#### CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

#### Petition No. 126/TT/2020

#### Coram:

#### Shri I.S. Jha, Member Shri Arun Goyal, Member

#### Date of Order: 24.01.2021

#### 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-1:315 MVA, 400/220 kV ICT-I and II along with bays and LILO of one ckt of 400 kV D/C Navsari-Kala Transmission Line at Magarwada Sub-station, Asset-2:400 kV, 80 MVAR Bus Reactor along with associated bays at GIS Magarwada (New) and Asset-3:LILO of 2nd ckt of 400 kV D/C Navsari-Boisar Transmission Line at Magarwada Sub-station under "Establishment of 400/220 kV GIS at Magarwada in Union Territory of Daman & Diu" in Western Region.

#### And in the Matter of:

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

....Petitioner

#### Vs

- Madhya Pradesh Power Management Company Ltd., Shakti Bhawan, Rampur, Jabalpur-482008.
- 2. Madhya Pradesh Power Transmission Company Ltd., Shakti Bhawan, Rampur, Jabalpur-482008.
- Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Ltd., 3/54, Press Complex, Agra-Bombay Road, Indore-452008.
- Maharashtra State Electricity Distribution Co. Ltd., Hongkong Bank Building, 3rd Floor, M.G. Road, Fort, Mumbai-400001.

- Maharashtra State Electricity Transmission Co. Ltd., Prakashganga, 6<sup>th</sup> Floor, Plot No. C-19, E-Block, Bandra Kurla Complex, Bandra (East), Mumbai-400 051.
- Gujarat Urja Vikas Nigam Ltd., Sardar Patel Vidyut Bhawan, Race Course Road, Vadodara-390007.
- Electricity Department, Government of Goa, Vidyut Bhawan, Panaji, Near Mandvi Hotel, Goa-403001.
- Electricity Department, Administration of Daman & Diu, Daman-396210.
- 9. DNH Power Distribution Corporation Ltd., Vidyut Bhawan, 66 kV Road, Near Secretariat Amli, Silvassa-396230.
- 10. Chhattisgarh State Power Transmission Co. Ltd., State Load Despatch Building, Dangania, Raipur-492013.
- 11. Chhattisgarh State Power Distribution Co. Ltd., P.O. Sunder Nagar, Dangania, Raipur, Chhattisgarh-492013. ....Respondents
- For Petitioner : Shri S.S. Raju, PGCIL Shri A.K. Verma, PGCIL
- For Respondents : None

### <u>ORDER</u>

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 the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") and for determination of tariff for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of the following assets under "Establishment of 400/220 kV GIS at Magarwada in Union Territory of Daman & Diu" in Western Region (hereinafter referred to as the "transmission project"):

**Asset-1:**315 MVA, 400/220 kV ICT - I & II along with bays and LILO of one ckt of 400 kV D/C Navsari-Kala Transmission Line at Magarwada Sub-station,

**Asset-2:**400 kV, 80 MVAr Bus Reactor along with associated bays at GIS Magarwada (New) and,

**Asset-3:**LILO of 2nd ckt of 400 kV D/C Navsari-Boisar Transmission Line at Magarwada Sub-station.

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

*"1) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 9 & 10 above.* 

2) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 9 & 10 above for respective block.

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

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

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



6)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 13.1 above.

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

8)Allow the Petitioner to bill and recover GST on Transmission Charges separately from the 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) and expenditure sanction for the transmission project was accorded by the Board of Directors of the Petitioner Company *vide* Memorandum No. C/CP/Magarwada-GIS dated 24.1.2012atan estimated cost of ₹25928.31 lakh including an IDC of ₹833 lakh (based on 3<sup>rd</sup> quarter, 2011 price level).

(b) The transmission tariff for Assets-1, 2 and 3 from their respective COD to 31.3.2019 was allowed *vide* order dated 28.3.2016 in Petition No. 404/TT/2014as per the 2014 Tariff Regulations.

(c) The scope of work covered under "Establishment of 400/220 kV GIS at Magarwada in Union Territory of Daman & Diu" in Western Region is as under:

### Transmission Line

(i) LILO of 400 kV D/C Navasari-Boisar transmission line at Magarwada Sub-station (multi-circuit tower)

## Sub-station

(i) Establishment of 2X315 MVA, 400/220 kV GIS Sub-station at Magarwada in Union Territory of Daman &Diu

(d) The entire scope of the transmission project is completed and covered in the instant petition.

(e) The details of commercial operation of the assets along with the time over-run are as under:

Asset	SCOD	COD	Time over-run
Asset 1		9.11.2014	Out of 289 days of time over-run, 242 days was condoned
Asset 2	24.1.2014	11.1.2015	Out of 352 days of time over-run, 242 days was condoned
Asset 3	1.3.2015		Time over-run of 401 days was fully condoned

(f) The trued-up transmission tariff claimed by the Petitioner in respect of the

instant transmission assets for the 2014-19 tariff period is as under:

(₹ in lakh)

Asset-1									
Particulars	2014-15 ( <i>pro-rata</i> for 143 days)	2015-16	2016-17	2017-18	2018-19				
Annual Fixed Charges (AFC) approved <i>vide</i> order dated 28.3.2016 in Petition No. 404/TT/2014	1164.90	3293.00	3382.02	3409.40	3403.75				
AFC claimed based on truing up in the instant petition	1189.68	3406.78	3603.28	3652.03	3742.26				

Asset-2									
Particulars	2014-15 ( <i>pro-rata</i> for 80 days)	2015-16	2016-17	2017-18	2018-19				
Annual Fixed Charges (AFC) approved <i>vide</i> order dated 28.3.2016 in Petition No. 404/TT/2014	38.82	198.92	225.36	229.36	226.51				
AFC claimed based on truing up in the instant petition	38.78	200.52	224.74	244.26	261.31				



		(₹ in lak	h)		
	Asset-3				
Particulars	2014-15 ( <i>pro-rata</i> for 31 days)	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges (AFC) approved <i>vide</i> order dated 28.3.2016 in Petition No. 404/TT/2014	14.85	177.61	179.65	177.37	173.96
AFC claimed based on truing up in the instant petition	14.85	176.78	176.47	173.13	169.98

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

5. The Petitioner has served the petition on the Respondents and notices regarding filing of this petition have also been published in newspapers in accordance with Section 64 of the Electricity Act, 2003. No suggestions/objections have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. Notice dated 12.3.2020 was posted on the Commission's website directing the beneficiaries/Respondents to file reply in the matter. Madhya Pradesh Power Management Company Ltd. (MPPMCL), Respondent No. 1, has filed its reply *vide* affidavit dated 17.3.2020 in which issues of grossing up of Return on Equity (RoE), Initial Spares and GST have been raised. Maharashtra State Electricity Distribution Company Ltd. (MSEDCL), Respondent No. 4 has also filed its reply *vide* affidavit dated 19.3.2020 in which grossing up of RoE, effects of GST and additional taxes and Interest on Loan have been raised. The Petitioner *vide* affidavits dated 23.7.2020 has filed respective rejoinders to the reply filed by MPPMCL and MSEDCL.

6. This order is issued considering the submissions made by the Petitioner in the petition dated 1.1.2020, Petitioner's affidavits dated 9.3.2020 and 17.8.2020, reply of MPPMCL *vide* affidavit dated 17.3.2020, reply of MSEDCL *vide* affidavit dated 19.3.2020 and Petitioner's rejoinders *vide* affidavits dated 23.7.2020.

7. The hearing in this matter was held on 28.7.2020 through video conference and the order was reserved.

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

## Truing up of Annual Fixed Charges of the2014-19 Tariff Period

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

				(	₹ in lakh)						
	Asset-1										
Particulars	2014-15 ( <i>pro- rata</i> for 143 days)	2015-16	2016-17	2017-18	2018-19						
Depreciation	376.99	1081.41	1111.86	1116.29	1117.72						
Interest on Loan	113.19	378.99	481.30	496.89	556.34						
Return on Equity	441.81	1270.26	1309.65	1316.80	1322.82						
Interest on Working Capital	33.87	94.96	99.99	101.71	104.39						
O&M Expenses	223.82	581.16	600.48	620.34	640.98						
Total	1189.68	3406.78	3603.28	3652.03	3742.26						

(₹ in lakh)

	Asset-2									
Particulars	2014-15 ( <i>pro- rata</i> for 80 days)	2015-16	2016-17	2017-18	2018-19					
Depreciation	8.00	43.79	51.93	57.58	62.51					
Interest on Loan	9.33	48.24	52.86	55.89	57.79					
Return on Equity	8.92	49.05	58.14	66.66	74.55					
Interest on Working Capital	1.23	6.19	6.79	7.29	7.73					
O&M Expenses	11.30	53.25	55.02	56.84	58.73					
Total	38.78	200.52	224.74	244.26	261.31					

Page 7 of 70

#### (₹ in lakh)

	Asset-3										
Particulars	2014-15 ( <i>pro- rata</i> for 31 days)	2015-16	2016-17	2017-18	2018-19						
Depreciation	4.03	48.54	49.58	49.58	49.58						
Interest on Loan	4.29	49.41	46.40	42.41	38.45						
Return on Equity	4.47	53.85	54.83	54.83	54.98						
Interest on Working Capital	0.39	4.62	4.63	4.58	4.53						
O&M Expenses	1.67	20.36	21.03	21.73	22.44						
Total	14.85	176.78	176.47	173.13	169.98						

10. The details of trued up Interest on Working Capital (IWC) claimed by the Petitioner in respect of the instant assets are as under:

[	•				(₹ in lakh)
		sset-1			
Particulars	2014-15 ( <i>pro-rata</i> for 143 days)	2015-16	2016-17	2017-18	2018-19
O&MExpenses	18.65	48.43	50.04	51.70	53.42
Maintenance Spares	33.57	87.17	90.07	93.05	96.15
Receivables	198.27	567.80	600.55	608.67	623.71
Total Working Capital	250.50	703.40	740.66	753.42	773.28
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	33.87	94.96	99.99	101.71	104.39

(₹ in lakh)

Asset-2									
Particulars	2014-15 ( <i>pro- rata</i> for 80 days)	2015-16	2016-17	2017-18	2018-19				
O&MExpenses	0.94	4.44	4.59	4.74	4.89				
Maintenance Spares	1.69	7.99	8.25	8.53	8.81				
Receivables	6.46	33.42	37.48	40.71	43.55				
Total Working Capital	9.10	45.85	50.32	53.98	57.25				
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50				
Interest on Working Capital	1.23	6.19	6.79	7.29	7.73				

(₹ in lakh)

Asset-3										
Particulars	2014-15 ( <i>pro-rata</i> for 31 days)	2015-16	2016-17	2017-18	2018-19					
O&MExpenses	.14	1.70	1.75	1.81	1.87					
Maintenance Spares	0.25	3.05	3.15	3.26	3.37					
Receivables	2.47	29.46	29.41	28.86	28.33					

Page 8 of 70

<b>Total Working Capital</b>	2.86	34.21	34.31	33.93	33.57
Rate of Interest (%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	0.39	4.62	4.63	4.58	4.53

#### Capital Cost

11. The admitted capital cost as on 31.3.2019 *vide* order dated 28.3.2016 in Petition No. 404/TT/2014 was ₹22503.62 lakh for Asset-1, ₹1019.05 lakh for Asset-2 and ₹954.78 lakh for Asset-3.

12. The Petitioner *vide* Auditor's Certificates has submitted the capital cost up to COD and Additional Capital Expenditure (ACE) up to 31.3.2019. The details of FR approved apportioned capital cost, capital cost as on COD, ACE incurred up to 31.3.2019 as claimed by the Petitioner for the instant assets are as under:

							(	₹ in lakh)
		Actual	Additional Capital Expenditure Total			Total		
Asset	Approved Apportioned Cost (FR)	Capital Cost as on COD	2014-15	2015-16	2016-17	2017-18	2018-19	Capital Cost as on 31.3 2019
Asset-1	23032.66(*)	17457.35	3463.11	1113.34	240.85	1.35	82.63	22358.63
Asset-2	1300.00(*)	694.36	0.00	273.12	32.04	256.25	3.94	1259.71
Asset-3	1595.62	893.54	0.00	34.02	0.00	0.00	0.00	927.56
Total	25928.28	19045.25	3463.11	1420.48	272.89	257.6	86.57	24545.90

(\*)Approved cost for the Assets 1 and 2 has been re-apportioned due to re-allocation of contingency and civil works executed in common package.

### Cost Over-run

13. The completion cost including ACE in respect of instant assets is ₹24545.90 lakh and the approved FR cost is ₹25928.28 lakh. Therefore, there is no cost overrun with respect to the FR cost.

## Interest During Construction (IDC) and Incidental Expenditure During Construction (IEDC)

14. The Petitioner has claimed IDC for the instant assets and has submitted the

Auditors Certificates in support of the same. The Petitioner vide affidavit dated

17.8.2020 has submitted computation of IDC along with the year-wise details of the IDC discharged.

15. The allowable IDC has been worked out considering the information submitted by the Petitioner for the individual assets on cash basis. The loan details submitted in Form-9C for the 2014-19 tariff period and the IDC computation sheet have been considered for the purpose of IDC calculation on cash and accrued basis. The un-discharged IDC as on COD has been considered as ACE during the year in which it has been discharged.

16. In case of Asset-1, there was a time over-run of 289 days, out of which 242 days was condoned by the Commission *vide* order dated 28.3.2016 in Petition No. 404/TT/2014. Accordingly, IDC for 242 days amounting to ₹472.41 lakh had been allowed with ₹403.03 as on COD and subsequent discharge of ₹69.38 lakh between COD and 31.3.2015 vide order dated 28.3.2016 in Petition No. 404/TT/2014. In the instant petition the Petitioner has submitted Auditor's Certificate in support of total IDC of ₹472.41 lakh as allowed earlier by the Commission. On detailed scrutiny of the IDC calculation submitted in the instant petition, it is observed that there has been computational error amounting to ₹130.70 lakh as mentioned at table under para 19 below. The same has been deducted from the total IDC as allowed earlier amounting to ₹472.41 lakh. Thus, IDC allowed in respect of Asset -1 now stands revised at ₹341.71 lakh in the instant true-up order.

17. In case of Asset-2, there was a time over-run of 352 days, out of which 242 days was condoned by the Commission *vide* order dated 28.3.2016 in Petition No.
404/TT/2014. Further, the Commission has allowed IDC of ₹25.83 lakh *vide* order

dated 28.3.2016 in Petition No. 404/TT/2014. The Petitioner has claimed ₹25.83 lakh in the instant petition and the same has considered in the calculation of capital cost.

18. In case of Asset-3, there was a time over-run of 401 days, which was fully condoned by the Commission *vide* order dated 28.3.2016 in Petition No. 404/TT/2014. Accordingly, IDC for 401 days amounting to ₹20.10 lakh as had been allowed vide order dated 28.3.2016 in Petition No. 404/TT/2014 has been retained for the capital cost as on COD in the instant true-up petition as well.

19. Based on the information furnished by the Petitioner, IDC considered is summarized as under:

						(₹i	n lakh)
Asset	IDC as per Auditor's Certificate	IDC admissi- ble	Computa- tional Difference	IDC dis- charged as on COD	IDC un- dis- charged as on COD	IDC dis- charged in 2014- 15	IDC dis- charged in 2015- 16
Α	В	С	D=B-C	E	F=C-E	G	Н
Asset-1	472.41	341.71	130.70	333.72	7.99	7.06	0.93
Asset-2	25.83	25.83	0.00	22.66	3.17	0.00	3.17
Asset-3	20.10	20.10	0.00	20.10	0.00	0.00	0.00

20. The Petitioner has claimed an IEDC of ₹411.43 lakh, ₹26.14 lakh and ₹17.69 lakh for Assets-1, 2 and 3 respectively and has submitted Auditor's Certificate in support of the same in line with the order dated 28.3.2016 in Petition No. 404/TT/2016. The Petitioner has also submitted that the entire IEDC has been discharged as on COD in respect of the instant assets. Hence, IEDC as allowed earlier has been allowed in the instant true-up petition.

### Initial Spares

21. The Petitioner has claimed the following Initial Spares for the instant transmission assets and prayed to revise the Initial Spares allowed vide order

dated 28.3.2016 in Petition No. 404/TT/2016 in light of the judgement of the Appellate Tribunal for Electricity (APTEL) dated 14.9.2019 in Appeal No.74 of 2017:

Assets	Plant & Machinery cost up to the cut-off date (excluding IDC and IEDC) (A) (₹ in lakh)	Initial Spares claimed (B) (₹ in lakh)	Ceiling (C) (in %)	Initial Spares worked out D=[(A- B)*C/(100-C)] (₹ in lakh)
	Sub-station/ PL	CC		
Assets-1	9033.18	439.00		452.33
Assets-2	819.83	41.00	5	40.99
Assets-3	55.49	2.70		2.78
Total	9908.50	482.70		496.10
	Transmission L	ine		
Asset-1	9359.95	74.00	1	93.80
Asset-3	802.26	8.30	I	8.02
Total	10162.21	82.30		101.82

22. MPPMCL in its reply has submitted that the 2014 Tariff Regulations do not mandate to allow Initial Spares by combining all the assets of the transmission project. MPPMCL has prayed for disallowance of excess Initial Spares claimed. In response, the Petitioner *vide* its rejoinder has stated that the cost of Initial Spares considering the project as a whole is within the specified limit under the 2014 Tariff Regulations. Further, the Petitioner has stated that the claims of Initial Spares on overall project basis has been endorsed by APTEL *vide* order dated 14.9.2019 in Appeal No. 74/2017. The Petitioner has prayed to apply ceiling of spares for the project as a whole as claimed in petition.

23. We have considered the submissions of MPPMCL and the Petitioner. APTEL vide its judgement dated 14.9.2019 in Appeal No. 74 of 2017, recognising the fact that the transmission projects are segregated into different assets or elements and executed in stages, laid down the following two guidelines for allowing initial spares (a) for the purpose of prudence check the Initial Spares may be restricted to the

cost of the individual asset initially, and (b) later at the time of truing-up allow Initial

Spares as per the ceiling limit on the overall project cost. The relevant portion of

the judgement dated 14.9.2019 is extracted here under:-

"8.12 In view of these facts, it is relevant to note that the transmission projects due to their inherent nature are segregated into different assets or elements which are executed and commissioned progressively in stages. Keeping this in view, developer / licensee while planning estimates finalises, the requirement of spares on the basis of complete project which requires flexibility in deciding quantum of spares for different type of elements of a project along with commissioning of the particular asset so as to have better performance with high degree of reliability. The requirement of spares as such, may not be exactly in proportion to the cost of individual assets. In other words, a licensee might require large number of spares with a particular asset or assets Commissioned first based on technical requirement and lesser number of spares or nil spares in subsequent assets/ elements of similar nature. Admittedly, the break-up of initial spares for various assets may be percentage wise different subject to the overall initial spares requirement of the project within the overall limits / percentage provided in the Regulations.

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."

24. The instant assets were put into commercial operation during the 2014-19

tariff period and accordingly, the norms specified for the Initial Spares in the 2014

Tariff Regulations are applicable for computation of the allowable Initial Spares

asset/element-wise. Regulation 3(43) of the 2014 Tariff Regulations defines the

"original project cost" as follows:-

"3. **Definitions and Interpretations.**—In these regulations, unless the context otherwise requires-

(43) **'Original Project Cost'** means the capital expenditure incurred by the generating company or the transmission licensee, as the case may be, within the original scope of the project up to the cut-off date as admitted by the Commission;"

25. Regulation 13(d) of the 2014 Tariff Regulations specifies the following

norms for the "initial spares".

**"13. Initial Spares:** Initial spares shall be capitalised as a percentage of the Plant and Machinery cost upto cut-off date, subject to following ceiling norms:

d) Transmission System

Transmission line: 1.00% Transmission sub-station (Green Field): 4.00% Transmission sub-station (Brown Field): 6.00% GIS Sub-station: 5.00% Communication System: 3.5%"

26. The cut-off date for Asset-1 was 31.3.2017 and cut-off date for Assets-2 and 3 was 31.3.2018. As per APTEL's judgement, for the purpose of prudence check the Initial Spares may be restricted to the cost of the individual asset initially and subsequently to be allowed as a percentage of the overall project cost. In the present case, though the instant assets were put into commercial operation during the 2014-19 tariff period, the overall project cost of the assets is arrived at 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 overall project cost in the 2019-24 period as per the APTEL's judgement dated 14.9.2019 in Appeal No.74 of 2017 when the instant assets are combined and the overall project cost is arrived at. Accordingly, the details of Initial Spares allowed for the 2014-19 tariff period are as under:

Asset	Capital cost up to cut-off date (excluding IDC and IEDC) (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per the 2014 Tariff Regulations (in %)	Initial Spares as per the norms in the 2014 Tariff Regulations (₹ in lakh)	Initial Spares allowed (₹ in lakh)
	Sub-stat	tion / PLCC			
Asset-1	8809.88	439.00		440.57	439.00
Asset-2	819.83	41.00	5	40.99	40.99
Asset-3	55.49	2.70		2.78	2.70
	Transm	ission Line			
Asset-1	7660.93	74.00	1	76.64	74.00
Asset-3	802.26	8.30	I	8.02	8.02

### **Capital Cost as on COD**

27. Accordingly, the capital cost allowed as on COD is summarized as under:

					(₹ in lakh)
	Capital Cost as		s on COD due to	Excess	Capital Cost
Asset	on COD as per Auditor's Certificate	Computati onal difference	Un- discharged	Excess Initial Spares	considered as on COD
	Α	В	С	D	E=A-B-C-D
Asset-1	17457.35	130.70	7.99	0.00	17318.66
Asset-2	694.36	0.00	3.17	0.01	691.18
Asset-3	893.54	0.00	0.00	0.28	893.26

### Additional Capital Expenditure (ACE)

28. The Petitioner has claimed the following ACE for the instant transmission assets and submitted the Auditor Certificates in support of the same:

					(₹ in lakh)				
	Additional Capital Expenditure								
Asset	2014-15	2015-16	2016-17	20 17-18	2018-19				
Asset-1	3470.17	1114.27	240.85	1.35	82.63				
Asset-2	0.00	276.29	32.04	256.25	3.94				
Asset-3	0.00	34.02	0.00	0.00	0.00				

29. The Petitioner in the petition has submitted that ACE incurred upto cut-off date has been claimed under Regulation 14(1)(i) of the 2014 Tariff Regulations. ACE incurred is on account of un-discharged liability towards final payment/withheld payment due to contractual exigencies for works executed within the cut-off date in all the assets covered under instant petition. ACE incurred after cut-off date has been claimed under Regulation 14(2)(iv) of the 2014 Tariff Regulations.

30. The Petitioner has further submitted that the Commission *vide* order dated 28.3.2016in Petition No. 404/TT/2014 disallowed IDC and IEDC to the tune of ₹39.58 lakh for Asset-1 and ₹10.95 lakh for Asset-2 on account of time over-run and reduced it from the capital cost as on COD. Subsequently, an amount of ₹39.58 lakh for Asset-1 and ₹10.95 lakh for Asset-2 was recovered as Liquidated

Damages (LD) from the contractor. The Petitioner has submitted that LD recovered to the extent of disallowed IDC and IEDC is added back as ACE as mentioned in footnote of the Auditor Certificate submitted by the Petitioner. In response to the Commission's query *vide* RoP of hearing dated 28.7.2020,the Petitioner *vide* affidavit dated 17.8.2020 has submitted that LD to the extent of disallowed IDC and IEDC of ₹39.58 lakh for Asset-1 and ₹10.95 lakh for Asset-2 was recovered and has been added back in ACE for the year 2015-16.

31. We have considered the submissions made by the Petitioner. APTEL in judgement dated 27.4.2011 in Appeal No. 72/2010 has laid down the following principles for dealing with the issue of time over-run in execution of projects.

*"7.4. The delay in execution of a generating project could occur due to following reasons:* 

i) due to factors entirely attributable to the generating company, e.g., imprudence in selecting the contractors/suppliers and in executing contractual agreements including terms and conditions of the contracts, delay in award of contracts, delay in providing inputs like making land available to the contractors, delay in payments to contractors/suppliers as per the terms of contract, mismanagement of finances, slackness in project management like improper co-ordination between the various contractors, etc.

ii) due to factors beyond the control of the generating company e.g. delay caused due to force majeure like natural calamity or any other reasons which clearly establish, beyond any doubt, that there has been no imprudence on the part of the generating company in executing the project.

iii) situation not covered by (i) & (ii) above.

In our opinion in the first case the entire cost due to time over run has to be borne by the generating company. However, the Liquidated Damages (LDs) and insurance proceeds on account of delay, if any, received by the generating company could be retained by the generating company. In the second case the generating company could be given benefit of the additional cost incurred due to time over-run. However, the consumers should get full benefit of the LDs recovered from the contractors/suppliers of the generating company and the insurance proceeds, if any, to reduce the capital cost. In the third case the additional cost due to time overrun including the LDs and insurance proceeds could be shared between the generating company and the consumer. It would also be prudent to consider the delay with respect to some benchmarks rather than depending on the provisions of the contract between the generating company and its contractors/suppliers. If the time schedule is taken as per the terms of the contract, this may result in imprudent time schedule not in accordance with good industry practices." 32. As per the above directions of APTEL, when the time over-run is attributable to the project developer (in the instant case, the Petitioner) or its contractors, the cost of the time over-run, i.e. IDC and IEDC have to be borne by the project developer and LD, if any, recovered can be retained by the Petitioner. In the instant case, the time over-run in case of Asset-1 and 2 was partly condoned. Accordingly, IDC and IEDC for the period of time over-run not condoned in case of Asset-1 and 2 was not capitalised and LD recovered by the Petitioner can be retained by the Petitioner. The capital cost of the instant assets is allowed in accordance with the observations of APTEL as per said judgement dated 27.4.2011. IDC and IEDC disallowed in case of said asset the is deducted from the capital cost as on their respective COD and the additional capital expenditure incurred by the Petitioner after the COD is added to the capital cost. Therefore, the Petitioner is allowed to retain LD to the extent of IDC and IEDC disallowed and allowed to adjust ACE on this account.

33. The capital cost allowed as on 31.3.2019 after including ACE in respect of the instant assets is as under:

Asset-1	Capital cost as on			ACE			(₹ in lakh) Total Capital cost	
ASSet-1	COD on cash basis	2014-15	2015-16	2016-17	17 2017-18 2018- 19		<ul> <li>including</li> <li>ACE as on</li> <li>31.3.2019</li> </ul>	
Allowed earlier in order dated 28.3.2016 in Petition No. 404/TT/2014	17346.66	3532.49	1048.47	576.01	0.00	0.00	22503.62	
Claimed by the Petitioner in the instant petition	17457.35	3463.11	1113.34	240.85	1.35	82.63	22358.63	
Allowed after true-up in this order	17318.66	3470.17	1114.27*	240.85	1.35	82.63	22227.93	

\*Includes IDC discharged



Asset-2	Capital cost as on COD on	ACE				(₹ in lakh) Total Capital cost including ACE as on 31.3.2019	
	cash basis	2014-15	2015-16	2016-17	2017-18	2018- 19	
Allowed earlier in order dated 28.3.2016 in Petition No. 404/TT/2014	690.95	3.17	247.90	77.03	0.00	0.00	1019.05
Claimed by the Petitioner in the instant petition	694.36	0.00	273.12	32.04	256.25	3.94	1259.71
Allowed after true-up in this order	691.18	0.00	276.29*	32.04	256.25	3.94	1259.70

\*Includes IDC discharged

				(₹ in lakh)
Accest 2	Capital cost as on COD	AC	CE	Total Capital cost
Asset-3	on cash basis	2015-16	2016-17	including ACE as on 31.3.2019
Allowed earlier in order dated 28.3.2016 in Petition No. 404/TT/2014	893.14	48.14	13.50	954.78
Claimed by the Petitioner in the instant petition	893.54	34.02	0.00	927.56
Allowed after true-up in this order	893.26	34.02	0.00	927.28

### **Debt-Equity ratio**

34. The Petitioner has claimed debt-equity ratio of 70:30 as on 31.3.2014 and for ACE post 31.3.2014. Debt-equity ratio of 70:30 has been considered for capital cost as on 31.3.2014 and ACE during the 2014-19 tariff period as provided under Regulation 19 of the 2014 Tariff Regulations. The same is summarised as under:

	Capital Cos	t as on COD	Capital Cost as on 31.3.2019		
Asset-1	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)	
Debt	12123.07	70.00	15559.57	70.00	
Equity	5195.59	30.00	6668.36	30.00	
Total	17318.66	100.00	22227.93	100.00	
Asset-2	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)	
Debt	483.82	70.00	881.79	70.00	
Equity	207.35	30.00	377.90	30.00	
Total	691.18	100.00	1259.70	100.00	

Page 18 of 70

Asset-3	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)
Debt	625.29	70.00	649.11	70.00
Equity	267.97	30.00	278.17	30.00
Total	893.26	100.00	927.28	100.00

#### Interest on Loan (IoL)

35. The Petitioner has claimed the weighted average rate of IoL, based on its actual loan portfolio and rate of interest. Accordingly, IoL is calculated based on actual interest rate in accordance with Regulation 26 of the 2014 Tariff Regulations.

36. MSEDCL has submitted that for calculating IoL, weighted average rate of interest has to be considered but the Petitioner has considered the rate of IoL on annual basis for the period under consideration. In response, the Petitioner in its rejoinder has stated that for computing IoL in Form-9E, the weighted average rate of IoL has been used.

37. We have considered the submissions of the Petitioner and MSEDCL. The details of IoL allowed is as follows:

(₹ in lakh)

		Asset-1			
Particular	2014-15 ( <i>pro-rata</i> for 143 days)	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	12123.07	14552.19	15332.18	15500.78	15501.73
Cumulative Repayments upto Previous Year	0.00	371.58	1437.13	2533.18	3633.65
Net Loan-Opening	12123.07	14180.61	13895.05	12967.60	11868.08
Addition due to ACE	2429.12	779.99	168.60	0.95	57.84
Repayment during the year	371.58	1065.56	1096.05	1100.47	1101.90
Net Loan-Closing	14180.61	13895.05	12967.60	11868.08	10824.03
Average Loan	13151.84	14037.83	13431.32	12417.84	11346.06
Weighted Average Rate of Interest on Loan (%)	2.186	2.685	3.567	3.986	4.890
Interest on Loan	112.61	376.89	479.08	495.04	554.84

Page 19 of 70

(₹ in lakh)

	Asset-2									
Particular	2014-15 ( <i>pro-rata</i> for 80 days)	2015-16	2016-17	2017-18	2018-19					
Gross Normative Loan	483.82	483.82	677.23	699.66	879.03					
Cumulative Repayments upto Previous Year	0.00	8.00	51.79	103.71	161.30					
Net Loan-Opening	483.82	475.82	625.44	595.94	717.73					
Addition due to ACE	0.00	193.40	22.43	179.38	2.76					
Repayment during the year	8.00	43.79	51.93	57.59	62.50					
Net Loan-Closing	475.82	625.44	595.94	717.73	657.99					
Average Loan	479.82	550.63	610.69	656.84	687.86					
Weighted Average Rate of Interest on Loan (%)	8.875	8.761	8.655	8.509	8.402					
Interest on Loan	9.33	48.24	52.86	55.89	57.79					

(₹ in lakh)

Asset-3								
Particular	2014-15 ( <i>pro-rata</i> for 31 days)	2015-16	2016-17	2017-18	2018-19			
Gross Normative Loan	625.29	625.29	649.11	649.11	649.11			
Cumulative Repayments upto								
Previous Year	0.00	4.03	52.56	102.12	151.69			
Net Loan-Opening	625.29	621.26	596.56	546.99	497.42			
Addition due to ACE	0.00	23.82	0.00	0.00	0.00			
Repayment during the								
year	4.03	48.52	49.57	49.57	49.57			
Net Loan-Closing	621.26	596.56	546.99	497.42	447.86			
Average Loan	623.28	608.91	571.77	522.21	472.64			
Weighted Average Rate of Interest on								
Loan (%)	8.110	8.111	8.112	8.118	8.133			
Interest on Loan	4.29	49.39	46.38	42.39	38.44			

38. Accordingly, IoL approved earlier *vide* order dated 28.3.2016 in Petition No. 404/TT/2014, claimed by the Petitioner in the instant petition and trued up *vide* this order is shown in the table as under:



					(₹	in lakh)
Asset	Particulars	2014-15	2015-16	2016-17	2017-18	2018- 19
Asset-1	Allowed earlier in order dated 28.3.2016 in Petition No. 404/TT/2014	113.13	338.22	326.68	305.78	278.96
	Claimed by the Petitioner in the instant petition	113.19	378.99	481.59	503.33	568.83
	Allowed after true-up in this order	112.61	376.89	479.08	495.04	554.84
	Allowed earlier in order dated 28.3.2016 in Petition No. 404/TT/2014	9.35	48.20	54.08	51.81	47.08
Asset-2	Claimed by the Petitioner in the instant petition	9.33	48.24	52.86	55.89	57.79
	Allowed after true-up in this order	9.33	48.24	52.86	55.89	57.79
	Allowed earlier in order dated 28.3.2016 in Petition No. 404/TT/2014	4.29	49.76	47.48	43.77	39.70
Asset-3	Claimed by the Petitioner in the instant petition	4.29	49.41	46.40	42.41	38.45
	Allowed after true-up in this order	4.29	49.39	46.38	42.39	38.44

# Return on Equity (RoE)

39. The Petitioner has claimed RoE for the instant assets in accordance with Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at Minimum Alternate Tax (MAT) rates and has claimed 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	19.624
2015-16	21.382	19.715
2016-17	21.338	19.704
2017-18	21.337	19.704
2018-19	21.549	19.757

40. MPPMCL has submitted that the Petitioner has grossed up RoE on the basis of actual taxes paid during 2016-17 and 2017-18 while for 2018-19, RoE has been grossed up on the basis of applicable MAT rate, surcharge and cess and not on the basis of actual taxes paid for the year 2018-19. MPPMCL has submitted that

the Petitioner has not placed on record the assessment orders for 2014-15, 2015-16, 2016-17 and 2017-18 and also that the Petitioner has not enclosed the audited accounts in respect of actual taxes paid for 2016-17 and 2017-18.

41. MSEDCL has submitted that the Petitioner has mentioned the effective tax rate for the years 2014-15 and 2015-16. MSEDCL has further submitted that the actual tax paid on income from other business activities of the Petitioner are required to be excluded for the computation of the effective tax rate as per Regulation 25(1) of the 2014 Tariff Regulations, which has not been done by the Petitioner. MSEDCL has contended that the Petitioner has claimed grossed up RoE on the basis of actual taxes paid during 2016-17 and 2017-18, whereas, for 2018-19, RoE has not been grossed up on the basis of actual tax paid. MSEDCL has further submitted that the Petitioner has not placed on record assessment orders for 2014-15, 2015-16, 2016-17 and 2017-18 have not been enclosed.

42. In response to MPPMCL and MSEDCL, the Petitioner in its rejoinder has submitted that the assessment orders for 2014-15, 2015-16 and 2016-17 have been issued by the Income Tax Department while Income Tax returns for years 2017-18 and 2018-19 have been filed. The Petitioner has further submitted that the assessment orders for the years 2014-15 and 2015-16 were submitted in Petition No. 20/TT/2020 and a copy of assessment order for the year 2016-17 has been filed along with the rejoinders.

43. We have considered the submissions of the Petitioner, MPPMCL and MSEDCL. It is observed that the Petitioner has submitted the assessment orders issued by the Income Tax Department for 2014-15, 2015-16 and 2016-17 and the

Income Tax returns for years 2017-18 and 2018-19 have been filed. The Commission vide order dated 27.4.2020 in Petition No. 274/TT/2019, has arrived at the effective tax rate for the Petitioner based on the notified MAT rates. 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 Assessee) if any imposed shall not be taken into account for the purpose of grossing up of rate of return on equity. Any underrecovery 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

44. The MAT rates 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, which 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	20.961	15.50	19.610
2015-16	21.342	15.50	19.705

Page 23 of 70

2016-17	21.342	15.50	19.705
2017-18	21.342	15.50	19.705
2018-19	21.549	15.50	19.758

45. Accordingly, RoE allowed for the instant assets is as follows:

					(₹ in lakh)			
Asset-1								
Particulars	2014-15 ( <i>pro-rata</i> for 143 days)	2015-16	2016-17	2017-18	2018-19			
Opening Equity	5195.59	6236.64	6570.92	6643.17	6643.57			
Addition due to Additional Capitalization	1041.05	334.28	72.25	0.40	24.79			
Closing Equity	6236.64	6570.92	6643.17	6643.57	6668.36			
Average Equity	5716.12	6403.78	6607.05	6643.37	6655.96			
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)	439.16	1261.86	1301.92	1309.08	1315.09			

#### (₹ in lakh)

Asset-2							
Particulars	2014-15 ( <i>pro-rata</i> for 80 days)	2015-16	2016-17	2017-18	2018-19		
Opening Equity	207.35	207.35	290.24	299.85	376.72		
Addition due to Additional Capitalization	0.00	82.89	9.61	76.88	1.18		
Closing Equity	207.35	290.24	299.85	376.72	377.90		
Average Equity	207.35	248.80	295.04	338.29	377.31		
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)	8.91	49.03	58.14	66.66	74.55		

### (₹ in lakh)

Asset-3							
Particulars	2014-15 ( <i>pro-rata</i> for 31 days)	2015-16	2016-17	2017-18	2018-19		
Opening Equity	267.97	267.97	278.17	278.17	278.17		
Addition due ACE	0.00	10.20	0.00	0.00	0.00		
Closing Equity	267.97	278.17	278.17	278.17	278.17		
Average Equity	267.97	273.07	278.17	278.17	278.17		
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500		

Page 24 of 70

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)	4.46	53.81	54.81	54.81	54.96

46. The details of RoE allowed in order dated 28.3.2016 in Petition No. 404/TT/2014, claimed by the Petitioner in the instant petition and trued up in the instant order is shown in the table as under:

						(₹ in lak
Asset	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A 1	Allowed earlier in order dated 28.3.2016 in Petition No. 404/TT/2014	440.52	1259.16	1306.94	1323.89	1323.89
Asset- 1	Claimed by the Petitioner in the instant petition	441.81	1270.26	1309.65	1324.38	1338.38
	Allowed after true-up in this order	439.16	1261.86	1301.92	1309.08	1315.09
Asset- 2	Allowed earlier in order dated 28.3.2016 in Petition No. 404/TT/2014	8.93	48.13	57.68	59.95	59.95
	Claimed by the Petitioner in the instant petition	8.92	49.05	58.14	66.66	74.55
	Allowed after true-up in this order	8.91	49.03	58.14	66.66	74.55
Accet	Allowed earlier in order dated 28.3.2016 in Petition No. 404/TT/2014	4.46	53.96	55.77	56.17	56.17
Asset- 3	Claimed by the Petitioner in the instant petition	4.47	53.85	54.83	54.83	54.98
	Allowed after true-up in this order	4.46	53.81	54.81	54.81	54.96

### **Depreciation**

47. The Petitioner's claim towards depreciation in this petition has been found to be higher than the depreciation allowed in order dated 28.3.2016 in Petition No. 404/TT/2014. The Petitioner has neither given any justification for claiming higher depreciation than that allowed earlier in order dated 26.10.2016 nor made any specific prayer for allowing higher depreciation in this petition. It is observed that *vide* order dated 28.3.2016 in Petition No. 404/TT/2014, the depreciation for IT equipment was allowed @5.28%. The Petitioner now at the time of truing up of the

tariff of the 2014-19 period has segregated the IT equipment cost from the substation cost and has considered depreciation rate for IT Equipment @ 15% and the salvage value for IT Equipment is NIL as per the 2014 Tariff Regulations. Similar issue had come up before the Commission in Petition No. 19/TT/2020 wherein the Commission *vide* order dated 9.5.2020 decided as under:

"31. We have considered the submissions of the Petitioner. The instant assets were put into commercial operation during the 2009-14 period and the tariff from the respective CODs to 31.3.2014 was allowed vide orders dated 30.8.2012and 9.5.2013in 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 apart 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 substation 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."

48. In line with above decision, depreciation has been considered for IT Equipment @5.28% as part of the sub-station upto 31.3.2019 while truing up the capital expenditure for the 2014-19 period. However, for 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 of the 2019 Tariff Regulations. The Gross Block during the 2014-19 tariff period has been depreciated at weighted average rate of depreciation (WAROD) and working of WAROD is at Annexure-1(a), (b) and (c). WAROD has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations and depreciation allowed during the 2014-19 tariff period is as under:

(₹ in lakh)

	Asset-1							
Particulars	2014-15 ( <i>pro-rata</i> for 143 days)	2015-16	2016-17	2017-18	2018-19			
Opening Gross Block	17318.66	20788.83	21903.10	22143.95	22145.30			
Additional Capitalisation	3470.17	1114.27	240.85	1.35	82.63			
Closing Gross Block	20788.83	21903.10	22143.95	22145.30	22227.93			
Average Gross Block	19053.75	21345.97	22023.53	22144.63	22186.62			
Weighted average rate of Depreciation (WAROD) (%)	4.98	4.99	4.98	4.97	4.97			
Balance useful life of the asset at the beginning of the year	29.00	29.00	28.00	27.00	26.00			
Aggregated Depreciable Value	16387.96	18440.62	19040.25	19149.24	19187.03			
Combined Depreciation during the year	371.58	1065.56	1096.05	1100.47	1101.90			
Remaining Aggregated Depreciable Value	16016.38	17003.49	16507.07	15515.59	14451.48			

(₹ in lakh)

	As	set-2			
Particulars	2014-15 ( <i>pro-rata</i> for 80 days)	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	691.18	691.18	967.47	999.51	1255.76
Additional Capitalisation	0.00	276.29	32.04	256.25	3.94
Closing Gross Block	691.18	967.47	999.51	1255.76	1259.70
Average Gross Block	691.18	829.32	983.49	1127.63	1257.73
Weighted average rate of Depreciation (WAROD) (%)	5.28	5.28	5.28	5.11	4.97
Balance useful life of the asset at the beginning of the year	25.00	25.00	24.00	23.00	22.00
Aggregated Depreciable Value	622.06	746.39	885.14	1014.87	1131.95

Page 27 of 70

Combined Depreciation during the year	8.00	43.79	51.93	57.59	62.50
Remaining Aggregated Depreciable Value	614.06	694.60	781.42	853.57	908.15

(₹	t in	lakh)
•		

	Asset-3									
Particulars	2014-15 ( <i>pro-rata</i> for 31 days)	2015-16	2016-17	2017-18	2018-19					
Opening Gross Block	893.26	893.26	927.28	927.28	927.28					
Additional Capitalisation	0.00	34.02	0.00	0.00	0.00					
Closing Gross Block	893.26	927.28	927.28	927.28	927.28					
Average Gross Block	893.26	910.27	927.28	927.28	927.28					
Weighted average rate of Depreciation (WAROD) (%)	5.32	5.33	5.35	5.35	5.35					
Balance useful life of the asset at the beginning of the year	34.00	34.00	33.00	32.00	31.00					
Aggregated Depreciable Value	803.93	819.24	834.55	834.55	834.55					
Combined Depreciation during the year	4.03	48.52	49.57	49.57	49.57					
Remaining Aggregated Depreciable Value	799.90	766.69	732.43	682.86	633.29					

49. The details of the depreciation allowed for the instant assets *vide* order dated 28.3.2016 in Petition No. 404/TT/2014, claimed by the Petitioner in the instant petition and trued up in the instant order is shown in the table under:

						( ( ) ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )
Asset	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-1	Allowed earlier in order dated 28.3.2016 in Petition No. 404/TT/2014	356.19	1022.06	1052.91	1063.14	1063.14
	Claimed by the Petitioner in the instant petition	376.99	1081.41	1111.86	1121.11	1127.66
	Allowed after true-up in this order	371.58	1065.56	1096.05	1100.47	1101.90
Asset-2	Allowed earlier in order dated 28.3.2016 in Petition No. 404/TT/2014	8.01	43.19	51.77	53.81	53.81
	Claimed by the Petitioner in the instant petition	8.00	43.79	51.93	57.58	62.51
	Allowed after true-up in this order	8.00	43.79	51.93	57.59	62.50



	Allowed earlier in order dated 28.3.2016 in Petition No. 404/TT/2014	4.03	48.89	50.66	51.02	51.02
Asset-3	Claimed by the Petitioner in the instant petition	4.03	48.54	49.58	49.58	49.58
	Allowed after true-up in this order	4.03	48.52	49.57	49.57	49.57

## **Operation & Maintenance Expenses (O&M Expenses)**

50. The details of the O&M Expenses claimed by the Petitioner for the instant assets and allowed under Regulation 29(4)(a) of the 2014 Tariff Regulations are as under:

					(₹ in lakn)					
Asset-1										
Particulars	2014-15 ( <i>pro-rata</i> for 143 days)	2015-16	2016-17	2017-18	2018-19					
Sub-station Bays	<b>y</b> /									
400 kV Magarwada - 2 Nos.315MVA ICT and associated bays	2	2	2	2	2					
400 kV Magarwada - line bays	4	4	4	4	4					
220 kV Magarwada - 2 Nos. 315MVA ICT and associated bays	2	2	2	2	2					
220 kV Magarwada - line bays	4	4	4	4	4					
Norm (₹ lakh/bay)										
400 kV Sub-station bays (GIS)	51.54	53.25	55.02	56.84	58.73					
220 kV Sub-station bays (GIS)	42.21	43.61	45.06	46.55	48.10					
Total Sub-station O&M Expenses	562.50	581.16	600.48	620.34	640.98					
AC & HVDC Lines										
LILO of one circuit 400 kV D/C Navsari-Boisar Transmission Line	15.884	0.00	0.00	0.00	0.00					
Norm (₹ lakh/km)										
Double Circuit Twin/Triple Conductor	0.71	0.73	0.76	0.78	0.81					
<b>Total Transmission Line</b>	11.23	0.00	0.00	0.00	0.00					
Total O&M Expenses	223.82	581.16	600.48	620.34	640.98					

\*\*O&M Expenses for D/C (two & triple conductors) Transmission Line portion has been claimed for the period from 9.11.2014 to 28.2.2015 only.

(₹ in lakh)

	Asset-2									
Particulars	2014-15 ( <i>pro-rata</i> for 80 days)	2015-16	2016-17	2017-18	2018-19					
Sub-station Bays										
400 kV, 1X80 MVArbus reactor and its associated bays at GIS Magarwada Sub-station	1	1	1	1	1					
Norm (₹ lakh/bay)										
400 kV Sub-station bays (GIS)	51.54	53.25	55.02	56.84	58.73					
Total Sub-station O&M										
Expenses	51.54	53.25	55.02	56.84	58.73					
Total O&M Expenses	11.30	53.25	55.02	56.84	58.73					

(₹	in	lakh)
----	----	-------

	Asset-3									
Particulars	2014-15 ( <i>pro-rata</i> for 31 days)	2015-16	2016-17	2017-18	2018-19					
AC & HVDC Lines										
LILO of 2nd Circuit 400kV Double circuit Navsari- Boisar Transmission Line	15.884	15.884	15.884	15.884	15.884					
Norm (₹ lakh/km)										
Multi Circuit Twin/Triple Conductor	1.24	1.28	1.32	1.37	1.41					
Total Sub-station O&M Expenses	19.70	20.36	21.03	21.73	22.44					
Total O&M Expenses	1.67	20.36	21.03	21.73	22.44					

51. The details of the O&M Expenses approved *vide* order dated 28.3.2016 in Petition No. 404/TT/2014, O&M Expenses claimed by the Petitioner in the instant petition and trued up O&M Expenses allowed in the instant order are shown in the table below:

						(₹ in lakh)
Asset	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
	Allowed earlier in order dated 28.3.2016 in Petition No. 404/TT/2014	221.85	581.16	600.48	620.34	640.98
Asset-1	Claimed by the Petitioner in the instant petition	223.82	581.16	600.48	620.34	640.98
	Allowed after true-up in	223.82	581.16	600.48	620.34	640.98

Page 30 of 70

	this order					
	Allowed earlier in order dated 28.3.2016 in Petition No. 404/TT/2014	11.30	53.25	55.02	56.84	58.73
Asset-2	Claimed by the Petitioner in the instant petition	11.30	53.25	55.02	56.84	58.73
	Allowed after true-up in this order	11.30	53.25	55.02	56.84	58.73
Asset-3	Allowed earlier in order dated 28.3.2016 in Petition No. 404/TT/2014	1.67	20.36	21.03	21.73	22.44
	Claimed by the Petitioner in the instant petition	1.67	20.36	21.03	21.73	22.44
	Allowed after true-up in this order	1.67	20.36	21.03	21.73	22.44

### Interest on Working Capital (IWC)

52. The Petitioner has claimed IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations as under:-

### i. Maintenance Spares:

Maintenance spares have been worked out based on 15% of O&M

Expenses.

### ii. O&M Expenses:

O&M Expenses have been considered for one month of the allowed O&M

Expenses.

### iii. Receivables:

The receivables have been worked out on the basis of 2 months of annual

transmission charges as worked out above.

# iv. Rate of interest on Working Capital:

Rate of interest on working capital is considered on normative basis in

accordance with Regulation 28(3) of the 2014 Tariff Regulations.

53. The trued up IWC allowed for the instant assets is as under:

(₹ in lakh)

		Asset-1			
Particulars	2014-15 ( <i>pro-rata</i> for 143 days)	2015-16	2016-17	2017-18	2018-19
O&M Expenses	47.81	48.43	50.04	51.70	53.42
Maintenance Spares	86.06	87.17	90.07	93.05	96.15
Receivables	502.33	563.30	596.15	604.34	619.44
Total	636.20	698.91	736.27	749.09	769.00
Rate of Interest on Working Capital(%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	33.65	94.35	99.40	101.13	103.81

(₹ in lakh)

		Asset-2			
Particulars	2014-15 ( <i>pro-rata</i> for 80 days)	2015-16	2016-17	2017-18	2018-19
O&M Expenses	4.30	4.44	4.59	4.74	4.89
Maintenance Spares	7.73	7.99	8.25	8.53	8.81
Receivables	29.48	33.42	37.46	40.71	43.55
Total	41.51	45.84	50.29	53.97	57.25
Rate of Interest on Working Capital(%)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	1.23	6.19	6.79	7.29	7.73

	Asset-3									
Particulars	2014-15 ( <i>pro-rata</i> for 31 days)	2015-16	2016-17	2017-18	2018-19					
O & M Expenses	1.64	1.70	1.75	1.81	1.87					
Maintenance Spares	2.95	3.05	3.15	3.26	3.37					
Receivables	29.14	29.45	29.40	28.85	28.32					
Total	33.73	34.20	34.31	33.92	33.56					
Rate of Interest on Working Capital(%)	13.50	13.50	13.50	13.50	13.50					
Interest on Working Capital	0.39	4.62	4.63	4.58	4.53					



54. The details of IWC approved vide order dated 28.3.2016 in Petition No. 404/TT/2014, trued up IWC claimed by the Petitioner and trued up IWC allowed in the instant order is shown in the table below:

	(*)					
Asset	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
	Allowed earlier in order dated 28.3.2016 in Petition No. 404/TT/2014	33.20	92.40	95.01	96.25	96.78
Asset-1	Claimed by the Petitioner in the instant petition	33.82	94.96	100.00	102.15	105.27
	Allowed after true-up in this order	33.65	94.35	99.40	101.13	103.81
	Allowed earlier in order dated 28.3.2016 in Petition No. 404/TT/2014	1.23	6.15	6.80	6.95	6.95
Asset-2	Claimed by the Petitioner in the instant petition	1.23	6.19	6.79	7.29	7.73
	Allowed after true-up in this order	1.23	6.19	6.79	7.29	7.73
	Allowed earlier in order dated 28.3.2016 in Petition No. 404/TT/2014	0.39	4.64	4.70	4.68	4.62
Asset-3	Claimed by the Petitioner in the instant petition	0.39	4.62	4.63	4.58	4.53
	Allowed after true-up in this order	0.39	4.62	4.63	4.58	4.53

### Approved Annual Fixed Charges for the 2014-19 Tariff Period

55. The trued up annual fixed charges for the instant assets for the 2014-19 tariff

period are as under:

(₹ in lakh)

	Asset-1									
Particulars	2014-15 ( <i>pro-rata</i> for 143 days)	2015-16	2016-17	2017-18	2018-19					
Depreciation	371.58	1065.56	1096.05	1100.47	1101.90					
Interest on Loan	112.61	376.89	479.08	495.04	554.84					
Return on Equity	439.16	1261.86	1301.92	1309.08	1315.09					
Interest on Working Capital	33.65	94.35	99.40	101.13	103.81					
O&M Expenses	223.82	581.16	600.48	620.34	640.98					
Total	1180.82	3379.83	3576.92	3626.04	3716.62					



#### (₹ in lakh)

Asset-2									
Particulars	2014-15 ( <i>pro-rata</i> for 80 days)	2015-16	2016-17	2017-18	2018-19				
Depreciation	8.00	43.79	51.93	57.59	62.50				
Interest on Loan	9.33	48.24	52.86	55.89	57.79				
Return on Equity	8.91	49.03	58.14	66.66	74.55				
Interest on Working Capital	1.23	6.19	6.79	7.29	7.73				
O&M Expenses	11.30	53.25	55.02	56.84	58.73				
Total	38.77	200.49	224.73	244.26	261.30				

(₹ in lakh)

Asset-3									
Particulars	2014-15 ( <i>pro-rata</i> for 31 days)	2015-16	2016-17	2017-18	2018-19				
Depreciation	4.03	48.52	49.57	49.57	49.57				
Interest on Loan	4.29	49.39	46.38	42.39	38.44				
Return on Equity	4.46	53.81	54.81	54.81	54.96				
Interest on Working Capital	0.39	4.62	4.63	4.58	4.53				
O&M Expenses	1.67	20.36	21.03	21.73	22.44				
Total	14.85	176.70	176.42	173.08	169.94				

56. The annual transmission charges approved *vide* order dated 28.3.2016 in Petition No. 404/TT/2014, trued up AFC claimed by the Petitioner in the instant petition and trued up AFC allowed in the instant order are shown in the table below:

					•	
Asset	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
	Allowed earlier in order dated 28.3.2016 in Petition No. 404/TT/2014	1164.90	3293.00	3382.02	3409.40	3403.75
Asset-1	Claimed by the Petitioner in the instant petition	1189.63	3406.78	3603.58	3671.31	3781.12
	Allowed after true-up in this order	1180.82	3379.83	3576.92	3626.04	3716.62
	Allowed earlier in order dated 28.3.2016 in Petition No. 404/TT/2014	38.82	198.92	225.36	229.36	226.52
Asset-2	Claimed by the Petitioner in the instant petition	38.78	200.52	224.74	244.26	261.31
	Allowed after true-up in this order	38.77	200.49	224.73	244.26	261.30

	Allowed earlier in order dated 28.3.2016 in Petition No. 404/TT/2014	14.84	177.61	179.65	177.37	173.96
Asset-3	Claimed by the Petitioner in the instant petition	14.85	176.78	176.47	173.13	169.98
	Allowed after true-up in this order	14.85	176.70	176.42	173.08	169.94

#### Determination of Annual Fixed Charges for the 2019-24 Tariff Period

57. The Petitioner has submitted the Tariff Forms considering the instant assets as Combined Asset. Accordingly, as per proviso (i) of Regulation 8(1) of 2019 Tariff Regulations, tariff for the Combined Asset has been worked out for the 2019-24 tariff period.

58. 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	1232.47	1233.65	1223.42	1219.21	1219.21
Interest on Loan	601.27	532.96	463.96	396.32	332.29
Return on Equity	1385.04	1387.02	1387.02	1387.02	1387.02
Interest on Working Capital	70.39	70.35	69.95	69.70	69.42
O&M Expenses	504.55	522.45	540.72	559.92	578.89
Total	3793.72	3746.43	3685.07	3632.17	3586.83

59. 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&MExpenses	42.05	43.54	45.06	46.66	48.24
Maintenance Spares	75.68	78.37	81.11	83.99	86.83
Receivables	466.44	461.89	454.32	447.80	441.00
Total	584.17	583.80	580.49	578.45	576.07
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	70.39	70.35	69.95	69.70	69.42

# Effective Date of Commercial Operation (E-COD)



60. The Petitioner has claimed E-COD of the Combined Asset as 16.11.2014. Based on the trued up admitted capital cost and actual COD of all the assets, the E-COD has been worked out as follows:

	Computation of Effective COD									
Asset	Actual COD	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Weight of cost (%)	No. of days from last COD	Weighted Days	Effective COD (Latest COD – Total weighted Days)				
Asset-1	9.11.2014	22227.93	91.04	112.00	101.97					
Asset-2	11.1.2015	1259.70	5.16	49.00	2.53	16.11.2014				
Asset-3	1.3.2015	927.28	3.80	0.00	0.00					
Total		24414.91	100.00		104.50					

61. 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) of the instant assets

62. The life as defined in Regulation 33 of the 2019 Tariff Regulations has been considered for determination of WAL.

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

64. WAL has been determined based on the admitted capital cost of individual elements as on 31.3.2019 and their respective life as stipulated in the 2019 Tariff Regulations. The element-wise life as defined in the 2014 Tariff Regulations prevailing at the time of actual COD of individual assets has been ignored for this

purpose. 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 30 years as shown below:-

	Admitted Capital Cost as on 31.3.2019						
Particulars	Combined Asset CostLife in Years (2)Weighted Cost (3)=(1) x (2)		Weighted Avg. Life of Asset (in years) (4)=(3)/(1)				
Leasehold Land	0.00	25.00	0.00				
Building & Other Civil Works	1499.48	25.00	37487.02				
Transmission Line	10913.65	35.00	381977.89				
Sub-Station Equipment	10918.40	25.00	272959.90				
PLCC	120.10	15.00	1801.46				
IT Equipment and Software	95.58	6.67	637.22				
Total	23547.21		694863.49	29.51 years, rounded off to 30 years			

65. WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. from 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in previous tariff period is required to be done. As discussed, the E-COD of the assets is 16.11.2014 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 E-COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 26 years.

# Capital Cost as on 1.4.2019

66. 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;

(I) 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."

67. The Petitioner has claimed capital cost of ₹22358.63 lakh, ₹1259.71 lakh and

₹927.56 lakh for Asset-1, 2 and 3 respectively. Against the overall FR apportioned

approved capital cost of ₹25928.31 lakh, the estimated completion cost including

ACE is ₹24616.22 lakh. The individual capital cost of each asset is also within the

respective FR apportioned capital cost.

68. 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) admitted by the Commission as on 31.3.2019 for the instant assets are clubbed together and the capital cost considered for the Combined Asset is as per the following details:

			(₹ in lakh)
Element	Asset-1	Asset-2	Asset-3
Free hold Land	867.70	0.00	0.00
Leasehold Land	0.00	0.00	0.00
Building & Other Civil Works	1298.10	201.38	0.00
Transmission Line	10044.20	0.00	869.45
Sub-station Equipment	9860.08	1058.32	0.00
PLCC	62.27	0.00	57.83
IT Equipment and Software	95.58	0.00	0.00
Total	22227.93	1259.70	927.28

	(₹ in lakh)
Particulars	Capital Cost for combined asset as on 1.4.2019
Freehold Land	867.70
Leasehold Land	0.00
Building & Other Civil Works	1499.48
Transmission Line	10913.65
Sub-station Equipment	10918.40
PLCC	120.10
IT Equipment and Software	95.58
TOTAL	24414.91

## Initial Spares

69. As stated above, Initial Spares are allowed for the 2014-19 period on the basis of the Plant & Machinery cost of individual assets. The instant transmission assets are combined and the overall project cost is arrived at in the 2019-24 tariff period and therefore Initial Spares are allowed during the 2019-24 tariff period on the basis of the overall project cost as per APTEL's judgement dated 14.9.2019 in Appeal No.74 of 2017.

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

Asset Cost Cut-of	inery Spares upto claimed	Norms as per 2014 Tariff Regulations	Initial Spares allowable as per	Initial Spares allowed in 2014- 19
-------------------------	------------------------------	---	--	---

	(excluding IDC and IEDC) (₹ in lakh)		(in %)	norms and APTEL judgement dated 14.9.2019 (₹ in lakh)	(₹ in lakh)		
A	В	С	D	E	F		
Sub-station / P	LCC						
Asset-1	8809.88	439.00					
Asset-2	819.83	41.00	5	482.70	482.69		
Asset-3	55.49	2.70					
Total	9685.20	482.70		482.70	482.69		
Transmission	Transmission Line						
Asset-1	9761.91	74.00	1	82.30	02.02		
Asset-3	897.35	8.30	I	82.30	82.02		
Total	10659.26	82.30		82.30	82.02		

71. Accordingly, additional Initial Spares of ₹0.29 lakh are being allowed as part of the combined capital cost as on 1.4.2019 in line with APTEL's judgement dated 14.9.2019 in Appeal No. 74 of 2017.

72. Capital cost as on 1.4.2019 is worked out as under:

		(₹ in lakh)
-	Additional Initial Spares allowed as per APTEL's judgement dated 14.9.2019	•
24414.91	0.29	24415.20

73. The trued-up capital cost of ₹24415.20 lakh for the Combined Asset is considered as admitted capital cost as on 1.4.2019 for working out tariff for the 2019-24 tariff period.

# Additional Capital Expenditure (ACE)

74. Regulation 24 of the 2019 Tariff Regulations provides as under:-

"24. Additional Capitalization within the original scope and up to the cut-off date

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

(a) Undischarged liabilities recognized to be payable at a future date;(b) Works deferred for execution;

(c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;
(d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;
(e) Change in law or compliance of any existing law; and

(f) Force Majeure events:

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

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

75. The Petitioner has claimed projected ACE for the 2019-24 period and

submitted Auditor certificates in support of the same. The Petitioner has submitted

that ACE claimed for the period 1.4.2019 to 31.3.2020 is on estimated basis and

may vary due to final claim/ reconciliation at the time of contract closing. The

Petitioner has projected ACE of ₹70.32 lakh in respect Asset-1 during 2019-20.

76. It is observed that the projected ACE claimed in case of Asset-1 during 2019-

24 period falls after cut-off date. ACE claimed is allowed Regulation 24(1)(a) of the 2019 Tariff Regulations as it is towards Balance & Retention Payments for work executed before cut-off date.

#### Capital cost for the 2019-24 tariff period

77. Accordingly, the capital cost of the Combined Asset, considered for the 2019-24 tariff period, 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
24415.20	70.32	24485.52

#### Debt-Equity ratio

78. Regulations 18 of the 2019 Tariff Regulations provide 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."

79. The details of the debt-equity considered for the purpose of computation of

tariff for the 2019-24 tariff period for the Combined Asset is as under:

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	(%)	Total Capital Cost as on 31.3.2024 (₹ in lakh)	(%)
Debt	17090.68	70.00	17139.90	70.00
Equity	7324.52	30.00	7345.61	30.00
Total	24415.20	100.00	24485.52	100.00

#### Return on Equity (RoE)

80. 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 runof-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:

Rate of pre-tax return on equity = Base rate / (1-t)

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

#### Illustration-

(i) In case of a generating company or a transmission licensee paying Minimum Alternate Tax (MAT) @ 21.55% including surcharge and cess:

Rate of return on equity = 15.50/(1-0.2155) = 19.758%

(ii) In case of a generating company or a transmission licensee paying normal corporate tax including surcharge and cess:

- (a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;
- (b) Estimated Advance Tax for the year on above is Rs 240 crore;
- (c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore/Rs 1000 Crore = 24%;
- (d) Rate of return on equity = 15.50/(1-0.24) = 20.395%.

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based



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

81. The Petitioner has submitted that MAT rate is applicable to the Petitioner's Company. MSEDCL has submitted that the MAT rate should be considered at 15% for 2019-20.

82. We have considered the submissions of MSEDCL and the Petitioner. The MAT rate applicable during the year 2019-20 has been considered for the purpose of computation of RoE for the 2019-24 tariff period, 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 follows:

(₹ in	lakh)
-------	-------

Combined Asset								
Particulars 2019-20 2020-21 2021-22 2022-23 2023-24								
Opening Equity	7324.52	7345.61	7345.61	7345.61	7345.61			
Addition due to Additional Capitalization	21.10	0.00	0.00	0.00	0.00			
Closing Equity	7345.61	7345.61	7345.61	7345.61	7345.61			
Average Equity	7335.06	7345.61	7345.61	7345.61	7345.61			
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)	1377.67	1379.65	1379.65	1379.65	1379.65			

## Interest on Loan (IoL)

83. 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."

84. The weighted average rate of IoL has been considered on the basis of the rate prevailing as on 1.4.2019. We have considered the submissions made by MSEDCL in this regard and the Petitioner's prayer that the change in interest rate due to floating rate of interest applicable, if any, during the 2019-24 tariff period will be adjusted. 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 for the Combined Asset for the 2019-24 tariff period is as follows:

(₹ in lakh)

Combined Asset								
Particular	2019-20	2020-21	2021-22	2022-23	2023-24			
Gross Normative Loan	17090.68	17139.90	17139.90	17139.90	17139.90			
Cumulative Repayments upto Previous Year	5160.60	6386.55	7613.67	8840.78	10067.90			
Net Loan-Opening	11930.08	10753.36	9526.24	8299.12	7072.00			
Addition due to Additional Capitalization	49.22	0.00	0.00	0.00	0.00			
Repayment during the year	1225.94	1227.12	1227.12	1227.12	1227.12			
Net Loan-Closing	10753.36	9526.24	8299.12	7072.00	5844.88			
Average Loan	11341.72	10139.80	8912.68	7685.56	6458.44			
Weighted Average Rate of Interest on Loan (%)	5.292	5.249	5.199	5.145	5.125			
Interest on Loan	600.24	532.28	463.36	395.43	331.00			

#### **Depreciation**

85. Regulations 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."

*"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."



86. We have considered the submissions of the Petitioner. The IT equipment have been considered as part of the Gross Block and depreciated using WAROD. 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 as 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 follows:

(₹ in lakh)

Combined Asset							
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24		
Opening Gross Block	24415.20	24485.52	24485.52	24485.52	24485.52		
Addition during the year 2019- 24 due to projected Additional Capitalisation	70.32	0.00	0.00	0.00	0.00		
Closing Gross Block	24485.52	24485.52	24485.52	24485.52	24485.52		
Average Gross Block	24450.36	24485.52	24485.52	24485.52	24485.52		
Weighted average rate of Depreciation (WAROD) (%)	5.01	5.01	5.01	5.01	5.01		
Balance useful life at the beginning	26.00	25.00	24.00	23.00	22.00		
Aggregated Depreciable Value	21233.95	21265.60	21265.60	21265.60	21265.60		
Remaining Aggregate Depreciable Value at the end of the year	14847.41	13651.93	12424.81	11197.69	9970.58		
Combined Depreciation during the year	1225.94	1227.12	1227.12	1227.12	1227.12		
Aggregate Cumulative Depreciation	6386.55	7613.67	8840.78	10067.90	11295.02		

#### **Operation & Maintenance Expenses (O&M Expenses)**

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

#### "35. Operation and Maintenance Expenses:

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



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station Bays (₹ Lakh per bay)					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per kr	n)		ı		
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."

88. The Petitioner has claimed O&M Expenses for Power Line Carrier Communication (PLCC) equipment for the 2019-24 tariff period separately @2% of the original project cost of that communication system under Regulation 35(4) of

the 2019 Tariff Regulations for the assets covered in this Petition. These assets

were put into commercial operation during the 2014-19 tariff period and tariff was granted from their respective COD to 31.3.2019 *vide* order dated 28.3.2016 in Petition No. 404/TT/2014 as per the 2014 Tariff Regulations.

89. It is observed that the Petitioner had considered PLCC equipment as part of the sub-station during the 2014-19 tariff period and it was granted O&M Expenses accordingly as part of the sub-station and no separate O&M Expenses was granted for PLCC equipment. However, the Petitioner in the instant petition for the tariff period 2019-24, has segregated a part of the capital cost of the assets towards PLCC equipment, i.e. ₹120.44 lakh, and has claimed O&M Expenses of ₹2.41 lakh @2% of the capital cost under Regulation 35(4) of the 2019 Tariff Regulations. The Petitioner has adopted similar approach not only in this petition but also in several other petitions. On basis of the claims made by the Petitioner, the Commission has already allowed O&M Expenses @2% of the original project cost of the PLCC equipment in case of those petitions while determining tariff for the 2019-24 period. The list of the petitions where O&M Expenses for PLCC has already been allowed @2% of the original project cost in accordance with Regulation 35(4) of the 2019 Tariff Regulations is given in Annexure-3.

90. However, on review, it is noticed that the O&M Expenses of PLCC equipment has already been considered as part of the O&M Expenses of substation both in the 2014 Tariff Regulations and the 2019 Tariff Regulations. Therefore, grant of O&M Expenses separately @2% for the PLCC equipment in instant assets under Regulation 35(4) of the 2019 Tariff Regulations needs re-examination. The issues for our consideration are:

a) whether PLCC equipment have been considered as part of communication equipment or part of the sub-station in the 2014 Tariff Regulations and 2019 Tariff Regulations? and

b) whether separate O&M Expenses can be granted to PLCC equipment under Regulation 35(4) of the 2019 Tariff Regulations?

91. The above issues are inter-related and hence we deal with them together.

We would like to refer to the relevant portions of the 2014 Tariff Regulations, the 2019 Tariff Regulations and Act and Regulation 2(i)(h) of the Central Electricity Regulatory Commission (Communication System for inter-State transmission of electricity) Regulations, 2017 (hereinafter referred to as 'the 2017 Communication Regulations') to address these issues. Regulation 3(11) of the 2014 Tariff

Regulations defines communication system as under:

"(11) 'Communication System' includes communication system of Power Grid Corporation of India Ltd. covered under Unified Load Dispatch and Communication (ULD&C) scheme, SCADA, Wide Area Measurement (WAMS), Fibre Optic Communication system, Remote Terminal Unit, Private Automatic Branch Exchange, Radio Communication System and auxiliary power supply system etc. used for managing inter-state transmission of electricity;"

92. As regards O&M Expenses for communication system, Regulation 29(4)(c)

of the 2014 Tariff Regulations provides as under:

#### "(3)Transmission system

(c) The operation and maintenance expenses of communication system forming part of inter-state transmission system shall be derived on the basis of the actual O&M expenses for the period of 2008-09 to 2012-13 based on audited accounts excluding abnormal variations if any after prudence check by the Commission. The normalised O&M expenses after prudence check, for the years 2008-09 to 2012-13 shall be escalated at the rate of 3.02% for computing base year expenses for FY 2012-13 and 2013-14 and at the rate of 3.32% for escalation from 2014-15 onwards."

93. Sub-section (69) of Section 2 of the Act defines sub-station as under:-

"(69) "sub-station" means a station for transforming or converting electricity for the transmission or distribution thereof and includes transformers converters, switch-gears, capacitors, synchronous condensers, structures, cable and other appurtenant equipment and any buildings used for that purpose and the site thereof;"

94. Regulation 3(12) of the 2019 Tariff Regulations defines communication system as under:

"(12) 'Communication System' means communication system as defined in subclause (h) of clause (i) of Regulation 2 of the Central Electricity Regulatory Commission (Communication System for inter-State transmission of electricity) Regulations, 2017;"

95. Regulation 2(i)(h) of the 2017 Communication Regulations defines communication system as under:

"h)"Communication system" is a collection of individual communication networks, communication media, relaying stations, tributary stations, terminal equipment usually capable of inter-connection and inter-operation to form an integrated communication backbone for power sector. It also includes existing communication system of Inter State Transmission System, Satellite and Radio Communication System and their auxiliary power supply system, etc. used for regulation of inter-State transmission of electricity;"

96. Regulation 35(4) of the 2019 Tariff Regulations has specified separate norms of O&M Expenses for communication system and the same is extracted as under:

"(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."

97. In the 2014 Tariff Regulations, PLCC equipment were not included in the definition of communication system under Regulation 3(11) of the 2014 Tariff Regulations and it rather formed part of sub-station. This is evident from Annexure Form 5 of Part-III of the 2014 Tariff Regulations, where PLCC equipment is included under the sub-station. Further, while fixing the norms for O&M Expenses for the 2014-19 tariff period, PLCC equipment were considered as part of the sub-station in the 2014 Tariff Regulations.

98. A combined reading of Regulation 3(12) of the 2019 Tariff Regulations and Regulation 2(i)(h) of the 2017Communication Regulations shows that PLCC equipment is a communication system. However, it continues to be considered as part of the sub-station (as in the case of 2014-19 tariff period), even though a specific provision has been made in the 2019 Tariff Regulations allowing O&M Expenses @2% for the communication system. The same is clear from the various Forms that are required to be submitted by a transmission licensee in terms of the 2019 Tariff Regulations. Form 5 under Part-III of the 2019 Tariff Regulations (similar table is there in the 2014 Tariff Regulations) requires the transmission licensee to provide "Element wise Break-up of Project/Asset/Element Cost for Transmission System or Communication System". Details are required to be furnished as regards a) transmission line (preliminary works, transmission lines material, taxes and duties); b) sub-stations (preliminary works & land, civil works, sub-station equipment, spares, taxes and duties); and c) communication system (preliminary works, communication system equipment, taxes and duties). We observe that PLCC forms a part (at SI. No. 6.5) of sub-station equipment under the head 'sub-station equipment' and that there is no mention of PLCC under communication system.

99. Similarly, from table 3 of Form-2 under Part-III of the 2019 Tariff Regulations, it is observed that the types of communication system indicated are ULDC/SCADA/WAMS, fibre optic communication system, RTU/PABX/PMU and there is no mention of PLCC in this table. Other columns of this table require length of OPGW, number of RTUs and number of PMUs to be indicated by the transmission licensee. Again, we do not find any mention of PLCC equipment under communication system.

100. The Petitioner had itself considered PLCC equipment as part of the substation during the 2014-19 tariff period. In fact, for all sub-stations existing before 1.4.2019 and tariff for which have already been decided in previous tariff periods, the PLCC equipment were considered as part of sub-station and the Petitioner has also claimed it under sub-station and not claimed it under communication system. In this regard, we would like to refer to the claim made by the Petitioner for grant of tariff for the 2014-19 tariff period in Petition No. 404/TT/2014, where the Petitioner has claimed PLCC as part of sub-station in Form 5 and no claim was made in Form 2 for PLCC under heading "Communication system". Further, in the said petition, the Petitioner in Form 13 claimed the cost of PLCC under sub-station (₹9411.25 lakh= sub-station ₹9297.04 lakh + PLCC ₹114.21 lakh) for computation of initial spares in the Management certificate. Further, the cost of PLCC equipment is also included in the cost of the sub-station for the purpose of allowing initial spares.

101. It is observed that a fixed amount is allowed as O&M Expenses for a substation (in the form of "Rs. In lakh/ bay") in the 2014 Tariff Regulations for the 2014-19 tariff period on the basis of the type and voltage level of sub-station whereas for the 2019-24 tariff period, the 2019 Tariff Regulations provides for O&M Expenses for communication system @2% of the project cost. Thus, it appears that the Petitioner in the instant petition is attempting to take advantage of Regulation 35(4) of the 2019 Tariff Regulations which provides for O&M Expenses for communication system @2% by segregating the project cost towards PLCC equipment during the 2019-24 tariff period. 102. As PLCC was considered as part of the sub-station, the cost of PLCC was also included in the capital cost of sub-station. Accordingly, as per Tariff Regulations, spares were approved as a percentage (%) of capital cost, considering this capital cost. Therefore, if now PLCC is not considered as part of the sub-station, then it would require revision of the approved capital cost.

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.

104. In the present petition, it is observed that the Petitioner in Form-5 for Asset-1 for the 2014-19 tariff period has included the PLCC under the head Sub-station Equipment and has claimed actual expenditure incurred towards PLCC for an amount of ₹55.49 lakh. The Petitioner did not claim any capital expenditure towards Communication system in the 2014-19 tariff period. However, on perusal of the Auditor certificate dated 27.11.2019, it is observed that an amount of ₹62.61 lakh for Asset-1 and ₹57.83 lakh for Asset-2 have been shown against PLCC/ communication system, which adds up to ₹120.44 lakh. Thus, there is a discrepancy in the amount claimed by the Petitioner towards PLCC and the amount mentioned in the Auditor certificate. 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.

107. In view of the above discussion, the O&M Expenses allowed for the instant Combined Asset in accordance with Regulation 35(3)(a) of the 2019 Tariff Regulations are as under:-

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station Bays					
400 kV Magarwada - 2 Nos.					
315MVA ICT and associated	2	2	2	2	2
bays					
400 KV Magarwada - line bays	4	4	4	4	4
220 kV Magarwada - 2 Nos.					
315MVA ICT and associated	2	2	2	2	2
bays					
220 kV Magarwada - line bays	4	4	4	4	4
400 kV, 1X80 MVAR bus					
reactor and its associated bays	1	1	1	1	1
at GIS Magarwada Sub-station					
Norm (₹ lakh/bay)					
400 kV Sub-station bays (GIS)	22.505	23.296	24.115	24.962	25.837
220 kV Sub-station bays (GIS)	15.757	16.310	16.884	17.472	18.088
Total Sub-station bays	252.08	260.93	270.11	279.57	289.39
Transformer					
400kV Magarwada:315 MVA	630	630	630	630	630
ICT I and II	030	030	030	030	030
Norms (₹ lakh/MVA)					
400kV	0.358	0.371	0.384	0.398	0.411
Total Transformer	225.54	233.73	241.92	250.74	258.93
AC & HVDC Lines					
LILO of 2nd Circuit 400kV					
Double circuit Navsari-Boisar	15.884	15.884	15.884	15.884	15.884
Transmission Line					
Norm (₹ lakh/km)					
Multi Circuit Twin/Triple	1.544	1.598	1.654	1.713	1.773
Conductor					
Total Transmission Line	24.52	25.38	26.27	27.21	28.16
Total O&M Expenses	502.14	520.04	538.30	557.52	576.48

## Interest on Working Capital (IWC)

108. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7)

of the 2019 Tariff Regulations provide as follows:

*"34. Interest on Working Capital:* 

(1) ...

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

(i) Receivables equivalent to 45 days of annual fixed cost;

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



(**X** !... |...|.)

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

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

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

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

"3. Definitions. - 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;"

109. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20 and 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-24 period. The components of the working capital and interest allowed thereon for the Combined Asset for the 2019-24 tariff period are as under:

(₹ in lakh)

					(3 in lakn)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	41.85	43.34	44.86	46.46	48.04
Maintenance Spares	75.32	78.01	80.75	83.63	86.47
Receivables	464.27	459.17	452.90	446.87	440.03
Total	581.44	580.52	578.50	576.96	574.54
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on Working					
Capital	70.06	65.31	65.08	64.91	64.64



# Annual Fixed Charges of the 2019-24 Tariff Period

110. The transmission charges allowed for the instant Combined Asset for the 2019-24 tariff period are summarised hereunder:

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	1225.94	1227.12	1227.12	1227.12	1227.12
Interest on Loan	600.24	532.28	463.36	395.43	331.00
Return on Equity	1377.67	1379.65	1379.65	1379.65	1379.65
Interest on Working Capital	70.06	65.31	65.08	64.91	64.64
O&M Expenses	502.14	520.04	538.30	557.52	576.48
Total	3776.06	3724.41	3673.52	3624.62	3578.88

## Filing Fee and the Publication Expenses

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

# Licence Fee and RLDC Fees and Charges

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

## **Goods and Services Tax**

113. The Petitioner has sought to recover GST on transmission charges separately from the Respondents, if GST on transmission service is withdrawn from negative list in future.

114. MPPMCL has submitted that the demand of the Petitioner is premature. In response, the Petitioner has submitted that if GST is levied in future on charges of transmission of electricity at any rate and any point of time, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged & billed separately by the Petitioner. Further, the Petitioner has submitted that additional taxes, if any, are to be paid by the Petitioner on account of demand from Government/Statutory authorities, the same may be allowed to be recovered from the beneficiaries.

115. MSEDCL also submitted that the prayer by the Petitioner regarding GST is premature at this stage and the same has been held by this Commission in its order dated 15.11.2018 in Petition No. 40/TT/2018. MSEDCL also submitted that if GST is levied any time in the future, the Petitioner may claim the same at the time of truing up of tariff.

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

#### Security Expenses

117. The Petitioner has submitted that security expenses for the instant 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 will be filed on yearly basis on the basis of the actual expenses of previous year subject to true up at the end of the year on actual expenses. The Petitioner has submitted that the difference, if any, between the estimated security expenses and actual security expenses as the audited accounts may be allowed to be recovered from the beneficiaries on a yearly basis.

118. 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**

119. 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

120. 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, as amended from time to time as provided in Regulation 43 of the 2014 Tariff Regulations for the 2014-19 tariff period and Regulation 57 of the 2019 Tariff Regulations for the 2019-24 tariff period.

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

(₹ in lakh)

Asset	Annual Fixed Cost									
	2014-15 ( <i>pro-rata</i> for 143 days)	2015-16	2016-17	2017-18	2018-19					
Asset-1	1180.82	3379.83	3576.92	3626.04	3716.62					
	2014-15 ( <i>pro-rata</i> for 80 days)	2015-16	2016-17	2017-18	2018-19					
Asset-2	38.77	200.49	224.73	244.26	261.30					
	2014-15 ( <i>pro-rata</i> for 31 days)	2015-16	2016-17	2017-18	2018-19					
Asset-3	14.85	176.70	176.42	173.08	169.94					

122. The Annual Fixed Charges allowed for the Combined Asset for the 2019-24 tariff period in the instant order are as under:

					(₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
AFC	3776.06	3724.41	3673.52	3624.62	3578.88

123. This order disposes of Petition No. 126/TT/2020.

Sd/ (Arun Goyal) Member Sd/-(I. S. Jha) Member

2014-19	Admitted Capital Cost as on COD			ACE (₹ in lakh	)		Admitted Capital Cost as on 31.3.2019	Rate of Depre ciatio	Α	annual Depre	eciation as po	er Regulation	S
Capital Expenditure as on COD	(₹ in lakh)	2014-15	2015-16	2016-17	2017-18	2018-19	(₹ in lakh)	n (%)	2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Freehold Land	844.74	0.34	22.62	0.00	0.00	0.00	867.70	0.00	0.00	0.00	0.00	0.00	0.00
Building	664.23	60.64	288.53	203.58	0.00	81.12	1298.10	3.34	23.20	29.03	37.25	40.65	42.00
Transmission Line	9502.35	102.53	409.71	26.75	1.35	1.51	10044.20	5.28	504.43	517.95	529.48	530.22	530.29
Sub Station	6175.06	3297.46	377.04	10.52	0.00	0.00	9860.08	5.28	413.10	510.10	520.33	520.61	520.61
PLCC	45.31	0.59	16.37	0.00	0.00	0.00	62.27	6.33	2.89	3.42	3.94	3.94	3.94
IT Equipment and software	86.97	8.61	0.00	0.00	0.00	0.00	95.58	5.28	4.82	5.05	5.05	5.05	5.05
TOTAL	17318.66	3470.17	1114.27	240.85	1.35	82.63	22227.93		948.43	1065.56	1096.05	1100.47	1101.90
							Average Gro Block (₹ in la		19053.75	21345.97	22023.53	22144.63	22186.62
							Weighted Av Rate of Depreciation	•	4.98	4.99	4.98	4.97	4.97

Asset-2

Annexure – 1(b) Page 65 of 70

Annexure – 1(a)

2014-19	Admitted Capital Cost as on COD			CE i lakh)		Admitted Capital Cost as on 31.3.2019	Rate of Depre ciatio	ļ	Annual Depre	eciation as p	er Regulation	IS
Capital Expenditure as on COD	(₹ in lakh)	2015-16	2016-17	2017-18	2018-19	(₹ in lakh)	n	2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Building	0.00	0.00	0.00	201.38	0.00	201.38	3.34	0.00	0.00	0.00	3.36	6.73
Sub Station	691.18	276.29	32.04	54.87	3.94	1058.32	5.28	36.49	43.79	51.93	54.22	55.78
TOTAL	691.18	276.29	32.04	256.25	3.94	1259.70		36.49	43.79	51.93	57.59	62.50
						Average Gro Block (₹ in la		691.18	829.32	983.49	1127.63	1257.73
						Weighted Av Rate of Depreciation	•	5.28	5.28	5.28	5.11	4.97



#### Asset-3

2014-19	Admitted Capital Cost as on COD	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019	Rate of Depreciation (%)	ļ	Annual Depre	eciation as p	er Regulatior	IS
Capital Expenditure as on COD	- (₹ in lakh) -	2015-16	(₹ in lakh)		2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Transmission Line	863.33	6.12	869.45	5.28	45.58	45.75	45.91	45.91	45.91
PLCC	29.93	27.90	57.83	6.33	1.89	2.78	3.66	3.66	3.66
TOTAL	893.26	34.02	927.28		47.48	48.52	49.57	49.57	49.57
				Average Gross Block (₹ in lakh)		910.27	927.28	927.28	927.28
			Weighted Ave Depreciation	-	5.32	5.33	5.35	5.35	5.35

#### Annexure – 2

Asset	2019-24	Combined ACE admitted (₹ in lakh) Capital Cost as on 1.4.2019		Admitted Capital Cost as on 31.3.2019	Rate of Depreciation (%)		Annual Depr	reciation as po	er Regulations	5
	Capital Expenditure as on 1.4.2019	(₹ in lakh)	2019-20	(₹ in lakh)	· · /	2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
	Freehold Land	867.70	0.00	867.70	0.00	0.00	0.00	0.00	0.00	0.00
	Building	1499.48	70.32	1569.80	3.34	51.26	52.43	52.43	52.43	52.43
	Transmission Line	10913.93	0.00	10913.93	5.28	576.26	576.26	576.26	576.26	576.26
Combined	Sub Station	10918.40	0.00	10918.40	5.28	576.49	576.49	576.49	576.49	576.49
Asset	PLCC	120.10	0.00	120.10	6.33	7.60	7.60	7.60	7.60	7.60
	IT Equipment and software	95.58	0.00	95.58	15.00	14.34	14.34	14.34	14.34	14.34
	TOTAL	24415.20	70.32	24485.52		1225.94	1227.12	1227.12	1227.12	1227.12
				-	oss Block (₹ in kh)	24450.36	24485.52	24485.52	24485.52	24485.52
					verage Rate of iation (%)	5.01	5.01	5.01	5.01	5.01

## Annexure-3

# Details of petitions where O&M Expenses where allowed for PLCC in 2019-24 tariff period

SI.	Petition Number	Date of Order
No.		
01	506/TT/2019	10.6.2020
02	35/TT/2020	3.6.2020
03	52/TT/2020	4.6.2020
04	301/TT/2019	17.6.2020
05	165/TT/2020	21.7.2020
06	137/TT/2020	16.7.2020
07	48/TT/2020	5.8.2020
08	37/TT/2020	17.8.2020
09	139/TT/2020	15.7.2020
10	27/TT/2020	27.7.2020
11	170/TT/2020	19.8.2020
12	77/TT/2020	16.8.2020
13	19/TT/2020	9.5.2020
14	300/TT/2019	12.7.2020
15	130/TT/2020	25.7.2020
16	95/TT/2020	20.8.2020
17	11/TT/2020	1.6.2020



Page 69 of 70

18	60/TT/2020	1.6.2020
19	58/TT/2020	17.8.2020
20	478/TT/2019	27.8.2020
21	496/TT/2019	28.8.2020
22	288/TT/2019	31.7.2020
23	305/TT/2019	30.7.2020
24	70/TT/2020	24.7.2020
25	26/TT/2020	6.7.2020
26	483/TT/2019	5.6.2020
27	87/TT/2020	5.6.2020
28	11/TT/2020	1.6.2020
29	244/TT/2019	2.5.2020
30	274/TT/2019	27.4.2020
31	245/TT/2019	23.4.2020

