.33
Total	604.12	617.61	612.97	602.74	594.20

(₹ in lakh)

Asset-2					
Particulars	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	2039.64	2415.44	2426.75	2426.75	2426.75
Interest on Loan	2363.65	2584.05	2355.88	2097.63	1873.97
Return on Equity	2349.89	2795.15	2807.38	2807.38	2814.83
Interest on Working Capital	177.95	203.67	199.76	194.65	190.53
O & M Expenses	407.42	438.94	453.45	468.58	484.13
Total	7338.55	8437.25	8243.22	7994.99	7790.21

(₹ in lakh)

Asset-3					
Particulars	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	545.59	853.82	865.71	868.11	868.11
Interest on Loan	665.31	961.71	884.75	789.08	706.63
Return on Equity	629.83	991.73	1004.98	1007.76	1010.44
Interest on Working Capital	54.51	83.00	82.42	80.96	79.78
O & M Expenses	219.69	332.75	343.78	355.19	366.97
Total	2114.93	3223.01	3181.64	3101.10	3031.93



(₹ in lakh)

Asset-4					
Particulars	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
Depreciation	4.19	98.14	100.09	103.74	106.74
Interest on Loan	5.63	124.18	114.83	105.14	97.62
Return on Equity	4.90	115.23	117.36	121.45	125.14
Interest on Working Capital	0.63	14.65	14.76	14.95	15.18
O & M Expenses	5.28	124.60	128.74	133.02	137.42
Total	20.63	476.80	475.78	478.30	482.10

(₹ in lakh)

Asset-5				
Particulars	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
Depreciation	1663.74	2677.04	2755.61	2787.14
Interest on Loan	1911.77	2876.63	2695.82	2477.46
Return on Equity	1865.09	2999.74	3087.88	3131.58
Interest on Working Capital	133.88	210.68	210.81	207.99
O & M Expenses	156.55	249.71	257.97	266.57
Total	5731.03	9013.80	9008.09	8870.74

17. The details of the trued-up Interest on Working Capital (IWC) claimed by the Petitioner in respect of Assets-1 to 5 are as under:

(₹ in lakh)

Asset-1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	10.78	11.13	11.50	11.88	12.28
Maintenance Spares	19.40	20.04	20.70	21.39	22.10
Receivables	100.69	102.94	102.16	100.46	99.03
Total	130.87	134.11	134.36	133.73	133.41
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	17.67	18.10	18.14	18.05	18.01

(₹ in lakh)

Asset-2					
Particulars	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
O & M Expenses	35.41	36.58	37.79	39.05	40.34
Maintenance Spares	63.73	65.84	68.02	70.29	72.62
Receivables	1275.51	1406.21	1373.87	1332.50	1298.37
Total	1374.65	1508.63	1479.68	1441.84	1411.33
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	177.95	203.67	199.76	194.65	190.53



(₹ in lakh)

Asset-3					
Particulars	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
O & M Expenses	26.83	27.73	28.65	29.60	30.58
Maintenance Spares	48.30	49.91	51.57	53.28	55.05
Receivables	516.69	537.17	530.27	516.85	505.32
Total	591.82	614.81	610.49	599.73	590.95
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	54.51	83.00	82.42	80.96	79.78

(₹ in lakh)

Asset-4					
Particulars	2014-15 (Pro-rata)	2015-16	2016-17	2017-18	2018-19
O & M Expenses	10.05	10.38	10.73	11.09	11.45
Maintenance Spares	18.09	18.69	19.31	19.95	20.61
Receivables	78.46	79.47	79.30	79.72	80.35
Total	106.60	108.54	109.34	110.76	112.41
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	0.63	14.65	14.76	14.95	15.18

(₹ in lakh)

Asset-5				
Particulars	2015-16 (Pro-rata)	2016-17	2017-18	2018-19
O & M Expenses	20.15	20.81	21.50	22.21
Maintenance Spares	36.27	37.46	38.70	39.99
Receivables	1475.08	1502.30	1501.35	1478.46
Total	1531.50	1560.57	1561.55	1540.66
Rate of Interest (%)	13.50	13.50	13.50	13.50
Interest on Working Capital	133.88	210.68	210.81	207.99

Capital Cost

18. The Commission vide order dated 24.2.2016 in Petition No. 147/TT/2015 for Asset-1, vide order dated 31.5.2016 in Petition No. 108/TT/2014 for Assets-2 and 3 and vide order dated 30.12.2015 in Petition No. 405/TT/2014 for Assets-4 and 5 allowed the capital cost as on COD and Additional Capital Expenditure (ACE) as under:



(₹ in lakh)

Assets	Capital cost as on COD/31.3.2014 (admitted)	ACE				Capital Cost as on 31.3.2019 (Admitted)
		2014-15	2015-16	2016-17	2017-18	
Asset-1	1974.00	0.00	0.00	0.00	0.00	1974.00
Asset-2	35086.71	9427.15	445.69	0.00	0.00	44959.55
Asset-3	14267.19	1673.87	1152.01	0.00	0.00	17093.07
Asset-4	1877.06	1.64	0.00	0.00	0.00	1878.70
Asset-5	46695.24	0.00	0.00	0.00	0.00	46695.24

19. The details of the apportioned approved capital cost, capital cost as on COD and 31.3.2014 and the ACE incurred up to 31.3.2019 as claimed by the Petitioner for the transmission assets are as under:

(₹ in lakh)

Assets	FR Apportioned Approved Capital Cost	RCE Apportioned Approved Capital Cost	Capital cost as on COD*	Additional Capital Expenditure*					Total Capital Cost as on 31.3.2019
				2013-14	2014-15	2015-16	2016-17	2017-18	
Asset-1	1974.00	3254.00	1960.62	603.48	201.50	60.30	12.35	0.00	2838.25
Asset-2	52281.00	46005.27	36132.43	0.00	9427.15	445.69	0.00	0.00	46005.27
Asset-3	23750.00	19305.00	14394.82	0.00	1673.87	354.61	91.21	0.00	16514.51
Asset-4	1878.70	2287.53	1880.59	0.00	46.86	45.28	25.02	113.43	2111.18
Asset-5	46695.24	52832.20	49109.97	0.00	0.00	850.50	1677.59	1194.14	52832.20

*Capital cost as on COD and ACE is shown on accrual basis as claimed by petitioner in the petition.

20. The completion cost including ACE in respect of transmission assets is within the RCE approved apportioned capital cost. Therefore, there is no cost over-run in respect of the transmission assets.

Interest During Construction (IDC)

21. The Petitioner has claimed IDC for the transmission assets and has submitted the Auditor's Certificates in support of the same. The Petitioner has submitted computation of IDC along with the year-wise details of the IDC discharged. The allowable IDC has been worked out considering the information submitted by the Petitioner for the individual assets separately on cash basis.



22. Accordingly, based on the information available on record, the IDC allowed is summarized as under:

(₹ in lakh)

Assets	IDC as per Auditor's Certificate	IDC Admissible	Computational difference in IDC	IDC Discharged as on COD	IDC Un-discharged as on COD	IDC Discharged in 2014-15	IDC Discharged in 2015-16	IDC Discharged in 2016-17
A	B	C	D=B-C	E	F=C-E	G	H	I
Asset-1	65.64	65.64	0.00	8.13	57.51*	57.42	0.00	0.00
Asset-2	1483.03	1483.03	0.00	437.31	1045.72	1045.72	0.00	0.00
Asset-3	545.35	545.35	0.00	469.24	76.11	71.56	4.55	0.00
Asset-4	98.34	98.34	0.00	94.82	3.52	0.00	3.52	0.00
Asset-5	4965.59	4946.93	18.66	3383.77	1563.16	0.00	1452.75	110.41

Out of the total un-discharged IDC as on COD of ₹57.51 lakh, ₹0.08 lakh was discharged in 2013-14.

Incidental Expenditure During Construction (IEDC)

23. The Petitioner has claimed IEDC of ₹116.73 lakh, ₹398.06 lakh, ₹65.87 lakh, ₹25.45 lakh and ₹1198.84 lakh for Assets-1, 2, 3, 4 and 5 respectively and has submitted Auditor's Certificates in support of the same. The Petitioner has also submitted that the entire IEDC has been discharged as on COD in respect of the transmission assets. The IEDC has been allowed as per the APTEL's judgment dated 2.12.2019 in Appeal Nos. 95 of 2018 and 140 of 2018. The IEDC claimed by the Petitioner is found to be within the estimated IEDC of ₹1805 lakh as per RCE. Accordingly, IEDC allowed is as under:

(₹ in lakh)

Assets	IEDC Claimed	IEDC Allowed
Asset-1	116.73	116.73
Asset-2	398.06	398.06
Asset-3	65.87	65.87
Asset-4	25.45	25.45
Asset-5	1198.84	1198.84



Initial Spares

24. 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 APTEL dated 14.9.2019 in Appeal No.74 of 2017:

Assets	Particulars	Estimated Completion Cost (₹ in lakh)	Initial Spares Claimed (₹ in lakh)	Ceiling Limit (%)
Asset-1	Sub-station (AIS)	922.36	51.65	2.5
Asset-2	Sub-station (AIS)	3070.68	84.25	6.0
Asset-3	Sub-station (AIS)	1655.60	92.77	6.0
Asset-4	Sub-station (AIS)	1757.51	64.27	6.0
Asset-5	Sub-station (AIS)	2394.99	65.37	6.0
Total			358.31	
Asset-1	Transmission Line	1603.98	12.25	0.75
Asset-2	Transmission Line	40795.39	355.34	1.00
Asset-3	Transmission Line	13967.63	136.88	1.00
Asset-4	Transmission Line	0.00	0.00	1.00
Asset-5	Transmission Line	44108.00	229.35	1.00
Total		100475.00	733.82	

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

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

26. We agree with the Petitioner that as per the APTEL's judgement dated 14.9.2019 in Appeal No. 74 of 2017, Initial Spares are to be allowed as a percentage of the project cost as a whole. In the present case, Asset-1 was put into commercial operation in the 2009-14 tariff period while Assets-2 to 5 were put into commercial operation during 2014-19 tariff period. Therefore, the 2009 Tariff Regulations are applicable for Asset-1 and 2014 Tariff Regulations are applicable for Assets-2, 3, 4



and 5. However, even though the transmission assets were put into commercial operation during 2009-14 and 2014-19 tariff periods and the entire transmission project was completed during 2014-19 tariff period, the overall project cost of the transmission assets is arrived at only when all the instant assets are combined while claiming the tariff for the 2019-24 tariff period. Therefore, the Initial Spares are allowed on the basis of the cost of the individual assets in the 2014-19 tariff period and the Initial Spares are allowed on the basis of the overall project cost in the 2019-24 period.

27. The details of the Initial Spares allowed for the transmission assets for the 2014-19 tariff period are as under:

Sub-stations:

Assets	Capital Cost/P&M cost considered as on cut-off date (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per 2009/2014 Tariff Regulations (in %)	Initial Spares allowable as per 2009/2014 Tariff Regulations	Initial Spares allowed (₹ in lakh)
Asset-1	922.36	51.65	2.5	22.33	22.33
Asset-2	3070.68	84.25	6.0	190.62	84.25
Asset-3	1655.60	92.77	6.0	99.72	92.77
Asset-4	1757.51	64.27	6.0	108.08	64.27
Asset-5	2394.99	65.37	6.0	148.70	65.37

Transmission Line:

Assets	Capital Cost considered as on cut-off date (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per 2009/2014 Tariff Regulations (in %)	Initial Spares allowable as per 2009/2014 Tariff Regulations	Initial Spares allowed (₹ in lakh)
Asset-1	1603.98	12.25	0.75	12.03	12.03
Asset-2	40795.39	355.34	1.0	408.49	355.34
Asset-3	13967.63	136.88	1.0	139.70	136.88
Asset-4	0.00	0.00	1.0	0.00	0.00
Asset-5	44108.00	229.35	1.0	443.22	229.35



Capital cost as on COD

28. The capital cost of the transmission assets has been calculated in accordance with Regulations 9(3) and 9(6) of the 2014 Tariff Regulations. Accordingly, the capital cost allowed as on COD is summarized as under:

(₹ in lakh)

Assets	Capital cost as on COD/ 31.3.2014 as per Auditor Certificate	Less: IDC as on COD due to		Excess Initial Spares	Capital cost considered as on COD/ 31.3.2014 (on cash basis)
		Computational difference	Un-discharged		
	1	2	3	4	6=1-2-3-4
Asset-1	2564.10	0.00	57.42	29.55	2477.12**
Asset-2	36132.43	0.00	1045.72	0.00	35086.71
Asset-3	14394.82	0.00	76.11	0.00	14318.71
Asset-4	1880.59	0.00	3.52	0.00	1877.07
Asset-5	49109.97	18.66	1563.16	0.00	47528.15

**Recomputed after considering RCE.

Additional Capital Expenditure (ACE)

29. The Petitioner has claimed the following ACE (including un-discharged IDC) for the assets covered in the instant petition and submitted the Auditor's Certificates in support of the same:

(₹ in lakh)

Assets	Additional Capital Expenditure			
	2014-15	2015-16	2016-17	2017-18
Asset-1	201.51	60.30	12.35	0.00
Asset-2	10472.87	445.69	0.00	0.00
Asset-3	1745.43	359.15	91.21	0.00
Asset-4	46.86	48.80	25.02	113.43
Asset-5	0.00	2303.26	1788.00	1194.14

30. The Petitioner has submitted that ACE incurred for the transmission assets is on account of balance and retention payments due to un-discharged liability towards final payment or withheld payment due to contractual exigencies for works executed within the cut-off date. The ACE for all the transmission assets covered in the instant petition during the 2014-19 tariff period has been claimed under Regulation 14(1)(i)



and (ii) of the 2014 Tariff Regulations and is within the cut-off date. It is further observed that total completion cost including ACE during 2014-19 tariff period for the transmission assets is within the RCE approved apportioned cost.

31. We have considered the submissions of the Petitioner. The un-discharged IDC as on COD has been allowed as ACE in its respective year of discharge. The ACE for the 2014-19 tariff period is allowed under Regulation 14(1)(i) and (ii) of the 2014 Tariff Regulations. Accordingly, the ACE allowed for the transmission assets is as under:

(₹ in lakh)

Assets	ACE on cash basis			
	2014-15	2015-16	2016-17	2017-18
Asset-1	201.51	60.30	12.35	0.00
Asset-2	10472.87	445.69	0.00	0.00
Asset-3	1745.43	359.15	91.21	0.00
Asset-4	46.86	48.80	25.02	113.43
Asset-5	0.00	2303.26	1788.00	1194.14

Capital Cost considered for the tariff period 2014-19

32. Accordingly, the capital cost as on COD including the ACE considered for the 2014-19 tariff period and capital cost as on 31.3.2019 considered for truing up of the 2014-19 tariff is as under:

(₹ in lakh)

Assets	Capital cost as on COD / 31.3.2014 (on cash basis)	ACE on cash basis (admitted)				Total Capital Cost as on 31.3.2019
		2014-15	2015-16	2016-17	2017-18	
Asset-1	2477.12	201.51	60.30	12.35	0.00	2751.28
Asset-2	35086.71	10472.87	445.69	0.00	0.00	46005.27
Asset-3	14318.71	1745.43	359.15	91.21	0.00	16514.50
Asset-4	1877.07	46.86	48.80	25.02	113.43	2111.18
Asset-5	47528.2	0.00	2303.26	1788.00	1194.14	52813.55

Debt-Equity Ratio

33. The Petitioner has considered debt-equity ratio of 70:30 as on COD and for ACE post COD. The debt-equity ratio of 70:30 has been allowed for the capital cost as on



COD and ACE during 2014-19 tariff period as provided under Regulation 19 of the 2014 Tariff Regulations. The same has been summarised as under:

Asset-1	As on 31.3.2014		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	1733.99	70.00	1925.91	70.00
Equity	743.14	30.00	825.38	30.00
Total	2477.12	100.00	2751.28	100.00
Asset-2	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	24560.70	70.00	32203.69	70.00
Equity	10526.01	30.00	13801.58	30.00
Total	35086.71	100.00	46005.27	100.00
Asset-3	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	10023.10	70.00	11560.16	70.00
Equity	4295.61	30.00	4954.34	30.00
Total	14318.71	100.00	16514.50	100.00
Asset-4	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	1313.95	70.00	1477.83	70.00
Equity	563.12	30.00	633.35	30.00
Total	1877.07	100.00	2111.18	100.00
Asset-5	As on COD		As on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	33269.71	70.00	36969.49	70.00
Equity	14258.44	30.00	15844.06	30.00
Total	47528.15	100.00	52813.55	100.00

Interest on Loan (IoL)

34. The Petitioner has claimed IoL based on actual interest rates for each year during the 2014-19 period. The Petitioner has prayed for change in interest rates prevailing as on 1.4.2019 for respective loans. We have considered the submissions of the Petitioner and accordingly calculated the IoL based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. The IoL has been worked out as detailed below:



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

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

35. The details of trued up IoL approved for the 2014-15 tariff period are as under:

(₹ in lakh)

Asset-1					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	1733.99	1875.05	1917.26	1925.91	1925.91
Cumulative Repayments upto Previous Year	17.01	152.04	293.64	436.74	580.17
Net Loan-Opening	1716.98	1723.01	1623.61	1489.16	1345.74
Addition due to ACE	141.06	42.21	8.65	0.00	0.00
Repayment during the year	135.03	141.60	143.10	143.43	143.43
Net Loan-Closing	1723.01	1623.61	1489.16	1345.74	1202.31
Average Loan	1719.99	1673.31	1556.39	1417.45	1274.02
Weighted Average Rate of Interest on Loan (%)	9.05	8.95	8.84	8.65	8.59
Interest on Loan	155.61	149.79	137.58	122.66	109.41

(₹ in lakh)

Asset-2					
Particular	2014-15 (Pro-rata for 350 days)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	24560.70	31891.71	32203.69	32203.69	32203.69
Cumulative Repayments upto Previous Year	0.00	2038.81	4452.48	6877.46	9302.43
Net Loan-Opening	24560.70	29852.90	27751.21	25326.24	22901.26
Addition due to ACE	7331.01	311.98	0.00	0.00	0.00
Repayment during the year	2038.81	2413.67	2424.97	2424.97	2424.97
Net Loan-Closing	29852.90	27751.21	25326.24	22901.26	20476.29
Average Loan	27206.80	28802.05	26538.72	24113.75	21688.78
Weighted Average Rate of Interest on Loan (%)	9.060	8.967	8.878	8.701	8.643
Interest on Loan	2363.68	2582.76	2356.01	2098.07	1874.58

(₹ in lakh)

Asset-3					
Particular	2014-15 (Pro-rata for 249 days)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	10023.10	11244.90	11496.31	11560.16	11560.16
Cumulative Repayments upto Previous Year	0.00	545.60	1399.42	2265.13	3133.25
Net Loan-Opening	10023.10	10699.30	10096.89	9295.03	8426.91



Addition due to ACE	1221.80	251.41	63.85	0.00	0.00
Repayment during the year	545.60	853.82	865.71	868.12	868.12
Net Loan-Closing	10699.30	10096.89	9295.03	8426.91	7558.79
Average Loan	10361.20	10398.10	9695.96	8860.97	7992.85
Weighted Average Rate of Interest on Loan (%)	9.413	9.247	9.125	8.905	8.841
Interest on Loan	665.32	961.53	884.72	789.08	706.63

(₹ in lakh)

Asset-4					
Particular	2014-15 (Pro-rata for 16 days)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	1313.95	1346.75	1380.91	1398.43	1477.83
Cumulative Repayments upto Previous Year	0.00	4.19	102.33	202.42	306.15
Net Loan-Opening	1313.95	1342.56	1278.58	1196.01	1171.67
Addition due to ACE	32.80	34.16	17.51	79.40	0.00
Repayment during the year	4.19	98.14	100.08	103.74	106.73
Net Loan-Closing	1342.56	1278.58	1196.01	1171.67	1064.94
Average Loan	1328.25	1310.57	1237.29	1183.84	1118.31
Weighted Average Rate of Interest on Loan (%)	9.670	9.452	9.278	8.881	8.729
Interest on Loan	5.63	123.88	114.80	105.13	97.62

(₹ in lakh)

Asset-5				
Particular	2015-16 (Pro-rata for 237 days)	2016-17	2017-18	2018-19
Gross Normative Loan	33269.71	34881.99	36133.59	36969.49
Cumulative Repayments upto Previous Year	0.00	1663.11	4339.16	7093.79
Net Loan-Opening	33269.71	33218.89	31794.43	29875.71
Addition due to ACE	1612.28	1251.60	835.90	0.00
Repayment during the year	1663.11	2676.06	2754.62	2786.15
Net Loan-Closing	33218.89	31794.43	29875.71	27089.56
Average Loan	33244.30	32506.66	30835.07	28482.63
Weighted Average Rate of Interest on Loan (%)	8.88	8.85	8.74	8.70
Interest on Loan	1911.04	2875.43	2694.86	2476.59

36. The details of IoL approved vide order dated 24.2.2016 in Petition No. 147/TT/2015, trued up IoL claimed by the Petitioner in the instant petition and trued up IoL allowed in the instant order for Asset-1 are shown in the table below:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 24.2.2016 in Petition No. 147/TT/2015	118.64	109.28	99.79	90.20	81.01
Claimed by the Petitioner in the instant petition	160.66	154.38	141.71	126.30	112.63
Allowed after True-Up in the instant order	155.61	149.79	137.58	122.66	109.41

37. The details of loL approved vide order dated 31.5.2016 in Petition No. 108/TT/2014, trued up loL claimed by the Petitioner in the instant petition and trued up loL allowed in the instant order for Asset-2 are shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 350 days)	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 31.5.2016 in Petition No. 108/TT/2014	2335.62	2549.56	2347.97	2131.73	1920.25
Claimed by the Petitioner in the instant petition	2363.65	2584.05	2355.88	2097.63	1873.97
Allowed after true-up in the instant order	2363.68	2582.76	2356.01	2098.07	1874.58

38. The details of loL approved vide order dated 31.5.2016 in Petition No. 108/TT/2014, trued up loL claimed by the Petitioner in the instant petition and trued up loL allowed in the instant order for Asset-3 are shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 249 days)	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 31.5.2016 in Petition No. 108/TT/2014	660.85	990.88	945.42	860.20	776.20
Claimed by the Petitioner in the instant petition	665.31	961.71	884.75	789.08	706.63
Allowed after true-up in the instant order	665.32	961.53	884.72	789.08	706.63

39. The details of loL approved vide order dated 30.12.2015 in Petition No. 405/TT/2014, trued up loL claimed by the Petitioner in the instant petition and trued up loL allowed in the instant order for Asset-4 are shown in the table below:



(₹ in lakh)

Particulars	2014-15 (Pro-rata for 16 days)	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 30.12.2015 in Petition No. 405/TT/2014	5.46	122.07	112.93	103.79	94.74
Claimed by the Petitioner in the instant petition	5.63	124.18	114.83	105.14	97.62
Allowed after true-up in the instant order	5.63	123.88	114.80	105.13	97.62

40. The details of IoL approved vide order dated 30.12.2015 in Petition No. 405/TT/2014, trued up IoL claimed by the Petitioner in the instant petition and trued up IoL allowed in the instant order for Asset-5 are shown in the table below:

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 237 days)	2016-17	2017-18	2018-19
Allowed vide order dated 30.12.2015 in Petition No. 405/TT/2014	1855.02	2681.12	2460.67	2242.19
Claimed by the Petitioner in the instant petition	1911.77	2876.63	2695.82	2477.46
Allowed after true-up in the instant order	1911.04	2875.43	2694.86	2476.59

Return on Equity (RoE)

41. 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 also claimed additional RoE of 0.50% in respect of Assets-2 and 3. The Petitioner has submitted that they are liable to pay income tax at MAT rates and has claimed following effective tax rates for the 2014-19 tariff period:

Year	Claimed effective tax (%)	Grossed up ROE [Base Rate/(1-t)] (%)
2014-15	21.018	19.625
2015-16	21.382	20.351
2016-17	21.338	20.341
2017-18	21.337	20.341
2018-19	21.549	20.395



42. We have considered the submissions of the Petitioner. The Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate based on the notified MAT rates for the Petitioner based on the notified MAT rates.

The relevant portion of the order dated 27.4.2020 is as under:

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

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

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

”

43. 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. Accordingly, the grossed up RoE rate is as follows:

Year	Notified MAT rates (inclusive of surcharge & cess) (in %)	Base rate of RoE (in %)	Grossed up RoE (Base Rate/1-t) (in %)
2014-15	20.9605	15.50	19.610
2015-16	21.3416	15.50	19.705



2016-17	21.3416	15.50	19.705
2017-18	21.3416	15.50	19.705
2018-19	21.5488	15.50	19.758

44. The additional RoE of 0.5% was allowed for the Assets-2 and 3 in order dated 31.5.2016 in Petition No. 108/TT/2014. Accordingly, following RoE has been considered for the assets in the instant petition:

Year	MAT Rate (%)	Grossed up ROE [Base Rate/(1-t)] (%)	
		Assets-1, 4 and 5	Assets-2 and 3
2014-15	20.9605	19.610	20.243
2015-16	21.3416	19.705	20.341
2016-17	21.3416	19.705	20.341
2017-18	21.3416	19.705	20.341
2018-19	21.5488	19.758	20.395

45. Accordingly, RoE allowed for the transmission assets is as under:

(₹ in lakh)

Asset-1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	743.14	803.59	821.68	825.38	825.38
Addition due to ACE	60.45	18.09	3.70	0.00	0.00
Closing Equity	803.59	821.68	825.38	825.38	825.38
Average Equity	773.36	812.63	823.53	825.38	825.38
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.610	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax)	151.66	160.13	162.28	162.64	163.08

(₹ in lakh)

Asset-2					
Particulars	2014-15 (Pro-rata for 350 days)	2015-16	2016-17	2017-18	2018-19
Opening Equity	10526.01	13667.87	13801.58	13801.58	13801.58
Addition due to ACE	3141.86	133.71	0.00	0.00	0.00
Closing Equity	13667.87	13801.58	13801.58	13801.58	13801.58
Average Equity	12096.94	13734.72	13801.58	13801.58	13801.58
Return on Equity (Base Rate) (%)	16.000	16.000	16.000	16.000	16.000
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax)	20.243	20.341	20.341	20.341	20.395
Return on Equity (Pre-tax)	2348.15	2793.80	2807.40	2807.40	2814.81



(₹ in lakh)

Asset-3					
Particulars	2014-15 (Pro-rata for 249 days)	2015-16	2016-17	2017-18	2018-19
Opening Equity	4295.61	4819.24	4926.98	4954.34	4954.34
Addition due to ACE	523.63	107.74	27.36	0.00	0.00
Closing Equity	4819.24	4926.98	4954.34	4954.34	4954.34
Average Equity	4557.42	4873.11	4940.66	4954.34	4954.34
Return on Equity (Base Rate) (%)	16.000	16.000	16.000	16.000	16.000
Tax Rate applicable (%)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax)	20.243	20.341	20.341	20.341	20.395
Return on Equity (Pre-tax)	629.36	991.24	1004.99	1007.77	1010.43

(₹ in lakh)

Asset-4					
Particulars	2014-15 (Pro-rata for 16 days)	2015-16	2016-17	2017-18	2018-19
Opening Equity	563.12	577.17	591.81	599.32	633.35
Addition due to ACE	14.06	14.64	7.51	34.03	0.00
Closing Equity	577.17	591.81	599.32	633.35	633.35
Average Equity	570.14	584.49	595.57	616.33	633.35
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	21.342	21.342	21.342	21.549	21.342
Rate of Return on Equity (Pre-tax)	19.705	19.705	19.705	19.758	19.705
Return on Equity (Pre-tax)	4.90	115.18	117.36	121.45	125.13

(₹ in lakh)

Asset-5				
Particulars	2015-16 (Pro-rata for 237 days)	2016-17	2017-18	2018-19
Opening Equity	14258.44	14949.42	15485.82	15844.06
Addition due to ACE	690.98	536.40	358.24	0.00
Closing Equity	14949.42	15485.82	15844.06	15844.06
Average Equity	14603.93	15217.62	15664.94	15844.06
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax)	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax)	1863.48	2998.70	3086.85	3130.39

46. The details of RoE approved vide order dated 24.2.2016 in Petition No. 147/TT/2015, trued up RoE claimed by the Petitioner in the instant petition and trued up RoE allowed in the instant order for Asset-1 are shown in the table below:



(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 24.2.2016 in Petition No. 147/TT/2015	116.13	116.13	116.13	116.13	116.13
Claimed by the Petitioner in the instant petition	156.89	165.36	167.42	167.78	168.23
Allowed after true-up in the instant order	151.66	160.13	162.28	162.64	163.08

47. The details of RoE approved vide order dated 31.5.2016 in Petition No. 108/TT/2014, trued up RoE claimed by the Petitioner in the instant petition and trued up RoE allowed in the instant order for Asset-2 are shown in the table below:

(₹ in lakh)					
Particulars	2014-15 (Pro-rata for 350 days)	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 31.5.2016 in Petition No. 108/TT/2014	2243.89	2631.86	2644.97	2644.97	2644.97
Claimed by the Petitioner in the instant petition	2349.89	2795.15	2807.38	2807.38	2814.83
Allowed after true-up in the instant order	2348.15	2793.80	2807.40	2807.40	2814.81

48. The details of RoE approved earlier vide order dated 31.5.2016 in Petition No. 108/TT/2014, trued up RoE claimed by the Petitioner in the instant petition and trued up RoE allowed in the instant order for Asset-3 are shown in the table below:

(₹ in lakh)					
Particulars	2014-15 (Pro-rata for 249 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 31.5.2016 in Petition No. 108/TT/2014	606.18	971.70	1005.90	1005.90	1005.90
Claimed by the Petitioner in the instant petition	629.83	991.73	1004.98	1007.76	1010.44
Allowed after true-up in the instant order	629.36	991.24	1004.99	1007.77	1010.43



49. The details of RoE approved vide order dated 30.12.2015 in Petition No. 405/TT/2014, trued up RoE claimed by the Petitioner in the instant petition and trued up RoE allowed in the instant order for Asset-4 are shown in the table below:

Particulars	(₹ in lakh)				
	2014-15 (Pro-rata for 16 days)	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 30.12.2015 in Petition No. 405/TT/2014	4.75	110.53	110.53	110.53	110.53
Claimed by the Petitioner in the instant petition	4.90	115.23	117.36	121.45	125.14
Allowed after true-up in the instant order	4.90	115.18	117.36	121.45	125.13

50. The details of RoE approved vide order dated 30.12.2015 in Petition No. 405/TT/2014, trued up RoE claimed by the Petitioner in the instant petition and trued up RoE allowed in the instant order for Asset-5 are shown in the table below:

Particulars	(₹ in lakh)			
	2015-16 (Pro-rata for 237 days)	2016-17	2017-18	2018-19
Allowed vide order dated 30.12.2015 in Petition No. 405/TT/2014	1779.74	2747.14	2747.14	2747.14
Claimed by the Petitioner in the instant petition	1865.09	2999.74	3087.88	3131.58
Allowed after true-up in the instant order	1863.48	2998.70	3086.85	3130.39

Depreciation

51. The Petitioner's claim towards depreciation in respect of Asset-2 was found higher than the depreciation allowed in order dated 31.5.2016 in Petition No. 108/TT/2014. The Petitioner has neither given any justification for claiming higher depreciation as allowed vide order dated 31.5.2016 in Petition No. 108/TT/2014 nor made any specific prayer for allowing higher depreciation in this petition. It has been further observed that in respect of Asset-2 in Petition No. 108/TT/2014, the



Petitioner had submitted the capital cost of IT equipment in Sub-station cost and therefore depreciation for IT equipment was allowed @5.28% of corresponding capital cost. The Petitioner now at the time of truing-up of tariff of the 2014-19 period has segregated the IT equipment cost from the cost of sub-station and has considered depreciation rate for IT Equipment @15% and salvage value for IT Equipment is NIL as per the 2014 Tariff Regulations.

52. We have considered the submissions of the Petitioner. Asset-2 was put into commercial operation during the 2014-19 period and the tariff from the respective COD to 31.3.2019 was allowed vide order dated 31.5.2016 in Petition No. 108/TT/2014. It is pertinent to point out that the Petitioner did not claim any capital expenditure towards "IT Equipment" in the above said petition, even though there was a clear provision in the 2014 Tariff Regulations providing depreciation @15% for IT Equipment. Having failed to make a claim as per the 2014 Tariff Regulations, the Petitioner has now, at the time of truing-up, apportioned a part of the capital expenditure as "IT Equipment". Similar issue had come up in Petition No. 19/TT/2020 wherein the Commission vide order dated 9.5.2020 held 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 upto 31.3.2019, admitted by the Commission after prudence check. We are of the view that scope of truing up exercise is restricted to truing up of the capital expenditure already admitted and apportionment or reapportionment of the capital expenditure cannot be allowed at the time of truing up. Therefore, we are not inclined to consider the Petitioner's prayer for apportionment of capital expenditure towards IT Equipment and allowing depreciation @ 15% from 1.4.2014 onwards. Accordingly, the depreciation @ 5.28% has been considered for IT Equipment as part of the sub-station upto 31.3.2019 while truing up the capital expenditure for the 2014-19 period. During the 2019-24 tariff period, the IT Equipment has been considered separately and depreciation has been allowed @ 15% for the balance depreciable value of IT Equipment in accordance with Regulation 33 read with Sr. No. (p) of the Appendix-I (Depreciation Schedule) of the 2019 Tariff Regulations."

53. In line with the above order dated 9.5.2020 in Petition No. 19/TT/2020, the Gross Block during the tariff period 2014-19 has been depreciated at weighted average of depreciation (WAROD) and working of WAROD is given in Annexure-1. The depreciation for the 2014-19 period is trued-up for the transmission assets as per the methodology provided under Regulation 27 of the 2014 Tariff Regulations and the same is as under:

(₹ in lakh)

Asset-1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	2477.12	2678.63	2738.93	2751.28	2751.28
ACE	201.51	60.30	12.35	0.00	0.00
Closing Gross Block	2678.63	2738.93	2751.28	2751.28	2751.28
Average Gross Block	2577.88	2708.78	2745.11	2751.28	2751.28
WAROD (%)	5.24	5.23	5.21	5.21	5.21
Balance useful life at the beginning of the year	31.00	30.00	29.00	28.00	27.00
Aggregated Depreciable Value	2320.09	2437.91	2470.60	2476.16	2476.16
Remaining Aggregated Depreciable Value at the beginning of the year	2303.08	2285.87	2176.96	2039.41	1895.98
Combined Depreciation during the year	135.03	141.60	143.10	143.43	143.43



(₹ in lakh)

Asset-2					
Particulars	2014-15 (Pro-rata for 350 days)	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	35086.71	45559.58	46005.27	46005.27	46005.27
ACE	10472.87	445.69	0.00	0.00	0.00
Closing Gross Block	45559.58	46005.27	46005.27	46005.27	46005.27
Average Gross Block	40323.14	45782.42	46005.27	46005.27	46005.27
WAROD (%)	5.27	5.27	5.27	5.27	5.27
Balance useful life at the beginning of the year	34.00	34.00	33.00	32.00	31.00
Aggregated Depreciable Value	36290.83	41204.18	41404.74	41404.74	41404.74
Remaining Aggregated Depreciable Value at the beginning of the year	36290.83	39165.37	36952.26	34527.29	32102.31
Combined Depreciation during the year	2038.81	2413.67	2424.97	2424.97	2424.97

(₹ in lakh)

Asset-3					
Particulars	2014-15 (Pro-rata for 249 days)	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	14318.71	16064.14	16423.29	16514.50	16514.50
ACE	1745.43	359.15	91.21	0.00	0.00
Closing Gross Block	16064.14	16423.29	16514.50	16514.50	16514.50
Average Gross Block	15191.43	16243.72	16468.90	16514.50	16514.50
WAROD (%)	5.26	5.26	5.26	5.26	5.26
Balance useful life at the beginning of the year	34.00	34.00	33.00	32.00	31.00
Aggregated Depreciable Value	13672.28	14619.34	14822.01	14863.05	14863.05
Remaining Aggregated Depreciable Value at the beginning of the year	13672.28	14073.75	13422.59	12597.92	11729.80
Combined Depreciation during the year	545.60	853.82	865.71	868.12	868.12

(₹ in lakh)

Asset-4					
Particulars	2014-15 (Pro-rata for 16 days)	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	1877.07	1923.93	1972.73	1997.75	2111.18
ACE	46.86	48.80	25.02	113.43	0.00
Closing Gross Block	1923.93	1972.73	1997.75	2111.18	2111.18
Average Gross Block	1900.50	1948.33	1985.24	2054.46	2111.18
WAROD (%)	5.04	5.04	5.04	5.05	5.06
Balance useful life at the beginning of the year	25.00	25.00	24.00	23.00	22.00



Aggregated Depreciable Value	1710.45	1753.49	1786.71	1849.01	1900.06
Remaining Aggregated Depreciable Value at the beginning of the year	1710.45	1749.30	1684.38	1646.60	1593.90
Combined Depreciation during the year	4.19	98.14	100.08	103.74	106.73

(₹ in lakh)

Asset-5				
Particulars	2015-16 (Pro-rata for 237 days)	2016-17	2017-18	2018-19
Opening Gross Block	47528.15	49831.41	51619.41	52813.55
ACE	2303.26	1788.00	1194.14	0.00
Closing Gross Block	49831.41	51619.41	52813.55	52813.55
Average Gross Block	48679.78	50725.41	52216.48	52813.55
WAROD (%)	5.28	5.28	5.28	5.28
Balance useful life at the beginning of the year	34.00	34.00	33.00	32.00
Aggregated Depreciable Value	43811.81	45652.87	46994.84	47532.20
Remaining Aggregated Depreciable Value at the beginning of the year	43811.81	43989.77	42655.67	40438.41
Combined Depreciation during the year	1663.11	2676.06	2754.62	2786.15

54. The details of depreciation approved vide order dated 24.2.2016 in Petition No. 147/TT/2015, trued up depreciation claimed by the Petitioner in the instant petition and trued up depreciation allowed in the instant order for Asset-1 are shown in the table below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 24.2.2016 in Petition No. 147/TT/2015	103.52	103.52	103.52	103.52	103.52
Claimed by the Petitioner in the instant petition	139.60	146.18	147.67	148.00	148.00
Allowed after true-up in the instant order	135.03	141.60	143.10	143.43	143.43

55. The details of Depreciation approved earlier vide order dated 31.5.2016 in Petition No. 108/TT/2014, trued up depreciation claimed by the Petitioner in the instant petition and trued up depreciation allowed in the instant order for Asset-2 are shown in the table below:



(₹ in lakh)

Particulars	2014-15 (Pro-rata for 350 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 31.5.2016 in Petition No. 108/TT/2014	2011.18	2358.53	2369.84	2369.84	2369.84
Claimed by the Petitioner in the instant petition	2039.64	2415.44	2426.75	2426.75	2426.75
Allowed after true-up in the instant order	2038.81	2413.67	2424.97	2424.97	2424.97

56. The details of Depreciation approved vide order dated 31.5.2016 in Petition No. 108/TT/2014, trued up depreciation claimed by the Petitioner in the instant petition and trued up depreciation allowed in the instant order for Asset-3 are shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 249 days)	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 31.5.2016 in Petition No. 108/TT/2014	542.45	866.21	894.58	894.58	894.58
Claimed by the Petitioner in the instant petition	545.59	853.82	865.71	868.11	868.11
Allowed after true-up in the instant order	545.60	853.82	865.71	868.12	868.12

57. The details of Depreciation approved vide order dated 30.12.2015 in Petition No. 405/TT/2014, trued up depreciation claimed by the Petitioner in the instant petition and trued up depreciation allowed in the instant order for Asset-4 are shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 16 days)	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 30.12.2015 in Petition No. 405/TT/2014	4.07	94.62	94.62	94.62	94.62
Claimed by the Petitioner in the instant petition	4.19	98.14	100.09	103.74	106.74



Allowed after true-up in the instant order	4.19	98.14	100.08	103.74	106.73
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58. The details of Depreciation approved vide order dated 30.12.2015 in Petition No. 405/TT/2014, tried up depreciation claimed by the Petitioner in the instant petition and tried up depreciation allowed in the instant order for Asset-5 are shown in the table below:

(₹ in lakh)				
Particulars	2015-16 (Pro-rata for 237 days)	2016-17	2017-18	2018-19
Allowed vide order dated 30.12.2015 in Petition No. 405/TT/2014	1596.12	2463.72	2463.72	2463.72
Claimed by the Petitioner in the instant petition	1663.74	2677.04	2755.61	2787.14
Allowed after true-up in the instant order	1663.11	2676.06	2754.62	2786.15

Operation & Maintenance Expenses (O&M Expenses)

59. The details of the O&M Expenses allowed for Assets-1, 2, 3, 4 and 5 under Regulation 29(4)(a) of the 2014 Tariff Regulations for purpose of tariff are as under:

(₹ in lakh)					
Asset-1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Sub-station Bays					
400 kV bays (AIS) - Nos	2	2	2	2	2
Norm (₹ lakh/bay)					
400 kV Sub-station bays (AIS)	60.30	62.30	64.37	66.51	68.71
Total Sub-station O&M	120.60	124.60	128.74	133.02	137.42
AC & HVDC Lines					
400 kV D/C Twin conductor (KM)	12.3	12.3	12.3	12.3	12.3
Norm (₹ lakh/KM)					
400 kV D/C Twin conductor	0.707	0.731	0.755	0.780	0.806
Total Transmission Line	8.70	8.99	9.29	9.59	9.91
Total O&M Expense (Claimed)	129.30	133.59	138.03	142.61	147.33
Total O&M Expense (Allowed)	129.30	133.59	138.03	142.61	147.33



(₹ in lakh)

Asset-2					
Particulars	2014-15 (Pro-rata for 350 days)	2015-16	2016-17	2017-18	2018-19
Sub-station Bays					
400 kV bays (AIS) – nos.	4	4	4	4	4
Norm (₹ lakh/bay)					
400 kV Sub-station bays (AIS)	60.30	62.30	64.37	66.51	68.71
Total Sub-station O&M	241.20	249.20	257.48	266.04	274.84
AC & HVDC Lines					
400 kV D/C Twin conductor (KM)	172.964	172.964	172.964	172.964	172.964
Norm (₹ lakh/KM)					
400 kV D/C Quad conductor	1.062	1.097	1.133	1.171	1.210
Total Transmission Line	183.69	189.74	195.97	202.54	209.29
Total O&M Expenses Claimed	407.42	438.94	453.45	468.58	484.13
Total O&M Expenses Allowed	407.43	438.94	453.45	468.58	484.13

(₹ in lakh)

Asset-3					
Particulars	2014-15 (Pro-rata for 249 days)	2015-16	2016-17	2017-18	2018-19
Sub-station Bays					
400 kV bays (AIS) - nos	4	4	4	4	4
Norm (₹ lakh/bay)					
400 kV Sub-station bays (AIS)	60.30	62.30	64.37	66.51	68.71
Total Sub-station O&M	241.20	249.20	257.48	266.04	274.84
AC & HVDC Lines					
400 kV D/C Twin conductor (KM)	114.3	114.3	114.3	114.3	114.3
Norm (₹ lakh/KM)					
400 kV D/C Twin conductor	0.707	0.731	0.755	0.780	0.806
Total Transmission Line	80.81	83.55	86.30	89.15	92.13
Total O&M Expenses Claimed	219.69	332.75	343.78	355.19	366.97
Total O&M Expenses Allowed	219.67	332.75	343.78	355.19	366.97



(₹ in lakh)

Asset-4					
Particulars	2014-15 (Pro-rata for 16 days)	2015-16	2016-17	2017-18	2018-19
Sub-station Bays					
400 kV bays (AIS) - nos	2	2	2	2	2
Norm (₹ lakh/bay)					
400 kV Sub-station bays (AIS)	60.30	62.30	64.37	66.51	68.71
Total Sub-station O&M	120.60	124.60	128.74	133.02	137.42
Total O&M Expenses Claimed	5.28	124.60	128.74	133.02	137.42
Total O&M Expenses Allowed	5.29	124.60	128.74	133.02	137.42

(₹ in lakh)

Asset-5				
Particulars	2015-16 (Pro-rata for 237 days)	2016-17	2017-18	2018-19
AC & HVDC Lines				
400 kV D/C Twin conductor (KM)	330.736	330.736	330.736	330.736
Norm (₹ lakh/KM)				
400 kV D/C Twin conductor	0.707	0.731	0.755	0.780
Total Transmission Line	241.77	249.71	257.97	266.57
Total O&M Expense Claimed	156.55	249.71	257.97	266.57
Total O&M Expense Allowed	156.55	249.71	257.97	266.57

60. The details of O&M Expenses approved vide order dated 24.2.2016 in Petition No. 147/TT/2015, trued up O&M Expenses claimed by the Petitioner in the instant petition and trued up O&M Expenses allowed in the instant order for Asset-1 are shown in the table below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 24.2.2016 in Petition No. 147/TT/2015	129.30	133.59	138.03	142.61	147.33
Claimed by the Petitioner in the instant petition	129.30	133.59	138.03	142.61	147.33
Allowed after true-up in the instant order	129.30	133.59	138.03	142.61	147.33

61. The details of O&M Expenses approved vide order dated 31.5.2016 in Petition No. 108/TT/2014, trued up O&M Expenses claimed by the Petitioner in the instant



petition and trued up O&M Expenses allowed in the instant order for Asset-2 are shown in the table below:

Particulars	(₹ in lakh)				
	2014-15 (Pro-rata for 350 days)	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 31.5.2016 in Petition No. 108/TT/2014	407.18	438.94	453.45	468.58	484.13
Claimed by the Petitioner in the instant petition	407.42	438.94	453.45	468.58	484.13
Allowed after true-up in the instant order	407.43	438.94	453.45	468.58	484.13

62. The details of O&M Expenses approved earlier vide order dated 31.5.2016 in Petition No. 108/TT/2014, trued up O&M Expenses claimed by the Petitioner in the instant petition and trued up O&M Expenses allowed in the instant order for Asset-3 are shown in the table below:

Particulars	(₹ in lakh)				
	2014-15 (Pro-rata for 249 days)	2015-16	2016-17	2017-18	2018-19
Allowed earlier vide order dated 31.5.2016 in Petition No. 108/TT/2014	219.87	332.75	343.78	355.19	366.97
Claimed by the Petitioner in the instant petition	219.69	332.75	343.78	355.19	366.97
Allowed after true-up in the instant order	219.67	332.75	343.78	355.19	366.97

63. The details of O&M Expenses approved vide order dated 30.12.2015 in Petition No. 405/TT/2014, trued up O&M Expenses claimed by the Petitioner in the instant petition and trued up O&M Expenses allowed in the instant order for Asset-4 are shown in the table below:



(₹ in lakh)

Particulars	2014-15 (Pro-rata for 16 days)	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 30.12.2015 in Petition No. 405/TT/2014	5.19	124.60	128.74	133.02	137.42
Claimed by the Petitioner in the instant petition	5.28	124.60	128.74	133.02	137.42
Allowed after true-up in the instant order	5.29	124.60	128.74	133.02	137.42

64. The details of O&M Expenses approved vide order dated 30.12.2015 in Petition No. 405/TT/2014, trued up O&M Expenses claimed by the Petitioner in the instant petition and trued up O&M Expenses allowed in the instant order for Asset-5 are shown in the table below:

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 237 days)	2016-17	2017-18	2018-19
Allowed vide order dated 30.12.2015 in Petition No. 405/TT/2014	156.63	249.71	257.97	266.57
Claimed by the Petitioner in the instant petition	156.55	249.71	257.97	266.57
Allowed after true-up in the instant order	156.55	249.71	257.97	266.57

Interest on Working Capital (IWC)

65. IWC is allowed for the transmission assets as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and the same are as under:

(₹ in lakh)

Asset-1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O & M Expenses	10.77	11.13	11.50	11.88	12.28
Maintenance Spares	19.39	20.04	20.70	21.39	22.10
Receivables	98.15	100.48	99.80	98.18	96.83
Total	128.32	131.65	132.01	131.46	131.20
Rate of Interest on working capital (%)	13.50	13.50	13.50	13.50	13.50
Interest of Working Capital	17.32	17.77	17.82	17.75	17.71



(₹ in lakh)

Asset-2					
Particulars	2014-15 (Pro-rata for 350 days)	2015-16	2016-17	2017-18	2018-19
O & M Expenses	35.41	36.58	37.79	39.05	40.34
Maintenance Spares	63.73	65.84	68.02	70.29	72.62
Receivables	1275.06	1405.45	1373.59	1332.27	1298.17
Total	1374.20	1507.87	1479.40	1441.61	1411.13
Rate of Interest on working capital (%)	13.50	13.50	13.50	13.50	13.50
Interest of Working Capital	177.89	203.56	199.72	194.62	190.50

(₹ in lakh)

Asset-3					
Particulars	2014-15 (Pro-rata for 249 days)	2015-16	2016-17	2017-18	2018-19
O & M Expenses	26.83	27.73	28.65	29.60	30.58
Maintenance Spares	48.30	49.91	51.57	53.28	55.04
Receivables	516.58	537.06	530.27	516.85	505.32
Total	591.72	614.70	610.48	599.73	590.95
Rate of Interest on working capital (%)	13.50	13.50	13.50	13.50	13.50
Interest of Working Capital	54.49	82.98	82.42	80.96	79.78

(₹ in lakh)

Asset-4					
Particulars	2014-15 (Pro-rata for 16 days)	2015-16	2016-17	2017-18	2018-19
O & M Expenses	10.05	10.38	10.73	11.09	11.45
Maintenance Spares	18.09	18.69	19.31	19.95	20.61
Receivables	78.49	79.41	79.29	79.72	80.35
Total	106.63	108.48	109.33	110.75	112.41
Rate of Interest on working capital (%)	13.50	13.50	13.50	13.50	13.50
Interest of Working Capital	0.63	14.64	14.76	14.95	15.18

(₹ in lakh)

Asset-5				
Particulars	2015-16 (Pro-rata for 237 days)	2016-17	2017-18	2018-19
O & M Expenses	20.15	20.81	21.50	22.21
Maintenance Spares	36.27	37.46	38.70	39.99



Receivables	1474.29	1501.75	1500.84	1477.94
Total	1530.70	1560.01	1561.04	1540.14
Rate of Interest on working capital (%)	13.50	13.50	13.50	13.50
Interest of Working Capital	133.81	210.60	210.74	207.92

66. The details of IWC approved vide order dated 24.2.2016 in Petition No. 147/TT/2015, trued up IWC claimed by the Petitioner in the instant petition and trued up IWC allowed in the instant order for Asset-1 are shown in the table below:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 24.2.2016 in Petition No. 147/TT/2015	14.93	14.95	14.98	15.01	15.06
Claimed by the Petitioner in the instant petition	17.67	18.10	18.14	18.05	18.01
Allowed after true-up in the instant order	17.32	17.77	17.82	17.75	17.71

67. The details of IWC approved vide order dated 31.5.2016 in Petition No. 108/TT/2014, trued up IWC claimed by the Petitioner in the instant petition and trued up IWC allowed in the instant order for Asset-2 are shown in the table below:

Particulars	(₹ in lakh)				
	2014-15 (Pro-rata for 350 days)	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 31.5.2016 in Petition No. 108/TT/2014	174.20	197.80	194.53	190.38	186.38
Claimed by the Petitioner in the instant petition	177.95	203.67	199.76	194.65	190.53
Allowed after true-up in the instant order	177.89	203.56	199.72	194.62	190.50

68. The details of IWC approved vide order dated 31.5.2016 in Petition No. 108/TT/2014, trued up IWC claimed by the Petitioner in the instant petition and trued up IWC allowed in the instant order for Asset-3 are shown in the table below:



(₹ in lakh)

Particulars	2014-15 (Pro-rata for 249 days)	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 31.5.2016 in Petition No. 108/TT/2014	53.80	83.49	84.49	83.16	81.88
Claimed by the Petitioner in the instant petition	54.51	83.00	82.42	80.96	79.78
Allowed after true-up in the instant order	54.49	82.98	82.42	80.96	79.78

69. The details of IWC approved vide order dated 30.12.2015 in Petition No. 405/TT/2014, trued up IWC claimed by the Petitioner in the instant petition and trued up IWC allowed in the instant order for Asset-4 are shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 16 days)	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 30.12.2015 in Petition No. 405/TT/2014	0.62	14.41	14.43	14.46	14.49
Claimed by the Petitioner in the instant petition	0.63	14.65	14.76	14.95	15.18
Allowed after true-up in the instant order	0.63	14.64	14.76	14.95	15.18

70. The details of IWC approved vide order dated 30.12.2015 in Petition No. 405/TT/2014, trued up IWC claimed by the Petitioner in the instant petition and trued up IWC allowed in the instant order for Asset-5 are shown in the table below:

(₹ in lakh)

Particulars	2014-15	2015-16 (Pro-rata for 237 days)	2016-17	2017-18	2018-19
Allowed vide order dated 30.12.2015 in Petition No. 405/TT/2014	-	129.06	195.45	190.83	186.28
Claimed by the Petitioner in the instant petition	-	133.88	210.68	210.81	207.99
Allowed after true-up in the instant order	-	133.81	210.60	210.74	207.92



Approved Annual Fixed Charges for the 2014-19 Tariff Period

71. The true-up the annual fixed charges in respect of Assets-1 to 5 for the 2014-19 tariff period are as under:

(₹ in lakh)

Asset-1					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	135.03	141.60	143.10	143.43	143.43
Interest on Loan	155.61	149.79	137.58	122.66	109.41
Return on Equity	151.66	160.13	162.28	162.64	163.08
Interest on Working Capital	17.32	17.77	17.82	17.75	17.71
O & M Expenses	129.30	133.59	138.03	142.61	147.33
Total	588.91	602.88	598.81	589.09	580.96

(₹ in lakh)

Asset-2					
Particulars	2014-15 (Pro-rata for 350 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	2038.81	2413.67	2424.97	2424.97	2424.97
Interest on Loan	2363.68	2582.76	2356.01	2098.07	1874.58
Return on Equity	2348.15	2793.80	2807.40	2807.40	2814.81
Interest on Working Capital	177.89	203.56	199.72	194.62	190.50
O & M Expenses	407.43	438.94	453.45	468.58	484.13
Total	7335.97	8432.73	8241.55	7993.63	7788.99

(₹ in lakh)

Asset-3					
Particulars	2014-15 (Pro-rata for 249 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	545.60	853.82	865.71	868.12	868.12
Interest on Loan	665.32	961.53	884.72	789.08	706.63
Return on Equity	629.36	991.24	1004.99	1007.77	1010.43
Interest on Working Capital	54.49	82.98	82.42	80.96	79.78
O & M Expenses	219.67	332.75	343.78	355.19	366.97
Total	2114.44	3222.33	3181.61	3101.12	3031.92

(₹ in lakh)

Asset-4					
Particulars	2014-15 (Pro-rata for 16 days)	2015-16	2016-17	2017-18	2018-19
Depreciation	4.19	98.14	100.08	103.74	106.73
Interest on Loan	5.63	123.88	114.80	105.13	97.62
Return on Equity	4.90	115.18	117.36	121.45	125.13



Interest on Working Capital	0.63	14.64	14.76	14.95	15.18
O & M Expenses	5.29	124.60	128.74	133.02	137.42
Total	20.64	476.44	475.74	478.29	482.08

(₹ in lakh)

Asset-5				
Particulars	2015-16 (Pro-rata for 237 days)	2016-17	2017-18	2018-19
Depreciation	1663.11	2676.06	2754.62	2786.15
Interest on Loan	1911.04	2875.43	2694.86	2476.59
Return on Equity	1863.48	2998.70	3086.85	3130.39
Interest on Working Capital	133.81	210.60	210.74	207.92
O & M Expenses	156.55	249.71	257.97	266.57
Total	5727.99	9010.49	9005.05	8867.62

72. The details of AFC approved vide order dated 24.2.2016 in Petition No. 147/TT/2015, trued up AFC claimed by the Petitioner in the instant petition and trued up AFC allowed in the instant order for Asset-1 are shown in the table below:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 24.2.2016 in Petition No. 147/TT/2015	482.52	477.47	472.45	467.47	463.05
Claimed by the Petitioner in the instant petition	604.12	617.61	612.97	602.74	594.20
Allowed after true-up in the instant order	588.91	602.88	598.81	589.09	580.96

73. The details of AFC approved vide order dated 31.5.2016 in Petition No. 108/TT/2014, trued up AFC claimed by the Petitioner in the instant petition and trued up AFC allowed in the instant order for Asset-2 are shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 350 days)	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 31.5.2016 in Petition No. 108/TT/2014	7172.07	8176.69	8010.76	7805.50	7605.57
Claimed by the Petitioner in the instant petition	7338.55	8437.25	8243.22	7994.99	7790.21
Allowed after true-up in the instant order	7335.97	8432.73	8241.55	7993.63	7788.99



74. The details of AFC approved vide order dated 31.5.2016 in Petition No. 108/TT/2014, trued up AFC claimed by the Petitioner in the instant petition and trued up AFC allowed in the instant order for Asset-3 are shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 249 days)	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 31.5.2016 in Petition No. 108/TT/2014	2083.15	3245.03	3274.17	3199.03	3125.53
Claimed by the Petitioner in the instant petition	2114.93	3223.01	3181.64	3101.10	3031.93
Allowed after true-up in the instant order	2114.44	3222.33	3181.61	3101.12	3031.92

75. The details of AFC approved vide order dated 30.12.2015 in Petition No. 405/TT/2014, trued up AFC claimed by the Petitioner in the instant petition and trued up AFC allowed in the instant order for Asset-4 are shown in the table below:

(₹ in lakh)

Particulars	2014-15 (Pro-rata for 16 days)	2015-16	2016-17	2017-18	2018-19
Allowed vide order dated 30.12.2015 in Petition No. 405/TT/2014	20.09	466.23	461.25	456.42	451.80
Claimed by the Petitioner in the instant petition	20.63	476.80	475.78	478.30	482.10
Allowed after true-up in the instant order	20.64	476.44	475.74	478.29	482.08

76. The details of AFC approved vide order dated 30.12.2015 in Petition No. 405/TT/2014, trued up AFC claimed by the Petitioner in the instant petition and trued up AFC allowed in the instant order for Asset-5 are shown in the table below:

(₹ in lakh)

Particulars	2015-16 (Pro-rata for 237 days)	2016-17	2017-18	2018-19
Allowed vide order dated 30.12.2015 in Petition No. 405/TT/2014	5516.57	8337.14	8120.33	7905.90
Claimed by the Petitioner in the instant petition	5731.03	9013.80	9008.09	8870.74



Allowed after true-up in the instant order	5727.99	9010.49	9005.05	8867.62
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Determination of Annual Fixed Charges for 2019-24 Tariff Period

77. The Petitioner has submitted the tariff forms combining Assets-1, 2, 3, 4 and 5, wherein the COD was achieved prior to 1.4.2019, as a single asset. Accordingly, as per proviso (i) of Regulation 8(1) of the 2019 Tariff Regulations, single tariff for the Combined Asset has been worked out for the 2019-24 tariff period.

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

(₹ in lakh)

Particulars	2019-20	2020-21	201-22	2022-23	2023-24
Depreciation	6336.74	6336.74	6334.50	6334.01	6334.01
Interest on Loan	4728.03	4171.79	3623.10	3074.19	2523.45
Return on Equity	6778.50	6778.50	6778.50	6778.50	6778.50
Interest on Working Capital	313.02	306.97	300.28	293.66	286.37
Operation and Maintenance	1025.34	1061.02	1098.00	1136.27	1175.64
Total	19181.63	18655.02	18134.38	17616.63	17097.97

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

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M expenses	85.45	88.42	91.50	94.69	97.97
Maintenance Spares	153.80	159.15	164.70	170.44	176.35
Receivables	2358.40	2299.93	2235.75	2171.91	2102.21
Total	2597.65	2547.50	2491.95	2437.04	2376.53
Rate of Interest	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	313.02	306.97	300.28	293.66	286.37



Effective Date of Commercial Operation (E-COD)

80. The Petitioner has claimed E-COD of the Combined Asset as 30.11.2014. Accordingly, based on the trued-up admitted capital cost and actual COD of all the assets, E-COD has been worked out as follows:

Computation of Effective COD						
Assets	Actual COD	Admitted Capital Cost as on 31.03.2019 (₹ in lakh)	Weight of the cost (%)	No. of Days from last COD	Weighted Days	Effective COD (Latest COD – Total weighted Days)
Asset-1	1.2.2014	2751.28	2.29%	553.00	12.66	30.11.2014
Asset-2	16.4.2014	46005.27	38.28%	479.00	183.34	
Asset-3	26.7.2014	16514.50	13.74%	378.00	51.94	
Asset-4	16.3.2015	2111.18	1.76%	145.00	2.55	
Asset-5	8.8.2015	52813.55	43.94%	0.00	0.00	
Total		120195.78			250.48	

81. E-COD is used to determine the lapsed life of the project as a whole, which works out as four (4) years as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD).

Weighted Average Life (WAL)

82. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as stipulated in the 2019 Tariff Regulations. The life as defined in the 2019 Tariff Regulations has been considered for determination of WAL. Accordingly, WAL of the Combined Asset has been worked out as 34 years as shown below:

Admitted Capital Cost as on 31.3.2019				
Particulars	Combined Cost (₹ in lakh) (a)	Life as per 2019 Regulation (Years) (b)	Weighted Cost (C) = (a) x (b)	Weighted Avg. Life of Asset (in years) (d) = (c)/(a)
Freehold Land	0.00	0	0.00	
Leasehold Land	0.00	25	0.00	
Building & Other Civil	1088.01	25	27200.23	



Works				
Transmission Line	108680.04	35	3803801.27	
Sub-Station Equipment	10012.24	25	250306.11	
PLCC	397.32	15	5959.85	
IT Equipment and Software	18.17	7	121.13	
Total	120195.78		4087388.60	34.01 years (rounded to 34 years)

WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. for 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed above, E-COD of the assets is 30.11.2014 and the lapsed life of the project as a whole, works out as four (4) years as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from Effective COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 30 years.

Capital Cost

83. 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 ash disposal and utilization including handling and transportation facility;*
- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
- (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*
- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.”*

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

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

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

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



(b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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

(c) *In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;*

(d) *Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and*

(e) *Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment."*

84. The Petitioner has claimed the capital cost of individual assets which has been added to arrive at the capital cost claimed during 2019-24 period for the Combined Asset as per following details:

(₹ in lakh)					
Assets	FR Apportioned Approved Capital Cost	RCE Apportioned Approved Capital Cost	Capital Cost claimed as on 31.3.2019	Additional Capitalisation Claimed in 2019-24 period	Estimated Completion Cost
Asset-1	1974.00	3254.00	2838.25	0.00	2838.25
Asset-2	52281.00	46005.27	46005.27	0.00	46005.27
Asset-3	23750.00	19305.00	16514.51	0.00	16514.51
Asset-4	1878.70	2287.53	2111.18	0.00	2111.18
Asset-5	46695.24	52832.20	52832.20	0.00	52832.20
Total	126578.94	123684.00	120301.41	0.00	120301.41

85. Against the overall apportioned approved capital cost (as per RCE) of ₹123684 lakh, the estimated completion cost is ₹120301.41 lakh. The individual capital cost of each asset is also within the respective RCE apportioned capital cost. Therefore, there is no cost over-run in respect of the Combined Asset.



86. The capital cost has been dealt in line with Regulation 19(3) of the 2019 Tariff Regulations. The element-wise capital cost (i.e. land, building, transmission line, sub-station and PLCC) as admitted by the Commission as on 31.3.2019 for the transmission assets are clubbed together and the capital cost has been considered as capital cost for Combined Asset as on 1.4.2019 as per following details:

(₹ in lakh)

Element	Asset-1	Asset-2	Asset-3	Asset-4	Asset-5	Capital cost for combined assets as on 31.3.2019
Free hold Land	0.00	0.00	0.00	0.00	0.00	0.00
Building & Other Civil Works	132.45	269.11	255.76	244.20	186.49	1088.01
Transmission Line	1689.49	42534.57	14539.63	0.00	49916.34	108680.04
Sub-Station Equipment	859.92	3077.09	1612.91	1866.98	2595.35	10012.24
PLCC	69.42	106.33	106.20	0.00	115.37	397.32
Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00
IT Equipment and Software	0.00	18.17	0.00	0.00	0.00	18.17
Total	2751.28	46005.27	16514.50	2111.18	52813.55	120195.78

87. The trued-up capital cost of ₹120195.78 lakh for Combined Asset is considered as admitted capital cost as on 31.3.2019 for working out tariff for 2019-24 tariff period.

88. The Petitioner has not claimed any ACE for the 2019-24 tariff period.

Initial Spares

89. As stated in para 27 of this order, Initial Spares are allowed for the 2014-19 period on the basis of the cost of individual assets. The assets covered in the transmission project are combined during the 2019-24 tariff period and hence, the Initial Spares are allowed on the basis of the overall project cost as per APTEL's judgement dated 14.9.2019 in Appeal No. 74 of 2017.

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



Sub-stations:

Assets	Capital Cost/P&M cost considered as on cut-off date (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per 2009/2014 Tariff Regulations (in %)	Initial Spares allowable as per 2009/2014 Tariff Regulations	Initial Spares allowed (₹ in lakh) During 2014-19 period	Initial Spares allowed on combined asset
Asset-1	922.36	51.65	2.5	22.33	22.33	
Asset-2	3070.68	84.25	6.0	190.62	84.25	
Asset-3	1655.60	92.77	6.0	99.72	92.77	
Asset-4	1757.51	64.27	6.0	108.08	64.27	
Asset-5	2394.99	65.37	6.0	148.70	65.37	
Combined Sub-station	9801.14	358.31		569.45	328.99	

* Additional Initial Spares of ₹29.32 lakh (₹358.31-₹328.99) are allowed for sub-station.

Transmission Line:

Assets	Capital Cost considered as on cut-off date (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per 2009/2014 Tariff Regulations (in %)	Initial Spares allowable as per 2009/2014 Tariff Regulations	Initial Spares allowed (₹ in lakh)	Initial spares allowed on combined transmission asset
Asset-1	1603.98	12.25	0.75	12.03	12.03	
Asset-2	40795.39	355.34	1.0	408.49	355.34	
Asset-3	13967.63	136.88	1.0	139.70	136.88	
Asset-4	0.00	0.00	1.0	0.00	0.00	
Asset-5	44108.00	229.35	1.0	443.22	229.35	
Combined Transmission Asset		733.82		1000.44	733.60	

*Additional Initial Spares of ₹0.22 lakh (₹733.82-₹733.60) are allowed for the transmission line.

91. Thus, in line with APTEL's judgement dated 14.9.2019 in Appeal No. 74 of 2017 additional initial spares of ₹29.54 lakh (₹29.32 + ₹0.22) are admissible.



Assets	Total Capital Cost as on 31.3.2019	Additional Initial Spares as per APTEL's Judgment dated 14.09.2019	Total Capital Cost as on 01.04.2019
Asset-1	2751.28	29.54	2780.82
Asset-2	46005.27	0	46005.27
Asset-3	16514.50	0	16514.50
Asset-4	2111.18	0	2111.18
Asset-5	52813.55	0	52813.55

Capital cost considered for the 2019-24 tariff period

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

(₹ in lakh)		
Capital Cost allowed as on 1.4.2019	ACE allowed for the year 2019-20	Total Estimated Completion Cost up to 31.3.2024
120225.32	0.00	120225.32

Debt-Equity Ratio

93. 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.”

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

Combined Asset	Capital Cost as on 1.4.2019 (₹ in lakh)	(%)	Capital Cost as on 31.3.2024 (₹ in lakh)	(%)
Debt	84157.73	70.00	84157.73	70.00
Equity	36067.60	30.00	36067.60	30.00
Total	120225.32	100.00	120225.32	100.00

Return on Equity (RoE)

95. 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 excluding Additional Capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;

Provided further that:

i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;

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

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

- a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;*
- b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:*

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

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

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



$$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$$

Where “t” is the effective tax rate in accordance with clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), “t” shall be considered as MAT rate including surcharge and cess.

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

96. The Petitioner has submitted that MAT rate is applicable to the Petitioner's Company. Accordingly, the MAT rate applicable during the 2019-20 has been considered for the purpose of RoE, which shall be trued-up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for the Combined Asset for the 2019-24 tariff period is as under:

(₹ in lakh)					
Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	36067.60	36067.60	36067.60	36067.60	36067.60
Addition due to ACE	0.00	0.00	0.00	0.00	0.00
Closing Equity	36067.60	36067.60	36067.60	36067.60	36067.60
Average Equity	36067.60	36067.60	36067.60	36067.60	36067.60
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (Pre-tax)	18.782	18.782	18.782	18.782	18.782
Return on Equity (Pre-tax)	6774.22	6774.22	6774.22	6774.22	6774.22



Interest on Loan (IoL)

97. 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”.*

98. We have considered the submissions the Petitioner. The weighted average rate of IoL has been considered on the basis of the rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up. In view of



above, IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed is as follows:

(₹ in lakh)

Combined Asset					
Particular	2019-20	2020-21	201-22	2022-23	2023-24
Gross Normative Loan	84157.73	84157.73	84157.73	84157.73	84157.73
Cumulative Repayments upto Previous Year	26745.19	33077.92	39410.65	45743.38	52076.10
Net Loan-Opening	57412.53	51079.81	44747.08	38414.35	32081.62
Addition due to ACE	0.00	0.00	0.00	0.00	0.00
Repayment during the year	6332.73	6332.73	6332.73	6332.73	6332.73
Net Loan-Closing	51079.81	44747.08	38414.35	32081.62	25748.89
Average Loan	54246.17	47913.44	41580.71	35247.99	28915.26
Weighted Average Rate of Interest on Loan (%)	8.714	8.705	8.712	8.720	8.726
Interest on Loan	4726.80	4170.92	3622.48	3073.70	2523.07

Depreciation

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

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

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

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

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

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

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



Provided also that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

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

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

*(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in **Appendix-I** to these regulations for the assets of the generating station and transmission system:*

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

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

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

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

100. We have considered the submissions of the Petitioner. The IT equipment has been considered as a part of the Gross Block and depreciated using weighted average rate of depreciation (WAROD). The WAROD has been worked out (refer Annexure-2) after taking into account the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered nil, i.e. IT asset has been considered as 100 per cent depreciable. The depreciation has been worked out considering the admitted capital expenditure



as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The depreciation allowed for the Combined Asset for the 2019-24 tariff period is as under:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	120225.32	120225.32	120225.32	120225.32	120225.32
Addition during 2019-24 due to Projected ACE	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	120225.32	120225.32	120225.32	120225.32	120225.32
Average Gross Block	120225.32	120225.32	120225.32	120225.32	120225.32
Weighted Average Rate of Depreciation (WAROD) (%)	5.27	5.27	5.27	5.27	5.27
Balance Useful life at the beginning of the year	30.00	29.00	28.00	27.00	26.00
Aggregated Depreciable Value	108204.61	108204.61	108204.61	108204.61	108204.61
Combined Depreciation during the year	6332.73	6332.73	6332.73	6332.73	6332.73
Remaining Aggregated Depreciable Value	81459.41	75126.69	68793.96	62461.23	56128.50

Operation & Maintenance Expenses (O&M Expenses)

101. Regulations 35(3)(a) and (4) of the 2019 Tariff Regulations provide as under:

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<i>Norms for sub-station Bays (₹ Lakh per bay)</i>					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
<i>Norms for Transformers (₹ Lakh per MVA)</i>					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
<i>Norms for AC and HVDC lines (₹ Lakh per km)</i>					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517



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

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

Provided further that:

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

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

(₹ in lakh)					
Particulars	2019-20	2020-21	201-22	2022-23	2023-24
Norm (₹ lakh/bay)					
400 kV Bay (AIS)	32.15	33.28	34.45	35.66	36.91
No. of bays	12	12	12	12	12
AC & HVDC Lines					
D/C Bundled with 4 or more sub-conductor)	1.32	1.37	1.42	1.47	1.52
Line length (KM)	172.964	172.964	172.964	172.964	172.964
D/C Twin conductor	0.881	0.912	0.944	0.977	1.011
Line length (KM)	457.336	457.336	457.336	457.336	457.336
Communication System					
PLCC	398.10	398.10	398.10	398.10	398.10
Total O&M Expenses claimed	1025.33	1061.03	1098.00	1136.26	1175.64

103. The Petitioner has claimed O&M Expenses separately for the PLCC under Regulation 35(4) of the 2019 @2% of its original project cost in the instant petition and 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 and 2019 Tariff Regulations and the norms for sub-station has 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.

104. The O&M Expenses allowed for the Combined Asset for the 2019-24 tariff period is as under:



(₹ in lakh)

Particulars	2019-20	2020-21	201-22	2022-23	2023-24
Sub-station					
Norm (₹ lakh/bay)					
400 kV Bay (AIS)	32.15	33.28	34.45	35.66	36.91
No. of bays	12	12	12	12	12
Total Sub-station O&M	385.80	399.36	413.40	427.92	442.92
Transmission Line					
AC & HVDC Lines					
D/C Bundled with 4 or more sub-conductor)	1.32	1.37	1.42	1.47	1.52
Line length (KM)	172.964	172.964	172.964	172.964	172.964
D/C Twin conductor	0.881	0.912	0.944	0.977	1.011
Line length (KM)	457.336	457.336	457.336	457.336	457.336
Total Transmission Line O&M	631.57	653.71	676.64	700.38	724.75
Total O&M Expenses	1017.37	1053.07	1090.04	1128.30	1167.67

Interest on Working Capital (IWC)

105. Regulation 34(1)(c), 34(3) and (4) and Regulation 3(7) of the 2019 Tariff

Regulations provides 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 annual fixed cost;

(ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and

(iii) Operation and maintenance expenses, including security expenses for one month.

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

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

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



“3. Definition - In these regulations, unless the context otherwise requires:-

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

106. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the bank rate as on 1.4.2019. The Petitioner has considered rate of IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. Rate of IWC considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, whereas, rate of IWC for 2020-21 onwards has been considered as 11.25% (SBI one-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points). The components of working capital and interest thereon have been worked out as under:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O & M Expenses	85.44	88.42	91.50	94.69	97.97
Maintenance Spares	153.80	159.15	164.70	170.44	176.35
Receivables	2357.21	2296.24	2232.42	2168.72	2099.10
Total	2596.45	2543.82	2488.62	2433.85	2373.41
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest of working capital	312.87	286.18	279.97	273.81	267.01

Annual Fixed Charges for the 2019-24 tariff period

107. The various components of the annual fixed charges allowed for the Combined Asset for the tariff period 2019-24 are summarized as under: -

(₹ in lakh)					
Particulars	2019-20	2020-21	201-22	2022-23	2023-24
Depreciation	6332.73	6332.73	6332.73	6332.73	6332.73
Interest on Loan	4726.80	4170.92	3622.48	3073.70	2523.07
Return on Equity	6774.22	6774.22	6774.22	6774.22	6774.22
Interest on Working Capital	312.87	286.18	279.97	273.81	267.01
Operation and Maintenance	1025.33	1061.03	1098.00	1136.26	1175.64
Total	19171.95	18625.07	18107.40	17590.72	17072.66



Filing Fee and Publication Expenses

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

Licence Fee and RLDC Fees and Charges

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

Goods and Services Tax

110. The Petitioner has sought to recover GST on transmission charges separately from the Respondents, if at any time GST on transmission is withdrawn from negative list in future. We have considered the submission of the Petitioner. GST is not levied on transmission service at present and we are of the view that Petitioner's prayer is premature and the Petitioner is at liberty to approach the Commission if GST is levied subsequently.

Security Expenses

111. 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 per the audited accounts may be allowed to be recovered from the beneficiaries on yearly basis. We have considered the submissions of the Petitioner. We are of the view that the Petitioner should claim security expenses for all the transmission assets in one petition. 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

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

Sharing of Transmission Charges

113. The billing, collection and disbursement of the transmission charges approved in this order shall be governed by the provisions of 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 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

114. To summarise, the trued-up annual fixed charges allowed for the transmission assets for the 2014-19 tariff period are as under:

(₹ in lakh)

Assets	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-1	588.91	602.88	598.81	589.09	580.96
	2014-15 (Pro-rata for 350 days)	2015-16	2016-17	2017-18	2018-19
Asset-2	7335.97	8432.73	8241.55	7993.63	7788.99
	2014-15 (Pro-rata for 249 days)	2015-16	2016-17	2017-18	2018-19
Asset-3	2114.44	3222.33	3181.61	3101.12	3031.92
	2014-15 (Pro-rata for 16 days)	2015-16	2016-17	2017-18	2018-19
Asset-4	20.64	476.44	475.74	478.29	482.08
	-	2015-16 (pro-rata 237 days)	2016-17	2017-18	2018-19
Asset-5	-	5727.99	9010.49	9005.05	8867.62

The annual fixed charges allowed for the Combined Asset for the 2019-24 tariff period in this order are as under:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Fixed Charges	19171.95	18625.07	18107.40	17590.72	17072.66

115. This order disposes of Petition No. 79/TT/2020.

Sd/
(Arun Goyal)
Member

Sd/
(I. S. Jha)
Member

Sd/
(P. K. Pujari)
Chairperson



Petition No.:	79-TT-2020
Period	2014-19 True-up

Annexure - 1

Asset	2014-19	Admitted Capital Cost as on COD (₹ in lakh)	Additional Capital Expenditure (₹ in lakh)				Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation	Annual Depreciation (₹ in lakh)					
	Capital Expenditure as on 1.4.2014		2014-15	2015-16	2016-17	2017-18			2014-15	2015-16	2016-17	2017-18	2018-19	
Asset-1	Building	83.24	0.00	49.21	0.00	0.00	132.45	3.34%	2.78	3.60	4.42	4.42	4.42	
	Transmission Line	1,552.98	124.16	0.00	12.35	0.00	1,689.49	5.28%	85.28	88.55	88.88	89.21	89.21	
	Sub-station	797.76	62.16	0.00	0.00	0.00	859.92	5.28%	43.76	45.40	45.40	45.40	45.40	
	PLCC	43.14	15.19	11.09	0.00	0.00	69.42	6.33%	3.21	4.04	4.39	4.39	4.39	
	TOTAL	2477.12	201.51	60.30	12.35	0.00	2,751.28		135.03	141.60	143.10	143.43	143.43	
			Average Gross Block (₹ in lakh)							2577.88	2708.78	2745.11	2751.28	2751.28
			Weighted Average Rate of Depreciation							5.24%	5.23%	5.21%	5.21%	5.21%
Asset-2	Building	169.56	47.82	51.73	0.00	0.00	269.11	3.34%	6.46	8.12	8.99	8.99	8.99	
	Transmission Line	32774.82	9679.07	80.68	0.00	0.00	42534.57	5.28%	1986.04	2243.70	2245.83	2245.83	2245.83	
	Sub-station	2,072.66	699.02	305.41	0.00	0.00	3077.09	5.28%	127.89	154.41	162.47	162.47	162.47	
	PLCC	69.67	28.79	7.87	0.00	0.00	106.33	6.33%	5.32	6.48	6.73	6.73	6.73	
	IT Equipment & Software	18.17	0.00	0.00	0.00	0.00	18.17	5.28%	0.48	0.96	0.96	0.96	0.96	
	TOTAL	35086.71	10472.87	445.69	0.00	0.00	46005.27		2126.19	2413.67	2424.97	2424.97	2424.97	
			Average Gross Block (₹ in lakh)							40323.14	45782.42	46005.27	46005.27	46005.27
			Weighted Average Rate of Depreciation							5.27%	5.27%	5.27%	5.27%	5.27%
Asset-3	Building	84.56	171.17	0.03	0.00	0.00	255.76	3.34%	5.68	8.54	8.54	8.54	8.54	
	Transmission Line	13,373.93	846.34	289.24	30.12	0.00	14,539.63	5.28%	728.49	758.47	766.90	767.69	767.69	



Petition No.:	79-TT-2020
Period	2014-19 True-up

Annexure - 1

Asset	2014-19	Admitted Capital Cost as on COD (₹ in lakh)	Additional Capital Expenditure (₹ in lakh)				Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation	Annual Depreciation (₹ in lakh)					
	Capital Expenditure as on 1.4.2014		2014-15	2015-16	2016-17	2017-18			2014-15	2015-16	2016-17	2017-18	2018-19	
	Sub-station	782.54	699.42	69.86	61.09	0.00	1612.91	5.28%	59.78	80.09	83.55	85.16	85.16	
	PLCC	77.68	28.50	0.02	0.00	0.00	106.20	6.33%	5.82	6.72	6.72	6.72	6.72	
	TOTAL	14318.71	1745.43	359.15	91.21	0.00	16514.50		799.77	853.82	865.71	868.12	868.12	
			Average Gross Block (₹ in lakh)							15191.43	16243.72	16468.90	16514.50	16514.50
			Weighted Average Rate of Depreciation							5.26%	5.26%	5.26%	5.26%	5.26%
Asset-4	Building	235.57	8.19	0.44	0.00	0.00	244.20	3.34%	8.00	8.15	8.16	8.16	8.16	
	Sub-station	1641.50	38.67	48.36	25.02	113.43	1866.98	5.28%	87.69	89.99	91.93	95.58	98.58	
	TOTAL	1877.07	46.86	48.80	25.02	113.43	2111.18		95.70	98.14	100.08	103.74	106.73	
			Average Gross Block (₹ in lakh)							1900.50	1948.33	1985.24	2054.46	2111.18
			Weighted Average Rate of Depreciation							5.04%	5.04%	5.04%	5.05%	5.06%
Asset-5	Building	150.09	0.00	17.17	19.23	0.00	186.49	3.34%	0.00	5.30	5.91	6.23	6.23	
	Transmission Line	45771.15	0.00	2197.02	1062.59	885.58	49916.34	5.28%	0.00	2474.72	2560.77	2612.20	2635.58	
	Sub-station	1502.59	0.00	82.83	701.37	308.56	2595.35	5.28%	0.00	81.52	102.23	128.89	137.03	
	PLCC	104.32	0.00	6.24	4.81	0.00	115.37	6.33%	0.00	6.80	7.15	7.30	7.30	
	TOTAL	47528.15	0.00	2303.26	1788.00	1194.14	52813.55		0.00	2568.34	2676.06	2754.62	2786.15	
			Average Gross Block (₹ in lakh)							0.00	48679.78	50725.41	52216.48	52813.55
			Weighted Average Rate of Depreciation							5.28%	5.28%	5.28%	5.28%	5.28%



Petition No.:	79-TT-2020
Period	2019-24 Tariff

Annexure - 2

Asset	2019-24	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Additional Capital Expenditure (₹ in lakh)	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation	Annual Depreciation (₹ in lakh)				
	Capital Expenditure as on 1.4.2019		2019-20			2019-20	2020-21	2021-22	2022-23	2023-24
Combined Assets	Building	1088.01	0.00	1088.01	3.34%	36.34	36.34	36.34	36.34	36.34
	Transmission Line	108680.26	0.00	108680.26	5.28%	5738.32	5738.32	5738.32	5738.32	5738.32
	Sub-station	10041.56	0.00	10041.56	5.28%	530.19	530.19	530.19	530.19	530.19
	PLCC	397.32	0.00	397.32	6.33%	25.15	25.15	25.15	25.15	25.15
	IT Equipment & Software	18.17	0.00	18.17	15.00%	2.73	2.73	2.73	2.73	2.73
	TOTAL		120225.32	0.00	120225.32		6332.73	6332.73	6332.73	6332.73
				Average Gross Block (₹ in lakh)		120225.32	120225.32	120225.32	120225.32	120225.32
				Weighted Average Rate of Depreciation		5.27%	5.27%	5.27%	5.27%	5.27%

