CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 375/TT/2020

Coram:

Shri P.K. Pujari, Chairperson Shri I.S. Jha, Member Shri Arun Goyal, Member Shri Pravas Kumar Singh, Member

Date of Order: 02.07.2021

In the matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing-up of transmission tariff of 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff for 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 of **Asset-1**: Angul—Jharsuguda (Sundargarh) 765 kV 02nd D/C line with line reactors (switchable) & termination bays at Angul Substation and line reactors at Jharsuguda Sub-station, **Asset-2**: Jharsuguda (Sundargarh) — Dharamjaygarh 765 kV 02nd D/C line with termination bays at Jharsuguda Sub-station and **Asset-3**: 765 kV, 02x330 MVAR Switchable Line Reactors charged as Bus Reactors at Dharamjaygarh Sub-station (for both Ckts of Jharsuguda (Sundargarh) Dharamjaygarh 765 kV 02nd D/C line) under "East Coast Energy Pvt. Ltd. and NCC Power Projects Ltd. LTOA Generation Projects in Srikakulam Area Part-B" in Eastern and Western Region.

And in the Matter of:

Power Grid Corporation of India Ltd., "Saudamini", Plot No. 2, Sector 29, Gurgaon – 122 001, Haryana.

....Petitioner

Vs.

- Bihar State Power (Holding) Company Ltd., (Formerly Bihar State Electricity Board -BSEB), Vidyut Bhavan, Bailey Road, Patna – 800 001.
- West Bengal State Electricity Distribution Company Ltd., Bidyut Bhawan, Bidhan Nagar, Block DJ, Sector-II, Salt Lake City, Calcutta – 700 091.



- Grid Corporation of Orissa Ltd.
 Shahid Nagar, Bhubaneswar 751 007.
- Jharkhand State Electricity Board, In front of Main Secretariat, Doranda, Ranchi – 834 002.
- Damodar Valley Corporation,
 DVC Tower, Maniktala,
 Civic Centre, VIP Road,
 Calcutta 700 054.
- 6. Power Department, Govt. of Sikkim, Gangtok – 737 101.
- 7. Madhya Pradesh Power Management Company Ltd., Shakti Bhawan, Rampur, Jabalpur – 482 008.
- Maharashtra State Electricity Distribution Co. Ltd., Prakashgad, 4th Floor, Andheri (East), Mumbai – 400 052.
- Gujarat Urja Vikas Nigam Ltd., Sardar Patel Vidyut Bhawan, Race Course Road, Vadodara – 390 007.
- Electricity Department,
 Government of Goa, Vidyut Bhawan,
 Panaji, Near Mandvi Hotel,
 Goa 403 001.
- Electricity Department,
 Administration of Daman & Diu,
 Daman 396 210.
- Electricity Department,
 Administration of Dadra Nagar Haveli,
 U.T., Silvassa 396 230.
- Chhattisgarh State Electricity Board,
 P.O. Sunder Nagar, Dangania, Raipur,
 Chhattisgarh 492 013.
- Madhya Pradesh Audyogik Kendra,
 Vikas Nigam (Indore) Ltd, 3/54, Press Complex,
 Agra-Bombay Road,



Indore - 452 008.

- 15. East Coast Energy Pvt. Ltd,7-1-24, B Block, 5th Floor,Roxana Towers, Green Lands,Begumpet, Hyderabad 500 016.
- 16. NCC Power Projects Ltd., 6th Floor, NCC House, Madhapur, Hyderabad – 500 016.
- 17. Karnataka Power Transmission Corporation Ltd., Kaveri Bhavan, Bangalore 560 009.
- 18. Transmission Corporation of Andhra Pradesh Ltd., Vidyut Soudha, Hyderabad 500 082.
- Kerala State Electricity Board,
 Vaidyuthi Bhavanam, Pattom,
 Thiruvananthapuram 695 004.
- Tamil Nadu Electricity Board,
 NPKRR Maaligai, 800,
 Anna Salai, Chennai 600 002.
- Electricity Department,
 Government of Goa,
 Vidyuti Bhawan, Panaji, Goa 403 001.
- 22. Electricity Department, Govt of Pondicherry, Pondicherry – 605 001.
- 23. Eastern Power Distribution Company of Andhra Pradesh Ltd., P&T Colony, Seethmmadhara, Vishakhapatnam, Andhra Pradesh.
- 24. Southern Power Distribution Company of Andhra Pradesh Ltd., Srinivasasa Kalyana Mandapam Backside, Tiruchanoor Road, Kesavayanagunta, Tirupati – 517 501, Chittoor District, Andhra Pradesh.
- 25. Central Power Distribution Company of Andhra Pradesh Ltd., Corporate Office, Mint Compound, Hyderabad 500 063, Andhra Pradesh.
- 26. Northern Power Distribution Company of Andhra Pradesh Ltd., Opp. NIT Petrol Pump, Chaitanyapuri, Kazipet, Warangal 506 004, Andhra Pradesh.



- 27. Bangalore Electricity Supply Company Ltd., Corporate Office, K.R. Circle, Bangalore – 560 001, Karnataka.
- 28. Gulbarga Electricity Supply Company Ltd., Station Main Road, Gulburga, Karnataka.
- 29. Hubli Electricity Supply Company Ltd., Navanagar, PB Road, Hubli, Karnataka.
- 30. MESCOM Corporate Office, Paradigm Plaza, AB Shetty Circle, Mangalore – 575 001, Karnataka.
- 31. Chamundeswari Electricity Supply Corporation Ltd., 927, L J Avenue, Ground Floor, New Kantharajurs Road, Saraswatipuram, Mysore 570 009, Karnataka.
- 32. Transmission Corporation of Telangana Ltd., Vidhyut Sudha, Khairatabad, Hyderabad 500 082.
- 33. Tamil Nadu Transmission Corporation, NPKRR Maaligai, 800, Anna Salai, Chennai 600 002.
- 34. Tamil Nadu Generation and Distribution Corporation Ltd., (Formerly Tamil Nadu Electricity Board -TNEB), NPKRR Maaligai, 800, Anna Salai, Chennai – 600 002.

...Respondents

For Petitioner : Shri S.S. Raju, PGCIL

Shri A.K. Verma, PGCIL Shri B. Dash, PGCIL

Shri Ved Prakash Rastogi, PGCIL

For Respondents: Shri Anindya Khare, MPPMCL

<u>ORDER</u>

The instant petition has been filed by Power Grid Corporation of India Ltd., a deemed transmission licensee, for truing-up of transmission tariff of 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of



Tariff) Regulations, 2014 (hereinafter referred to as "the 2014 Tariff Regulations") and determination of tariff of 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") in respect of following transmission assets under "East Coast Energy Pvt. Ltd. and NCC Power Projects Ltd. LTOA Generation Projects in Srikakulam Area Part-B" in Eastern and Western Region (hereinafter referred to as "the transmission scheme"):

Asset-1: Angul–Jharsuguda (Sundargarh) 765 kV 02nd D/C line with line reactors (switchable) and termination bays at Angul Sub-station and line reactors at Jharsuguda Sub-station,

Asset-2: Jharsuguda (Sundargarh) – Dharamjaygarh 765 kV 02nd D/C line with termination bays at Jharsuguda Sub-station; and

Asset-3: 765 kV, 02x330 MVAR Switchable Line Reactors charged as Bus Reactors at Dharamjaygarh Sub-station (for both Ckts of Jharsuguda (Sundargarh) Dharamjaygarh 765kV 02nd D/C line)

- 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 9.1 and 10.0 above.
 - (2) Approve the Completion cost and additional capitalization incurred during 2014-19.
 - (3) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 9.1 and 10.0 above for respective block.
 - (4) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70(1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.
 - (5) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges,



separately from the respondents in terms of Regulation 70 (3) and (4) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.

- (6) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the respondents.
- (7) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.
- (8) Allow the IDC as claimed. Further, IDC computation and loan proofs submitted may be taken on record for purpose of tariff approval.
- (9) 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 10.6 above.
- (10) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.

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

Background

- 3. The brief facts of the case are as follows:
 - (a) The Investment Approval (IA) for the transmission scheme was accorded by Board of Directors of the Petitioner in its 285th meeting held on 28.3.2013 for ₹251488 lakh including an IDC of ₹15665 lakh based on February, 2013 price level (communicated vide Memorandum No. C/CP/Srikakulam-Part-B dated 5.4.2013). Further, the administrative approval and expenditure sanction of Revised Cost Estimate (RCE) of the transmission scheme was accorded by the Board of Directors of Petitioner in its 351st meeting held on 16.3.2018 and communicated vide C/CP/PA17-18-12-0P-RCE-010 dated 28.3.2018 for ₹319027 lakh including IDC of ₹40909 lakh based on August, 2017 price level.
 - (b) The transmission tariff of Asset-1 and Asset-2 from COD to 31.3.2019 was determined vide order dated 30.9.2019 in Petition No. 360/TT/2018 and the transmission tariff of Asset-3 from COD to 31.3.2019 was determined vide order dated 2.7.2019 in Petition No. 241/TT/2018.



(c) The scope of the transmission scheme is as follows:

Transmission Lines:

- (a) 765 kV Angul Jharsuguda 2^{nd} D/C line (1st D/C line is covered under Orissa IPPs) 245 kms.
- (b) 765 kV Jharsuguda Dharamjaigarh 2nd D/C line (1st D/C line is covered under Orissa IPPs) 156 kms.

Sub-stations

(a) Extension of Angul Sub-station:

This sub-station is owned by Powergrid and shall be extended to accommodate following bays under this project:

- (i) 2 numbers 765 kV line bays for termination of Angul Jharsuguda 765 kV D/C.
- (b) Extension of Jharsuguda Sub-station:

This sub-station is owned by Powergrid and shall be extended to accommodate following bays under this project:

- (i) 2 numbers 765 kV line bays for termination of Angul Jharsuguda 765 kV D/C.
- (ii) 2 numbers 765 kV line bays for termination of Jharsuguda Dharamjaigarh 765 kV D/C.
- (c) Extension of Dharamjaigarh Sub-station:

This Sub-station is owned by Powergrid and shall be extended to accommodate following bays under this project

(i) 2 numbers 765 kV line bays for termination of Jharsuguda – Dharamjaigarh 765 kV D/C.

Reactive Compensation

Line Reactors

- (i) 240 MVAR line reactors with 800 ohms NGR at each end of both circuits of Angul Jharsuguda 765 kV D/C line (switchable line reactor at Angul end).
- (ii) 330 MVAR switchable line reactors Dharamjaigarh end of both circuits of Jharsuguda Dharamjaigarh 765 kV D/C line
- (d) The entire scope of the transmission scheme is covered in the instant petition.
 - (e) The details of commercial operation along with time over-run of the transmission assets covered in the instant petition are as follows:

Asset	SCOD	Actual COD	Time over-run	Remarks
Asset-1	27.12.2015	1.12.2018	35 months and 4 days	Entire Time over-run
ASSEL-1	27.12.2013	1.12.2010	33 months and 4 days	Condoned
Asset-2	27.12.2015	3.11.2018	34 months and 6 days	Entire Time over-run
ASSEL-2	27.12.2013	3.11.2010	34 months and 6 days	Condoned
Asset-3	3 27.12.2015 21.9.2017 20 months and 18 days		Entire Time over-run	
ASSEL-3	27.12.2015	21.9.2017	20 months and 16 days	Condoned



- 4. The Respondents are power departments and distribution and transmission licensees, who are procuring transmission services from the Petitioner, mainly beneficiaries of the Eastern Region, Southern Region and Western Region.
- 5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has also been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. Madhya Pradesh Power Management Company Limited (MPPMCL), i.e. the Respondent No. 7 has filed its reply vide affidavit dated 1.3.2021 and has raised issues of grossing up of Return on Equity (RoE), Additional Capital Expenditure (ACE) claimed in 2019-24 and effects of CGST. The Petitioner vide affidavit dated 10.3.2021 has filed rejoinder to the reply of MPPMCL. The issues raised by MPPMCL and the clarifications given by the Petitioner are considered in the relevant portion of the instant order.
- 6. The hearing in this matter was held on 3.3.2021 through video conference and order was reserved.
- 7. Having heard the representatives of the Petitioner and perused the material on record, we proceed to dispose of the petition. This order is issued considering the submissions made by the Petitioner in the petition vide affidavit dated 22.1.2020, Petitioner's affidavit 3.12.2020, reply filed by MPPMCL and Petitioner's rejoinder thereto.

Truing-up of Annual Fixed Charges for 2014-19 tariff period

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

(₹ in lakh)

Particulars	Asset-1	Asset-2	Ass	set-3
Particulars	2018-19	2018-19	2017-18	2018-19
Depreciation	3,423.93	1,804.50	171.19	336.79
Interest on Loan	3,699.76	1,885.43	183.90	340.62
Return on Equity	3,871.96	2,021.91	194.85	384.65
Interest on Working Capital	243.64	126.16	21.88	42.59
O&M Expenses	309.57	152.74	195.92	384.80
Total	11548.86	5990.74	767.74	1489.45

9. The details of the trued-up Interest on Working Capital (IWC) claimed by the Petitioner for 2014-19 tariff period in respect of the transmission assets are as follows:

(₹ in lakh)

Particulars	Asset-1	Asset-2	As	set-3
Particulars	2018-19	2018-19	2017-18	2018-19
O&M Expenses	77.82	31.18	31.04	32.07
Maintenance Spares	140.08	56.13	55.87	57.72
Receivables	5806.25	2445.89	243.25	248.24
Total Working Capital	6024.15	2533.20	330.16	338.03
Rate of Interest (%)	12.20	12.20	12.60	12.60
Interest on Working Capital	243.64	126.16	21.88	42.59

Capital Cost

10. The Commission vide order dated 30.9.2019 in Petition No. 360/TT/2018 approved the capital cost of ₹202290.79 lakh and ₹88853.83 lakh as on 31.3.2019 for Asset-1 and Asset-2 respectively. Further, vide order dated 2.7.2019 in Petition No. 241/TT/2018, the Commission approved capital cost of ₹7252.60 lakh as on 31.3.2019 for Asset-3. The details of the capital cost approved by the Commission in the aforesaid orders are as follows:

(₹ in lakh)

Asset	Apportioned Approved	Expenditure	Additional Capital Expenditure (ACE)		Total Capital Cost	
	Capital Cost as per RCE	up to COD	2017-18	2018-19	as on 31.3.2019	
Asset-1	213899.19	193521.24	0.00	8769.55	202290.79	
Asset-2	97600.37	82741.35	0.00	6112.48	88853.83	
Asset-3	7527.44	6109.87	751.06	391.67	7252.60	

11. The Petitioner vide Auditor's Certificates dated 13.1.2020 in respect of Asset-1, dated 19.10.2019 in respect of Asset-2 and Asset-3 submitted the capital cost incurred up to COD and ACE up to 31.3.2019. The details of apportioned approved capital cost, capital cost as on COD and ACE incurred up to 31.3.2019 as claimed by the Petitioner for Assets-1, 2 and 3 are as follows:

(₹ in lakh)

Asset	Apportioned approved Capital Cost	Expenditure up to COD	ACE		Estimated completion Capital Cost as
	as per RCE		2017-18	2018-19	on 31.3.2019
Asset-1	213899.19	198075.75	0.00	3222.39	201298.14
Asset-2	97600.37	84056.82	0.00	994.77	85051.59
Asset-3	7527.44	6257.92	210.66	88.27	6556.85

12. The completion cost including ACE claimed by the Petitioner in respect of the transmission assets is within the RCE approved cost as mentioned above.

Time Over-run

- 13. As per the IA, the transmission assets were scheduled to be put into commercial operation within 33 months from the date of IA. IA was accorded on 28.3.2013 and, hence, the scheduled date of commercial operation (SCOD) was 27.12.2015 whereas the Asset-1, Asset-2 and Asset-3 were declared under commercial operation on 1.12.2018, 3.11.2018 and 21.9.2017 respectively. There was delay of 35 months and 4 days, 34 months and 6 days, and 20 months and 18 days respectively.
- 14. The delay of 35 months and 4 days for Asset-1 and delay of 34 months and 6 days for Asset-2 have been condoned by the Commission vide order dated 30.9.2019 in Petition No. 360/TT/2018. Also, delay of 20 months and 18 days in Asset-3 has

been condoned by the Commission vide order dated 2.7.2019 in Petition No. 241/TT/2018.

<u>Interest During Construction (IDC) and Incidental Expenditure During Construction (IEDC)</u>

- 15. The Petitioner has claimed IDC in respect of Assets-1, Asset-2 and Asset-3 and has submitted the Auditor's Certificates in support of the same. The Petitioner has submitted the computation of IDC along with year-wise details of the IDC discharged. The Commission vide order dated 30.9.2019 in Petition No. 360/TT/2018 directed the Petitioner to submit the details of changes in rate of interest during the period for which IDC is claimed along with supporting documents at the time of truing-up. The Petitioner in the instant petition has submitted the details of changes in rate of interest along with supporting documents for the period for which IDC is claimed.
- 16. We have considered the submissions made by the Petitioner. The allowable IDC has been worked out considering the information submitted by the Petitioner for Asset-1, Asset-2 and Asset-3 on cash basis. The loan details submitted in Form-9C for 2014-19 tariff period and 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. Accordingly, based on the information furnished by the Petitioner, the IDC considered, is summarized as follows:

Assets	IDC as per Auditor's Certificate	IDC Admissible /Worked out	Computational difference	IDC discharged as on COD	IDC Un- discharged as on COD	IDC D	2018-19	2019-20
Α	В	С	D=B-C	Е	F=C-E			
Asset-1	29417.74	28241.87	1175.87	24873.65	3368.22	0.00	1428.01	1940.21
Asset-2	12544.51	12544.51	0.00	11234.26	1310.25	0.00	635.20	675.05
Asset-3	613.75	613.37	0.38	465.40	147.97	101.44	46.53	0.00

17. The Petitioner has claimed IEDC of ₹5679.29 lakh, ₹2035.57 lakh and ₹119.36 lakh respectively in respect of Asset-1, Asset-2 and Asset-3 and has submitted Auditor's Certificates in support of the same. The Petitioner has also submitted that entire IEDC has been discharged as on COD. IEDC claimed is within the estimated expenditure of IEDC as indicated in the Abstract Cost Estimate. Hence, IEDC claimed has been allowed.

Initial Spares

18. The Petitioner has claimed the following Initial Spares under transmission line (TL) and sub-station (SS) head in respect of the transmission assets covered in the petition:

(₹ in lakh)

Asset	Particulars	Total Cost (Plant and Machinery cost excluding IDC, IEDC, Land cost and cost of civil works) (A)	Norms as per the 2009 Tariff Regulations (%) (B)	Spares Claimed (c)	Spares Permissible D= [(A-C)*B /(100-B)]
Asset-1	Transmission Line	152319.32	1	1470.15	1523.73
	Sub-station	16021.07	6	518.83	989.50
Asset-2	Transmission Line	69883.37	1	598.97	699.84
	Sub-station	3166.34	6	118.62	194.54
Asset-3	Sub-station	5738.68	6	275.41	348.72

19. We have considered the submissions of the Petitioner. Initial Spares are allowable subject to the ceiling specified in Regulation 13(d) of the 2014 Tariff Regulations. The Petitioner's claim of initial spares is within the ceiling specified in Regulation 13(d) of the 2014 Tariff Regulations. Accordingly, Initial Spares allowed for 2014-19 are as follows:

Asset	Particulars	Plant & Machinery cost upto cut-off date (excluding	Initial Spares claimed (₹ in lakh)	Norms as per the 2014 Tariff Regulations (%)	Initial Spares as per the norms of the 2014	Initial Spares allowed (₹ in lakh)	Initial Spares discharged (₹ in lakh)
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		IDC and IEDC) (₹ in lakh)			Tariff Regulations (₹ in lakh)		As on COD
Asset-1	Transmission Line	152319.32	1470.15	1	1523.73	1470.15	1470.15
	Sub-station	16021.07	518.83	6	989.50	518.83	518.83
Asset-2	Transmission Line	69883.37	598.97	1	699.84	598.97	598.97
	Sub-station	3166.34	118.62	6	160.41	118.62	118.62
Asset-3	Sub-station	5738.68	275.41	6	348.72	275.41	274.41

Capital Cost as on COD

20. Accordingly, the capital cost allowed as on COD is summarized as follows:

	Capital Cost as on	Less: IDC as	Capital Cost	
Assets	COD as per Auditor's Certificate	IDC disallowed	Un-discharged IDC	as on COD
Asset-1	198075.75	1175.87	3368.22	193531.66
Asset-2	84056.82	0.00	1310.25	82746.57
Asset-3	6257.92	0.38	147.97	6109.57

Additional Capital Expenditure (ACE)

21. As per the Auditor's Certificates, the Petitioner has claimed the following ACE in respect of Asset-1, Asset-2 and Asset-3:

(₹ in lakh)

Asset	Additional Capital Expenditure (ACE)				
ASSEL	2017-18	2018-19			
Asset-1	0.00	3222.39			
Asset-2	0.00	994.77			
Asset-3	210.66	88.27			

22. The Petitioner has submitted that ACE incurred in respect of the transmission assets covered in the instant petition is on account of un-discharged liability towards final payment/ withheld payment due to contractual exigencies for work executed within the cut-off date. Further, ACE within the cut-off date has been claimed under Regulation 14(1)(i) and 14(1)(ii) of the 2014 Tariff Regulations whereas ACE claimed for the period beyond cut-off date is allowed under Regulation 14(3)(v) of the 2014

Tariff Regulations. The Petitioner vide affidavit dated 3.12.2020 has submitted the liability flow statements in respect of the transmission assets.

23. We have considered the submissions made by the Petitioner. The capital cost considered for truing-up of transmission tariff of 2014-19 tariff period after including ACE in respect of the transmission assets is as follows:

(₹ in lakh)

	Conital Coat	AC	Total Conital Cost	
Asset	Capital Cost as on COD	2017-18	2018-19	Total Capital Cost as on 31.3.2019
Asset-1	193531.66	0.00	4650.40**	198182.06
Asset-2	82746.57	0.00	1629.97**	84376.54
Asset-3	6109.57	312.10**	134.80**	6556.47

^{**}Includes IDC discharged

Debt-Equity Ratio

24. The Petitioner has claimed the debt-equity ratio of 70:30 and submitted Form-6 for ACE during the 2014-19 period. The debt-equity ratio of 70:30 has been considered as claimed by the Petitioner in Form-6 for capital cost as on COD and ACE during the 2014-19 tariff period as provided under Regulation 19 of the 2014 Tariff Regulations. The details of the debt-equity as on COD and on 31.3.2019 considered for the purpose of tariff computation for 2014-19 tariff period are as follows:

Asset-1	Capital Cost as on COD Capital Cost as on 31.3.20			as on 31.3.2019
	Amount	(%)	Amount	(%)
	(₹ in lakh)		(₹ in lakh)	
Debt	135472.17	70.00	138727.45	70.00
Equity	58059.50	30.00	59454.61	30.00
Total	193531.66	100.00	198182.06	100.00
Asset-2	Capital Cost as on COD		Capital Cost as on 31.3.2019	
	Amount	(%)	Amount	(%)
	(₹ in lakh)		(₹ in lakh)	
Debt	57922.61	70.00	59063.73	70.00
Equity	24823.96	30.00	25312.81	30.00
Total	82746.57	100.00	84376.54	100.00
Asset-3	Capital Cost as on COD		as on 31.3.2019	
	Amount	(%)	Amount	(%)

Asset-1	Capital Cos	t as on COD	Capital Cost a	Cost as on 31.3.2019	
	Amount (₹ in lakh)	(%)	Amount (₹ in lakh)	(%)	
	(₹ in lakh)		(₹ in lakh)		
Debt	4276.70	70.00	4589.53	70.00	
Equity	1832.87	30.00	1966.94	30.00	
Total	6109.57	100.00	6556.47	100.00	

Depreciation

- 25. The Petitioner's claim towards depreciation in this petition was found to be higher than the depreciation allowed vide order dated 30.9.2019 in Petition No. 360/TT/2018 and order dated 2.7.2019 in Petition No. 241/TT/2018. The Petitioner has neither given any justification for claiming higher depreciation than that was allowed earlier nor made any specific prayer for allowing higher depreciation in this petition. It is observed that vide order dated 30.9.2019 in Petition No. 360/TT/2018 and vide order dated 2.7.2019 in Petition No. 241/TT/2018, the depreciation for IT equipment was allowed @5.28%. The Petitioner now at the time of truing-up of the tariff of 2014-19 period has segregated the IT equipment cost from the sub-station cost and has considered depreciation rate for IT Equipment @15% and salvage value for IT Equipment is NIL as per the 2014 Tariff Regulations. A similar issue had come up in Petition No. 19/TT/2020 wherein the Commission vide order dated 9.5.2020 has dealt with the issue.
- 26. In terms of the order dated 9.5.2020 in Petition No. 19/TT/2020, depreciation has been considered for IT Equipment @5.28% as part of the sub-station up to 31.3.2019 while truing-up the capital expenditure for 2014-19 period. However, for 2019-24 tariff period, 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 given at Annexure-I(a), I(b) and I(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 2014-19 tariff period are as follows:

(₹ in lakh)

	Asset-1	Asset-2	Asset	t-3
Particulars	2018-19 (Pro-rata for 121 days)	2018-19 (Pro-rata for 149 days)	2017-18 (Pro-rata for 192 days)	2018-19
Opening Gross Block	193531.66	82746.57	6109.57	6421.67
ACE	4650.40	1629.97	312.10	134.80
Closing Gross Block	198182.06	84376.54	6421.67	6556.47
Average Gross Block	195856.86	83561.56	6265.62	6489.07
Rate of Depreciation (%)	5.24	5.28	5.14	5.14
Balance useful life (at the beginning of the year) (Year)	34	34	25	25
Aggregate Depreciable Value	176271.18	75205.40	5639.06	5840.16
Depreciation during the year	3400.10	1802.14	169.55	333.62
Cumulative Depreciation at the end of the year	3400.10	1802.14	169.55	503.17
Remaining Aggregate Depreciable Value at the end of the year	172871.07	73403.26	5469.51	5336.99

27. The details of depreciation allowed vide order dated 30.9.2019 in Petition No. 360/TT/2018 and vide order dated 2.7.2019 in Petition No. 241/TT/2018, as claimed by the Petitioner and as trued-up in the instant order is as follows:

Assets	Particulars	2017-18	2018-19
	Approved vide order dated 30.9.2019 in Petition No. 360/TT/2018	0.00	3435.20
Asset-1	Claimed by the Petitioner in the instant petition	0.00	3423.93
	Allowed after true-up in this order	0.00	3400.10
Asset-2	Approved vide order dated 30.9.2019 in Petition No. 360/TT/2018	0.00	1850.34
	Claimed by the Petitioner in the instant petition	0.00	1804.50
	Allowed after true-up in this order	0.00	1802.14
Asset-3	Approved vide order dated 2.7.2019 in Petition No. 241/TT/2018	174.34	358.27
	Claimed by the Petitioner in the instant	171.19	336.79

petition		
Allowed after true-up in this order	169.55	333.62

Interest on Loan (IoL)

- 28. The Petitioner has claimed the Weighted Average Rate of IoL (WAROI) based on actual interest rates for each year during 2014-19 tariff period. Accordingly, IoL is calculated based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. IoL has been worked out as follows:
 - (i) Gross amount of loan, repayment of instalments and weighted average rate of interest on actual average loan have been considered as per the petition.
 - (ii) The repayment for 2014-19 tariff period has been considered to be equal to the depreciation allowed for that period.
- 29. The details of trued-up IoL allowed in respect of transmission assets for 2014-19 tariff period are as follows:

(₹ in lakh)

	Asset-1	Asset-2	Asse	et-3
Particulars	2018-19 (Pro-rata for 121 days)	2018-19 (Pro-rata for 149 days)	2017-18 (Pro-rata for 192 days)	2018-19
Gross Normative Loan	135472.17	57922.61	4276.70	4495.17
Cumulative Repayments up to Previous Year	0.00	0.00	0.00	169.55
Net Loan-Opening	135472.17	57922.61	4276.70	4325.62
Additions due to ACE	3255.28	1141.12	218.47	94.36
Repayment during the year	3400.10	1802.14	169.55	333.62
Net Loan-Closing	135327.35	57261.59	4325.62	4086.36
Average Loan	135399.76	57592.10	4301.16	4205.99
Weighted Average Rate of Interest on Loan (%)	8.193	8.020	8.129	8.104
Interest on Loan	3677.40	1885.47	183.93	340.86

30. The details of loL allowed vide order dated 30.9.2019 in Petition No. 360/TT/2018 and vide order dated 2.7.2019 in Petition No. 241/TT/2018, as claimed by the Petitioner and as trued-up in the instant order is as follows:

Assets	Particulars	2017-18	2018-19
	Approved vide order dated 30.9.2019 in Petition No. 360/TT/2018	0.00	3734.95
Asset-1	Claimed by the Petitioner in the instant petition	0.00	3699.76
	Allowed after true-up in this order	0.00	3677.40
Asset-2	Approved vide order dated 30.9.2019 in Petition No. 360/TT/2018	0.00	1941.30
	Claimed by the Petitioner in the instant petition	0.00	1885.43
	Allowed after true-up in this order	0.00	1885.47
	Approved vide order dated 2.7.2019 in Petition No. 241/TT/2018	190.40	371.64
Asset-3	Claimed by the Petitioner in the instant Petition	183.90	340.62
	Allowed after true-up in this order	183.93	340.86

Return on Equity (RoE)

31. The Petitioner has claimed RoE in respect of the transmission assets in terms of Regulations 24 and 25 of the 2014 Tariff Regulations. The Petitioner has submitted that it is liable to pay income tax at MAT rates and has claimed the following effective tax rates for 2014-19 tariff period:

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

32. MPPMCL has submitted that the Petitioner has grossed up RoE on the basis of actual taxes paid during 2016-17 and 2017-18. For 2018-19 period, it has been grossed up on the basis of applicable rate of MAT, surcharge and cess. The Petitioner has not placed on record the assessment orders for 2016-17 and 2017-18. The Petitioner has not claimed the grossed-up RoE on the basis of actual tax paid for the year 2018-19. MPPMCL has further submitted that the Petitioner has not finalized its income tax assessment order for the years 2016-17, 2017-18 and 2018-19 yet and

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

33. In response, the Petitioner has submitted that the assessment orders for years 2014-15, 2015-16 and 2016-17 have been issued by the Income Tax Department and Income Tax returns for years 2017-18 and 2018-19 have been filed. The Petitioner has further submitted that the assessment order for the years 2014-15 and 2015-16 was submitted in Petition No. 20/TT/2020 and assessment orders for 2016-17 have been filed in Petition No. 650/TT/2020. The Petitioner has further submitted that the Petitioner has already been granted trued up tariff for 2014-19 period by the Commission based on approved MAT rates vide orders in Petition No. 247/TT/2019 18.4.2020, Petition No. 274/TT/2019 dated 27.4.2020, Petition No. 245/TT/2019 dated 23.4.2020 and Petition No. 307/TT/2019 dated 16.4.2020. The Petitioner has also requested to allow it to claim the differential tariff on account of the trued-up RoE based on effective tax rate calculated on completion of income-tax assessment/ re-assessment for 2014-15, 2015-16, 2016-17, 2017-18 and 2018-19 periods on receipt of the respective assessment orders, directly from the beneficiaries, on yearly basis as provided in the Regulation.

34. We have considered the submissions of the Petitioner and MPPMCL. It is pointed out that the Commission vide order dated 2.2.2021 in Petition No. 312/TT/2020 has already dealt with the issues of MPPMCL observing that the Petitioner has submitted the assessment orders issued by the Income Tax Department for the years 2014-15, 2015-16 and 2016- 17 and the Income Tax returns filed by the Petitioner for years 2017-18 and 2018-19. It was further observed by the

Commission that the Petitioner has submitted the documents pointed out by MPPMCL.

- 35. In view of the above clarification of the Petitioner, the issue raised in the present petition does not require any finding.
- 36. 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 and the same is given in the table as follows:

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

37. The MAT rates considered in the above 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 2014-19 period in terms of the provisions of 2014 Tariff Regulations and the same is as follows:

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

38. Accordingly, trued-up RoE allowed in respect of the transmission assets for 2014-19 tariff period is as follows:

				(\
	Asset-1	Asset-2	Asse	et-3
Particulars	2018-19	2018-19	2017-18	2018-19

	(Pro-rata for 121 days)	(Pro-rata for 149 days)	(Pro-rata for 192 days)	
Net Opening Equity	58059.50	24823.96	1832.87	1926.50
Increase in Equity due to addition during the year	1395.12	488.85	93.63	40.44
Closing Equity	59454.61	25312.81	1926.50	1966.94
Average Equity	58757.05	25068.39	1879.68	1946.72
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500
Tax Rate applicable (%)	21.549	21.549	21.342	21.549
Applicable RoE Rate (%)	19.758	19.758	19.705	19.758
Return on Equity for the year	3848.54	2021.91	194.84	384.63

39. The details of RoE allowed vide order dated 30.9.2019 in Petition No. 360/TT/2018 and vide order dated 2.7.2019 in Petition No. 241/TT/2018, as claimed by the Petitioner and as trued-up in the instant order is as follows:

(₹ in lakh)

Assets	Particulars	2017-18	2018-19
	Approved vide order dated 30.9.2019 in Petition No. 360/TT/2018	0.00	3708.09
Asset-1	Claimed by the Petitioner in the instant petition	0.00	3871.96
	Allowed after true-up in this order	0.00	3848.54
	Approved vide order dated 30.9.2019 in Petition No. 360/TT/2018	0.00	1987.06
Asset-2	Claimed by the Petitioner in the instant petition	0.00	2021.91
	Allowed after True-up in this order	0.00	2021.91
	Approved vide order dated 2.7.2019 in Petition No. 241/TT/2018	200.70	415.15
Asset-3	Claimed by the Petitioner in the instant Petition	194.85	384.65
	Allowed after true-up in this order	194.84	384.63

Operation & Maintenance Expenses (O&M Expenses)

40. The details of the O&M Expenses claimed by the Petitioner and allowed under Regulation 29(4)(a) of the 2014 Tariff Regulations are the same and are as follows:

Asset-1		
Particulars	2018-19 (Pro-rata for 121 days)	
Sub-station Bays		



Angul: 765 kV 240 MVAr SLR Bay (III)	1
Angul: 765 kV 240 MVAr SLR Bay (IV)	1
Angul: 765 kV Jharsuguda-III Line Bay	1
Angul: 765 kV Jharsuguda-IV Line Bay	1
Jharsuguda/Sundargarh:765 kV Angul -III Line Bay	1
Jharsuguda/Sundargarh:765 kV Angul -IV Line Bay	1
Norm (₹lakh/bay)	
765 kV Sub-station Bays	96.20
Total Sub-station O&M Expenses	577.20
AC & HVDC Lines	
765 kV D/C Angul-Jharsuguda 02nd Line (Bundled with 4 or more sub-conductor)	294.746
Norm (₹lakh/km)	
765 kV D/C	1.21
(Bundled with 4 or more sub-conductor)	
Total Transmission Line	356.64
Total O&M Expenses	309.58

(₹ in lakh)

Asset-2			
Particulars	2018-19 (Pro-rata for 149 days)		
Sub-station Bays			
Jharsuguda/Sundargarh:765 kV Dharamjaygarh Line-III Bay	1		
Jharsuguda/Sundargarh:765 kV Dharmjaygarh Line-IV Bay	1		
Norm (₹lakh/bay)			
765 kV Sub-station Bays	96.20		
Total Sub-station O&M Expenses	192.40		
AC & HVDC Lines			
765 kV D/C Jharsuguda-Dharamjaigarh 02nd Line (Bundled with 4 or more sub-conductor)	150.220		
Norm (₹lakh/km)			
765 kV D/C (Bundled with 4 or more sub-conductor)	1.21		
Total Transmission Line	181.77		
Total O&M Expenses	152.74		

Asset-3					
Particulars	2017-18 (Pro-rata for 192 days)	2018-19			
Sub-station Bays					
765 kV: Dharamjaigarh: Jharsuguda Line Bay-III	1	1			
765 kV: Dharamjaigarh: Jharsuguda Line Bay-IV	1	1			
765 kV: Dharamjaigarh: Jharsuguda SLR Bay-III	1	1			
765 kV: Dharamjaigarh: Jharsuguda SLR Bay-IV	1	1			
Norm (₹lakh/bay)					
765 kV Sub-station Bays	93.11	96.20			
Total Sub-station O&M Expenses	372.44	384.80			



Total O&M Expenses	195.91	384.80

41. The details of O&M Expenses allowed vide order dated 30.9.2019 in Petition No. 360/TT/2018 and vide order dated 2.7.2019 in Petition No. 241/TT/2018, as claimed by the Petitioner and as trued up in the instant order are as follows:

(₹ in lakh)

Assets	Particulars	2017-18	2018-19
	Approved vide order dated 30.9.2019 in Petition No. 360/TT/2018	0.00	309.58
Asset-1	Claimed by the Petitioner in the instant petition	0.00	309.57
	Allowed after true-up in this order	0.00	309.58
	Approved vide order dated 30.9.2019 in Petition No. 360/TT/2018	0.00	152.74
Asset-2	Claimed by the Petitioner in the instant petition	0.00	152.74
	Allowed after true-up in this order	0.00	152.74
Asset-3	Approved vide order dated 2.7.2019 in Petition No. 241/TT/2018	195.91	384.80
	Claimed by the Petitioner in the instant Petition	195.92	384.80
	Allowed after true-up in this order	195.91	384.80

Interest on Working Capital (IWC)

42. The Petitioner is entitled to claim IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations and the same is as follows:

(i) Maintenance Spares:

Maintenance spares have been worked out based on 15% of Operation and Maintenance Expenses specified in Regulation 28.

(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.



43. The trued-up IWC allowed in respect of the transmission assets for 2014-19 tariff period is as follows:

(₹ in lakh)

	Asset-1	Asset-2	Asse	et-3
Particulars	2018-19 (Pro-rata for 121 days)	2018-19 (Pro-rata for 149 days)	2017-18 (Pro-rata for 192 days)	2018-19
O&M Expenses (O&M Expenses for one Month)	77.82	31.18	31.04	32.07
Maintenance Spares (15% of O&M)	140.08	56.12	55.87	57.72
Receivables (Equivalent to two months of annual transmission charges)	5770.52	2444.92	242.72	247.74
Total Working Capital	5988.42	2532.22	329.63	337.53
Rate of Interest (%)	12.20	12.20	12.60	12.60
Interest of working capital	242.19	126.11	21.85	42.53

44. The details of IWC allowed vide order dated 30.9.2019 in Petition No. 360/TT/2018 and vide order dated 2.7.2019 in Petition No. 241/TT/2018, as claimed by the Petitioner and as trued-up in the instant order is as follows:

(₹ in lakh)

Assets	Particulars	2017-18	2018-19
	Approved vide order dated 30.9.2019 in Petition No. 360/TT/2018	0.00	241.20
Asset-1	Claimed by the Petitioner in the instant petition	0.00	243.64
	Allowed after true-up in this order	0.00	242.19
Asset-2	Approved vide order dated 30.9.2019 in Petition No. 360/TT/2018	0.00	127.55
	Claimed by the Petitioner in the instant petition	0.00	126.16
	Allowed after true-up in this order	0.00	126.11
Asset-3	Approved vide order dated 2.7.2019 in Petition No. 241/TT/2018	22.57	45.09
	Claimed by the Petitioner in the instant Petition	21.88	42.59
	Allowed after true-up in this order	21.85	42.53

Annual Fixed Charges for 2014-19 Tariff Period

45. Accordingly, the annual fixed charges after truing-up for 2014-19 tariff period in respect of the transmission assets are as follows:

(₹ in lakh)

	Asset-1	Asset-2	Asset-3	
Particulars	2018-19 (Pro-rata for 121 days)	2018-19 (Pro-rata for 149 days)	2017-18 (Pro-rata for 192 days)	2018-19
Depreciation	3400.10	1802.14	169.55	333.62
Interest on Loan	3677.40	1885.47	183.93	340.86
Return on Equity	3848.54	2021.91	194.84	384.63
Interest on Working Capital	242.19	126.11	21.85	42.53
O&M Expenses	309.58	152.74	195.91	384.80
Total	11477.81	5988.37	766.07	1486.44

46. The details of the annual fixed charges allowed vide order dated 30.9.2019 in Petition No. 360/TT/2018 and vide order dated 2.7.2019 in Petition No. 241/TT/2018, as claimed by the Petitioner and as trued-up in the instant order is as follows:

(₹ in lakh)

Assets	Particulars	2017-18	2018-19
A = = = 1 A	Approved vide order dated 30.9.2019 in Petition No. 360/TT/2018	0.00	11429.02
Asset-1	Claimed by the Petitioner in the instant petition	0.00	11548.86
	Allowed after true-up in this order	0.00	11477.81
A 1.0	Approved vide order dated 30.9.2019 in Petition No. 360/TT/2018	0.00	6058.99
Asset-2	Claimed by the Petitioner in the instant petition	0.00	5990.74
	Allowed after true-up in this order	0.00	5988.37
Asset-3	Approved vide order dated 2.7.2019 in Petition No. 241/TT/2018	783.92	1574.96
	Claimed by the Petitioner in the instant petition	767.74	1489.45
	Allowed after true-up in this order	766.07	1486.44

Determination of Annual Fixed Charges for 2019-24 tariff period

- 47. The Petitioner has submitted the combined tariff forms for Asset-1, Asset-2 and Asset-3 as a single asset. Accordingly, as per proviso (i) of Regulation 8(1) of the 2019 Tariff Regulations, single tariff for the Combined Asset has been worked out for 2019-24 tariff period.
- 48. The Petitioner has claimed the following transmission charges in respect of the Combined Asset for 2019-24 tariff period:



(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	15493.84	15830.12	15926.31	15926.31	15926.31
Interest on Loan	15687.18	14747.93	13568.41	12275.91	10970.43
Return on Equity	16619.72	16989.05	17096.35	17096.35	17096.35
Interest on Working Capital	768.61	768.86	755.93	738.29	718.62
O&M Expenses	1141.92	1181.47	1222.39	1265.04	1308.73
Total	49711.27	49517.43	48569.39	47301.90	46020.44

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

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M expenses	95.16	98.46	101.87	105.42	109.06
Maintenance Spares	171.29	177.22	183.36	189.36	196.31
Receivables	6112.04	6104.89	5988.01	5831.74	5958.25
Total	6378.49	6380.57	6273.24	6126.92	5963.62
Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	768.61	768.86	755.93	738.29	718.62

Effective Date of Commercial Operation (E-COD)

50. The Petitioner in the instant petition has submitted that E-COD of the Combined Asset works out to be 13.11.2018. Based on the trued-up admitted capital cost and actual COD of the transmission assets, same E-COD as claimed by the Petitioner has been worked out as follows:

Assets	Actual COD	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Weightage of the cost (in %)	Number of days from last COD	Weighted days	Effective COD (latest COD - total weighted days)	
Asset-1	1.12.2018	198182.06	68.55	0.00	0.00		
Asset-2	3.11.2018	84376.54	29.18	28.00	8.17	13.11.2018	
Asset-3	21.9.2017	6556.47	2.27	436.00	9.89	13.11.2010	
Total		289115.07	100.00		18.06		

51. E-COD has been used to determine the lapsed life of the project as a whole, which works out as 0 (Zero) year as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from E-COD).

Weighted Average Life (WAL)

- 52. The life as defined in Regulation 33 of the 2019 Tariff Regulations has been considered for determination of Weighted Average Life (WAL). The Combined Asset may have multiple elements (i.e. 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.
- 53. 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 the individual asset 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 follows:

Admitted Capital Cost as on 31.3.2019						
Particulars	Combined Cost (₹ in lakh) (a)	Life (in years) (b)	Weight (c)=(a) x (b)	Weighted Average Life of Asset (in years) (d)= (c) ÷ (a)		
Building & other Civil Works	5128.04	25.00	128200.94			
Transmission Line	254893.57	35.00	8921275.02	33.78 years,		
Sub-station	28236.06	25.00	705901.42	rounded off to 34		
PLCC	668.01	15.00	10020.11	years		
IT Equipment and software	189.40	6.67	1262.65			
Total	289115.07		9766660.14			

54. WAL as on 1.4.2019 as determined above is applicable prospectively (i.e. for 2019-24 tariff period onwards) and no retrospective adjustment of depreciation in

previous tariff period is required to be done. As discussed above, E-COD of the Combined Asset is 13.11.2018 and the lapsed life of the project as a whole, works out as zero (0) year as on 1.4.2019 (i.e. the number of completed years as on 1.4.2019 from Effective COD). Accordingly, WAL has been used to determine the remaining useful life as on 31.3.2019 to be 34 years.

Capital Cost

- 55. Regulation 19 of the 2019 Tariff Regulations provides as follows:
 - "19. Capital Cost: (1) The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.
 - (2) The Capital Cost of a new project shall include the following:
 - (a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
 - (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
 - (c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;
 - (d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;
 - (e) Capitalised initial spares subject to the ceiling rates in accordance with these regulations;
 - (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
 - (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;
 - (h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;
 - (i) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
 - (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal 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 renovation and modernisation as admitted by this Commission in accordance with these regulations;
 - (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
 - (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and
 - (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (4) The capital cost in case of existing or new hydro generating station shall also include:
 - (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
 - (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area
- (5) The following shall be excluded from the capital cost of the existing and new projects:
 - (a) The assets forming part of the project, but not in use, as declared in the tariff petition;
 - (b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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

- (c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;
- (d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and



- (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."
- 56. The Petitioner has claimed capital cost of ₹199374.41 lakh, ₹84376.53 lakh and ₹6556.85 lakh as on 31.3.2019 in respect of Assets-1,2 and 3 respectively. Against the overall apportioned approved capital cost (as per RCE) of ₹319027.00 lakh, the estimated completion cost including ACE is ₹303417.30 lakh as on 31.3.2024. The individual capital cost of each asset is also within the respective RCE apportioned capital cost.
- 57. 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, substation and PLCC) admitted by the Commission as on 31.3.2019 in respect of the transmission assets are clubbed together and the capital cost considered for the Combined Asset as on 1.4.2019 are as follows:

(₹ in lakh)

Particulars	Asset-1	Asset-2	Asset-3
Freehold Land	0.00	0.00	0.00
Leasehold Land	0.00	0.00	0.00
Building & Other Civil Works	4614.85	27.43	485.75
Transmission Line	174763.29	80130.28	0.00
Sub-Station Equipment	18336.08	3861.70	6038.27
PLCC	370.83	297.18	0.00
IT Equipment and Software	97.01	59.95	32.44
TOTAL	198182.06	84376.54	6556.47

Particulars	Capital Cost for Combined Asset as on 1.4.2019
Freehold Land	0.00
Leasehold Land	0.00
Building & Other Civil Works	5128.04
Transmission Line	254893.57
Sub-Station Equipment	28236.06
PLCC	668.01
IT Equipment and Software	189.40
TOTAL	289115.07

58. The trued-up capital cost of ₹289115.07 lakh in respect of the Combined Asset is considered as admitted capital cost as on 1.4.2019 for working out tariff for 2019-24 period.

Additional Capital Expenditure (ACE)

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

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

- (1) The Additional Capital Expenditure in respect of a new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:
 - (a) Undischarged liabilities recognized to be payable at a future date;
 - (b) Works deferred for execution;
 - (c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;
 - (d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;
 - (e) Change in law or compliance of any existing law; and
 - (f) Force Majeure events:

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

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

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

- (1) The ACE incurred or projected to be incurred in respect of an existing project or a new project on the following counts within the original scope of work and after the cut off date may be admitted by the Commission, subject to prudence check:
 - a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;
 - b) Change in law or compliance of any existing law;
 - c) Deferred works relating to ash pond or ash handling system in the original scope of work:
 - d) Liability for works executed prior to the cut-off date;
 - e) Force Majeure events;



- f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and
- g) Raising of ash dyke as a part of ash disposal system.
- (2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:
 - (a) The useful life of the assets is not commensurate with the useful life of the project 54 and such assets have been fully depreciated in accordance with the provisions of these regulations;
 - (b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;
 - (c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and
 - (d) The replacement of such asset or equipment has otherwise been allowed by the Commission.
- 60. The Petitioner has claimed projected ACE for 2019-24 tariff period. ACE claimed is within the cut-off date and is claimed under Regulations 24(1)(a) and 24(1)(b) of the 2019 Tariff Regulations. The details of the projected ACE in respect of the Assets-1, 2 and 3 is as follows:

		(× 111 141K11)			
Acceta	Projected ACE 2019-24				
Assets	2019-20	2020-21			
Asset-1	5381.26*	3477.64			
Asset-2	3553.06*	331.00			
Asset-3	366.55	0.00			

^{*}Includes discharge of IDC

- 61. MPPMCL has submitted that the Petitioner has proposed ACE of ₹9300.87 lakh and ₹3808.64 lakh for the year 2019-20 and 2020-21 in respect of the Combined Asset. MPPMCL has further submitted that the Petitioner has not submitted any details of the proposed ACE. MPPMCL has prayed that projected ACE may be deferred till the truing up when the Petitioner comes with actual ACE.
- 62. In response, the Petitioner has submitted that the proposed ACE incurred till cut-off date for the period 2019-24 will be governed by Regulations 24(1)(a) and

- 24(1)(b) of the 2019 Tariff Regulations. The Petitioner has further submitted that the liability flow statement is submitted vide affidavit dated 17.11.2020.
- 63. We have considered the submissions made by the Petitioner and MPPMCL. The capital cost considered for determination of transmission tariff of 2019-24 period after including ACE in respect of Asset-1, Asset-2 and Asset-3 are as follows:

(₹ in lakh)

	Comital Coat on	Д	CE	Total Carital Coat	
Asset	Capital Cost as on 31.3.2019	2019-20 2020-21		Total Capital Cost as on 31.3.2024	
Asset-1	198182.06	5397.74*	3477.64	207057.44	
Asset-2	84376.54	3553.06*	331.00	88260.60	
Asset-3	6556.47	366.55	0.00	6923.02	

^{*}Includes IDC discharged

Capital Cost for 2019-24 Tariff Period

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

(₹ in lakh)

Capital Cost allowed	ACE allowed 2019-20 2020-21		Total Estimated Completion	
as on 1.4.2019			Cost up to 31.3.2024	
289115.07	9317.34	3808.64	302241.05	

65. Against the overall RCE approved capital cost of ₹319027.00 lakh, the estimated project cost in respect of the Combined Asset including ACE is ₹302241.05 lakh which is within the RCE cost.

Debt-Equity Ratio

- 66. Regulation 18 of the 2019 Tariff Regulations provides as follows:
 - "18. Debt-Equity Ratio: (1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that:

- i. where equity actually deployed is less than 30% of the capital cost, actual equity shall be considered for determination of tariff:
- ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:



iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.

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

- (2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.
- (3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

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

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

- (4).In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.
- (5). Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as Additional Capital Expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation."
- 67. The details of debt-equity ratio considered for the purpose of computation of tariff for 2019-24 period is as follows:

Combined	Capital Cost as on	(%)	Total Cost as on	(%)	
Asset	1.4.2019 (in ₹ lakh)	(/0)	31.3.2024 (in ₹ lakh)	(/0)	
Debt	202380.71	70.00	211568.90	70.00	
Equity	86734.36	30.00	90672.15	30.00	
Total	289115.07	100.00	302241.05	100.00	



Depreciation

- 68. Regulation 33 of the 2019 Tariff Regulations provides as follows:
 - "33. Depreciation: (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:

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

- (2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.
- (3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

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

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

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

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

- (4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.
- (5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the assets of the generating station and transmission system:



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

- (6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets.
- (7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.
- (8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the de-capitalized asset during its useful services."
- 69. The IT equipment has been considered as a part of the Gross Block and depreciated using weighted average rate of depreciation (WAROD). The weighted average rate of depreciation (WAROD) has been worked out in Annexure-II after taking into account the depreciation rates of IT and non-IT assets as prescribed in the 2019 Tariff Regulations. The salvage value of IT equipment has been considered nil, i.e. IT asset has been considered as 100 per cent depreciable. Depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019. The depreciation allowed in respect of the Combined Asset is as follows:

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Capital Cost	289115.07	298432.41	302241.05	302241.05	302241.05
ACE during the year	9317.34	3808.64	0.00	0.00	0.00
Closing Capital Cost	298432.41	302241.05	302241.05	302241.05	302241.05
Average Capital Cost	293773.74	300336.73	302241.05	302241.05	302241.05
Balance useful life at the beginning of the year (Year)	34.00	33.00	32.00	31.00	30.00
Rate of Depreciation (%)	5.25	5.25	5.25	5.25	5.25
Depreciable Value	264415.38	270322.14	272036.03	272036.03	272036.03
Depreciation during the year	15431.75	15768.47	15864.65	15864.65	15864.65
Depreciation upto previous year	5705.41	21137.16	36905.63	52770.28	68634.94

Aggregate Cumulative Depreciation at the end of the year	21137.16	36905.63	52770.28	68634.94	84499.59
Remaining Aggregate Depreciable Value at the end of the year	243278.22	233416.51	219265.75	203401.09	187536.44

Interest on Loan (IoL)

- 70. Regulation 32 of the 2019 Tariff Regulations provides as follows:
 - **"32. Interest on loan capital**: (1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.
 - (2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.
 - (3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of decapitalization 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".
- 71. The weighted average rate of IoL has been considered on the basis of rates prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during the 2019-24 tariff period will be



adjusted. Accordingly, the floating rate of interest, if any, shall be considered at the time of truing-up of tariff. By considering above, IoL has been worked out in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed in respect of the Combined Asset is as follows:

(₹ in lakh)

Combined Asset									
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24				
Gross Normative Loan	202380.71	208902.85	211568.90	211568.90	211568.90				
Cumulative Repayments up to Previous Year	5705.41	21137.16	36905.63	52770.28	68634.94				
Net Loan-Opening	196675.30	187765.69	174663.27	158798.61	142933.96				
Additions	6522.14	2666.05	0.00	0.00	0.00				
Repayment during the year	15431.75	15768.47	15864.65	15864.65	15864.65				
Net Loan-Closing	187765.69	174663.27	158798.61	142933.96	127069.31				
Average Loan	192220.49	181214.48	166730.94	150866.29	135001.63				
Weighted Average Rate of Interest on Loan (%)	8.129	8.107	8.107	8.106	8.095				
Interest on Loan	15624.84	14691.24	13516.71	12229.22	10928.79				

Return on Equity (RoE)

- 72. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provide as follows:
 - **"30. Return on Equity**: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.
 - (2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of-river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of-river generating station with pondage:

Provided that return on equity in respect of Additional Capitalization after cutoff 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."
- 73. The Petitioner has submitted that the MAT rate is applicable to the Petitioner company. Accordingly, MAT rate applicable during 2019-20 has been considered for the purpose of RoE for 2019-24 period, which shall be trued-up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed in respect of the Combined Asset for 2019-24 tariff period is as follows:

(₹ in lakh)

Combined Asset									
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24				
Net Opening Equity	86734.36	89529.56	90672.15	90672.15	90672.15				
Increase in Equity due to addition during the year	2795.20	1142.59	0.00	0.00	0.00				
Closing Equity	89529.56	90672.15	90672.15	90672.15	90672.15				
Average Equity	88131.96	90100.86	90672.15	90672.15	90672.15				
Return on Equity (Base Rate) (%)	15.500	15.500	15.500	15.500	15.500				
MAT Rate for respective year (%)	17.472	17.472	17.472	17.472	17.472				
Applicable RoE Rate (%)	18.782	18.782	18.782	18.782	18.782				
Return on Equity for the year	16552.95	16922.74	17030.04	17030.04	17030.04				

Operation & Maintenance Expenses (O&M Expenses)

- 74. Regulations 35(3)(a) and 35(4) of the 2019 Tariff Regulations provide as follows:
 - **"35. Operation and Maintenance Expenses: (3)Transmission system**: (a) The following normative operation and maintenance expenses shall be admissible for the transmission system:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24		
Norms for sub-station Bays (₹ Lakh per bay)							
765 kV	45.01	46.60	48.23	49.93	51.68		

400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	32.15 22.51	23.30	34.45 24.12	35.66 24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ La			11.25	17.03	10.40
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 line			0.200	U.L.I.L	0.202
Single Circuit (Bundled	3 (\ Lakii pc	i Kilij			
Conductor with six or more	0.881	0.912	0.944	0.977	1.011
sub-conductors)	0.001	0.512	0.544	0.577	7.077
Single Circuit (Bundled					
conductor with four sub-	0.755	0.781	0.809	0.837	0.867
conductors)	0.755	0.701	0.003	0.007	0.007
Single Circuit					
(Twin & Triple	0.503	0.521	0.539	0.558	0.578
Conductor)	0.503	0.521	0.559	0.556	0.576
Single Circuit (Single					
Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit					
(Bundled conductor	4 000	4 000		4 400	
with four or more sub-	1.322	1.368	1.416	1.466	1.517
conductors)					
Double Circuit					
(Twin & Triple	0.881	0.912	0.944	0.977	1.011
Conductor)					
Double Circuit (Single	0.377	0.391	0.404	0.419	0.433
Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled					
Conductor with four or	2.319	2.401	2.485	2.572	2.662
more sub-conductor)					
Multi Circuit					
(Twin & Triple	1.544	1.598	1.654	1.713	1.773
Conductor)					
Norms for HVDC stations					
HVDC Back-to-Back					
stations (Rs Lakh per 500	834	864	894	925	958
MW) (Except Gazuwaka					
BTB)					
Gazuwaka HVDC Back-	4.000	4 70 5	4 705	4 0 40	4.040
to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
,					
500 kV Rihand-Dadri	_		_	_	
HVDC bipole scheme	2,252	2,331	2,413	2, <i>4</i> 98	2,586
(Rs Lakh) (1500 MW)					
±500 kV Talcher- Kolar					
HVDC bipole scheme	2,468	2,555	2,645	2,738	2,834
(Rs Lakh) (2000 MW)					

±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."

The Petitioner has claimed the following O&M Expenses for 2019-24 period in 75. respect of the Combined Asset:

(₹ in lakh)

Combined Asset					(₹ in iakn
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station Bays	2019-20	2020-21	2021-22	2022-23	2023-24
Angul: 765 kV 240 MVAr SLR Bay (III)	1	1	1	1	1
<u> </u>	1	<u>'</u> 1	1	1	1
Angul: 765 kV 240 MVAr SLR Bay (IV)	1	<u> </u>	1	1	1
Angul: 765 kV Jharsuguda-III Line Bay		<u>1</u>			1
Angul: 765 kV Jharsuguda-IV Line Bay	1	1	1	1	1
Jharsuguda/Sundargarh:765 kV	1	1	1	1	1
Angul -III Line Bay Jharsuguda/Sundargarh:765 kV					
	1	1	1	1	1
Angul -IV Line Bay Jharsuguda/Sundargarh:765 kV					
	1	1	1	1	1
Dharamjaygarh Line-III Bay Jharsuguda/Sundargarh:765 kV					
Dharmjaygarh Line-IV Bay	1	1	1	1	1
765 kV: Dharamjaigarh: Jharsuguda Line					
Bay-III	1	1	1	1	1
765 kV: Dharamjaigarh: Jharsuguda Line					
Bay-IV	1	1	1	1	1
765 kV: Dharamjaigarh: Jharsuguda SLR					
Bay-III	1	1	1	1	1
765 kV: Dharamjaigarh: Jharsuguda SLR					
Bay-IV	1	1	1	1	1
Norm (₹lakh/bay)					
765 kV Sub-station Bays	45.01	46.60	48.23	49.93	51.68
Total Sub-station O&M Expenses	540.12	559.20	578.76	599.16	620.16
AC & HVDC Lines					
765 kV D/C Angul-Jharsuguda 02nd Line	004.740	004.740	004.740	204.740	004.740
(Bundled with 4 or more sub-conductor)	294.746	294.746	294.746	294.746	294.746
765 kV D/C Jharsuguda-Dharamjaigarh					
02nd Line	150.220	150.220	150.220	150.220	150.220
(Bundled with 4 or more sub-conductor)					
Norm (₹lakh/km)					
765 kV D/C	1 222	1 260	1 116	1.466	1 517
(Bundled with 4 or more sub-conductor)	1.322	1.368	1.416	1.400	1.517
Total Transmission Line	588.25	608.71	630.07	652.32	675.01
PLCC					
Original Project Cost (₹ in lakh)	678.22	678.22	678.22	678.22	678.22
Norms (% of Project Cost)	2	2	2	2	2
Total PLCC O&M Expenses	13.56	13.56	13.56	13.56	13.56
Total O&M Expenses	1141.93	1181.48	1222.40	1265.04	1308.74

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

77. The total O&M Expenses allowed in respect of the Combined Asset for 2019-24 tariff period are as follows:

(₹ in lakh)

Combined Asset					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Sub-station Bays					
Angul: 765 kV 240 MVAr SLR Bay (III)	1	1	1	1	1
Angul: 765 kV 240 MVAr SLR Bay (IV)	1	1	1	1	1
Angul: 765 kV Jharsuguda-III Line Bay	1	1	1	1	1
Angul: 765 kV Jharsuguda-IV Line Bay	1	1	1	1	1
Jharsuguda/Sundargarh:765 kV	1	1	1	1	1
Angul -III Line Bay	I	I	I	I	I
Jharsuguda/Sundargarh:765 kV	1	1	1	1	1
Angul -IV Line Bay	Į	I	I	ı	
Jharsuguda/Sundargarh:765 kV	1	1	1	1	1
Dharamjaygarh Line-III Bay	ı	ı	1		
Jharsuguda/Sundargarh:765 kV	1	1	1	1	1
Dharmjaygarh Line-IV Bay	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			
765 kV: Dharamjaigarh: Jharsuguda Line	1	1	1	1	1
Bay-III		'		'	•
765 kV: Dharamjaigarh: Jharsuguda Line	1	1	1	1	1
Bay-IV		'		'	•
765 kV: Dharamjaigarh: Jharsuguda SLR	1	1	1	1	1
Bay-III	<u>'</u>	<u>'</u>	<u>'</u>		•
765 kV: Dharamjaigarh: Jharsuguda SLR	1	1	1	1	1
Bay-IV	'	'	'	'	
Norm (₹lakh/bay)					
765 kV Sub-station Bays	45.01	46.60	48.23	49.93	51.68

Total Sub-station O&M Expenses	540.12	559.20	578.76	599.16	620.16
AC & HVDC Lines					
765 kV D/C Angul-Jharsuguda 02nd Line (Bundled with 4 or more sub-conductor)	294.746	294.746	294.746	294.746	294.746
765 kV D/C Jharsuguda-Dharamjaigarh 02nd Line (Bundled with 4 or more subconductor)	150.220	150.220	150.220	150.220	150.220
Norm (₹lakh/km)					
765 kV D/C (Bundled with 4 or more sub-conductor)	1.322	1.368	1.416	1.466	1.517
Total Transmission Line	588.25	608.71	630.07	652.32	675.01
Total O&M Expenses	1128.37	1167.91	1208.83	1251.48	1295.17

Interest on Working Capital (IWC)

- 78. Regulations 34(1)(c), 34(3), 34(4) and 3(7) of the 2019 Tariff Regulations provide as follows:
 - "34. Interest on Working Capital: (1) The working capital shall cover:
 - (c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:
 - (i) Receivables equivalent to 45 days of annual fixed cost;
 - (ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and
 - (iii) Operation and maintenance expenses, including security expenses for one month.
 - (3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

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

- (4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency.
- 3. **Definition** In these regulations, unless the context otherwise requires:-
- (7) 'Bank Rate' means the one year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;"
- 79. The Petitioner has submitted that it has computed IWC for 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. IWC is worked out in accordance with



Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 12.05% (SBI 1year 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. The components of the working capital and interest allowed thereon are as follows:

(₹ in lakh)

Combined Asset					•
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses (O&M Expenses for one Month)	94.03	97.33	100.74	104.29	107.93
Maintenance Spares (15% of O&M)	169.25	175.19	181.32	187.72	194.28
Receivables (Equivalent to 45 days of annual transmission charges)	6086.44	6073.68	5957.53	5802.04	5629.42
Total Working Capital	6349.72	6346.20	6239.59	6094.05	5931.63
Rate of Interest (%)	12.05	11.25	11.25	11.25	11.25
Interest on Working Capital	765.14	713.95	701.95	685.58	667.31

Annual Fixed Charges For 2019-24 Tariff Period

80. The annual fixed charges allowed in respect of the Combined Asset for 2019-24 tariff period are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	15431.75	15768.47	15864.65	15864.65	15864.65
Interest on Loan	15624.84	14691.24	13516.71	12229.22	10928.79
Return on Equity	16552.95	16922.74	17030.04	17030.04	17030.04
Interest on Working Capital	765.14	713.95	701.95	685.58	667.31
Operation and Maintenance Expenses	1128.37	1167.91	1208.83	1251.48	1295.17
Total	49503.04	49264.31	48322.20	47060.98	45785.97

Filing Fee and Publication Expenses

81. 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 & RLDC Fees and Charges

82. The Petitioner has requested to allow it to bill and recover license fee and RLDC fees and charges, separately from the Respondents. The Petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for 2019-24 tariff period. The Petitioner shall also be entitled for recovery of RLDC fees and charges in accordance with Regulation 70(3) of the 2019 Tariff Regulations.

Goods and Services Tax

83. MPPMCL has submitted that the demand of the Petitioner for CGST is premature and need not to be considered at this juncture.

84. In response, the Petitioner has submitted that under CGST Act, 2017 has been implemented w.e.f. 1.7.2017. The Govt. of India has exempted the charges of transmission of electricity vide Notification No. 12/2017- Central Tax (Rate) dated 28.6.2017 at Sl. No. 25 under the heading 9969 "Transmission or distribution of electricity by an electric transmission or distribution utility" by giving applicable GST rate NIL. Hence, the transmission charges as indicated at para 4 and 5 of the instant petition are exclusive of GST. Further if GST is levied at any rate and at any point of time in future on charge of transmission of electricity, the same shall be borne and additional paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately by the Petitioner. Further additional taxes, if any are to be paid by the Petitioner on account of demand from Government/ Statutory authorities the same may be allowed to be recovered from the beneficiaries.

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

Security Expenses

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

87. 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 based on 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

88. 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

89. We note that the Commission in order dated 30.9.2019 in Petition No. 360/TT/2018 regarding sharing of transmission charges of Asset-1 and Asset-2 had held as under:

"Sharing of Transmission Charges

- 77. We have considered the submissions of the Petitioner and Respondent. Transmission charges for all the assets allowed in this order shall be recovered on monthly basis in accordance with Regulation 43 of the 2014 Tariff Regulations. The billing, collection and disbursement of the transmission charges approved 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."
- 90. We also note that the Commission vide order dated 2.7.2019 in Petition No. 241/TT/2018 with regard to sharing of transmission charges of Asset-3 observed as under:
 - "62. The transmission charges shall be recovered on monthly basis in accordance with Regulation 43 of the 2014 Tariff Regulations and shall be shared by the beneficiaries and long term transmission customers in Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 as amended from time to time."
- 91. With effect from 1.11.2020, sharing of transmission charges is governed by the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2020 (in short, 'the 2020 Sharing Regulations'). Accordingly, the liabilities of DICs for arrears of transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and shall be recovered from the concerned DICs through Bill 2 under

Regulation 15(2)(b) of the 2020 Sharing Regulations. For subsequent period, the billing, collection and disbursement of the transmission charges approved in this order shall be governed by the provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

92. To summarise,

a. The trued-up Annual Fixed Charges allowed in respect of the transmission assets for 2014-19 tariff period are:

(₹ in lakh)

	Asset-1	Asset-2	Asset	-3
Particulars	2018-19 (Pro-rata for 121 days)	2018-19 (Pro-rata for 149 days)	2017-18 (Pro-rata for 192 days)	2018-19
Annual Fixed Charges	11477.81	5988.37	766.07	1486.44

b. The Annual Fixed Charges allowed in respect of the Combined Asset for 2019-24 tariff period in this order are:

(₹ in lakh)

Particulars	Asset	2019-20	2020-21	2021-22	2022-23	2	023-24
Annual Fixed Charges	Combined Asset	49503.04	49264.31	48322.20	47060.98	4	5785.97

- 93. Annexure(s) given hereinafter shall form part of the order.
- 94. This order disposes of Petition No. 375/TT/2020 in terms of the above discussion and findings.

sd/- sd/- sd/- sd/(Pravas Kumar Singh) (Arun Goyal) (I. S. Jha) (P. K. Pujari)
Member Member Member Chairperson

Annexure-I(a)

Asset	Particulars	Capital Expenditure as on COD	ACE (₹ in lakh)	Admitted Capital Cost as on	Rate of Depreciation (%)	Annual Depreciation as per Regulations	
		(₹ in lakh)	2018-19	31.3.2019 (₹ in lakh)		2018-19	
	Freehold Land	0.00	0.00	0.00	0.00	0.00	
	Building	4520.73	94.12	4614.85	3.34	152.56	
	Transmission Line	171130.79	3632.50	174763.29	5.28	9131.60	
Asset-1	Sub Station	17415.73	920.35	18336.08	5.28	943.85	
ASSELI	PLCC	368.11	2.72	370.83	6.33	23.39	
	Leasehold Land	0.00	0.00	0.00	3.34	0.00	
	IT Equipment and software	96.30	0.71	97.01	5.28	5.10	
	Total	193531.66	4650.40	198182.06		10256.51	
				Average	Gross Block		
				(₹ in lakh)		195856.86	
					Average Rate of ciation (%)	5.24%	

Annexure-I(b)

Asset	Particulars	Capital Expenditure as on COD	ACE (₹ in lakh)	Admitted Capital Cost as on	Rate of Depreciation (%)	Annual Depreciation as per Regulations	
		(₹ in lakh)	2018-19	31.3.2019 (₹ in lakh)		2018-19	
	Freehold Land	0.00	0.00	0.00	0.00	0.00	
	Building		0.21	27.43	3.34	0.91	
	Transmission 78694.53		1435.75	80130.28	5.28	4192.98	
Asset-2	Sub Station	3670.41	191.29	3861.70	5.28	198.85	
A5561-7	PLCC	294.92	2.26	297.18	6.33	18.74	
	Leasehold Land	0.00	0.00	0.00	3.34	0.00	
	IT Equipment and software	59.49	0.46	59.95	5.28	3.15	
	Total	82746.57	1629.97	84376.54		4414.63	
				Average Gross Block			
				(₹	in lakh)	83561.56	
					Average Rate of ciation (%)	5.28	

Annexure-I(c)

Asset	Particulars	Capital Expenditure as on COD	ACE (₹ in lakh)		Admitted Capital Cost as on	Rate of Depreciat ion (%)	Annual Depreciation as per Regulations	
		(₹ in lakh)	2017-18	2018-19	31.3.2019 (₹ in lakh)		2017-18	2018-19
	Freehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asset-3	Building	434.88	7.25	43.62	485.75	3.34	14.65	15.50
	Transmission Line	0.00	0.00	0.00	0.00	5.28	0.00	0.00
	Sub Station	5643.02	304.32	90.94	6038.27	5.28	305.99	316.42
	PLCC	0.00	0.00	0.00	0.00	6.33	0.00	0.00
	Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00	0.00
	IT Equipment and software	31.67	0.53	0.24	32.44	5.28	1.69	1.71
	Total	6109.57	312.10	134.80	6556.47		322.32	333.62
					Average Gross Block		6265.62	6489.07
					(₹ in	(₹ in lakh)		0409.07
					Weighted Ave Deprecia	erage Rate of ation (%)	5.14	5.14

Annexure-II

2019-24	Combined Asset										
Particulars	Combined Admitted Capital Cost as on 1.4.2019 Additional Capitalization (₹ in lakh)		Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciatio n as per Regulations (%)	Annual Depreciation as per Regulations (₹ in lakh)						
	(₹ in lakh)	2019-20	2020-21	,		2019-20	2020-21	2021-22	2022-23	2023-24	
Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Building	5128.04	572.58	450.03	6150.65	3.34	180.84	197.92	205.43	205.43	205.43	
Transmission Line	254893.57	7893.98	3304.10	266091.65	5.28	13666.78	13962.41	14049.64	14049.64	14049.64	
Sub Station	28236.06	841.35	54.51	29131.92	5.28	1513.08	1536.73	1538.17	1538.17	1538.17	
PLCC	668.01	7.98	0.00	675.98	6.33	42.54	42.79	42.79	42.79	42.79	
Leasehold Land	0.00	0.00	0.00	0.00	3.34	0.00	0.00	0.00	0.00	0.00	
IT Equipment and software	189.40	1.45	0.00	190.85	15.00	28.52	28.63	28.63	28.63	28.63	
TOTAL	289115.07	9317.34	3808.64	302241.05		15431.75	15768.47	15864.65	15864.65	15864.65	
				Average Gross Block (₹ in lakh)		293773.74	300336.73	302241.05	302241.05	302241.05	
				Weighted Average Rate of Depreciation (%)		5.25	5.25	5.25	5.25	5.25	