

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 185/TT/2022

Coram:

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

Date of order: 09.02.2023

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 the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for **Asset-1:** 1 no. 500 MVA 400/220 kV Transformer along with associated bays at NP Kunta Sub-station, **Asset-2:** 2 nos. 220 kV line bays (Bay No. 210 and 212) at NP Kunta Sub-station and **Asset-3:** 2 nos. 220 kV line bays (Bay No 209 & 211) at NP Kunta Sub-station under "Transmission System for Ultra Mega Solar Park in Anantpur District, Andhra Pradesh - Part C (Phase-III)" in the Southern Region.

And in the matter of:

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

.....Petitioner

Vs

1. Karnataka Power Transmission Corporation Limited (KPTCL),
Kaveri Bhavan, Bangalore-560009.
2. Transmission Corporation of Andhra Pradesh Limited (APTRANSCO),
Vidyut Soudha, Gunadala, Eluru Road,
Vijayawada-520004.
3. Kerala State Electricity Board (KSEB),
Vaidyuthi Bhavanam,
Pattom, Thiruvananthapuram-695004.
4. Tamil Nadu Generation and Distribution Corporation Limited,
(Formerly Tamil Nadu Electricity Board-TNEB),



NPKRR Maaligai, 800, Anna Salai, Chennai-600002.

5. Electricity Department,
Government of Pondicherry, Pondicherry-605001.
6. Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL),
P&T Colony,
Seethmmadhara, Vishakhapatnam, Andhra Pradesh.
7. Southern Power Distribution Company of Andhra Pradesh Limited (APSPDCL),
D. No: 19-13-65/A, Srinivasapuram, Corporate Office,
Tiruchanoor Road, Tirupati- 517503,
Chittoor District, Andhra Pradesh.
8. Southern Power Distribution Company of Telangana Limited (TSSPDCL),
6-1-50, Corporate Office, Mint Compound,
Hyderabad-500063, Telangana.
9. Northern Power Distribution Company of Telangana Limited (TSNPDCL),
H.No 2-5-3 1/2, Vidyut Bhawan, Corporate Office, Nakkal Gutta, Hanamkonda,
Warangal-506001, Telangana.
10. Bangalore Electricity Supply Company Limited (BESCOM),
Corporate Office, K.R. Circle,
Bangalore-560001, Karanataka.
11. Gulbarga Electricity Supply Company Limited (GESCOM),
Station Main Road, Gulbarga, Karnataka.
12. Hubli Electricity Supply Company Limited (HESCOM),
Navanagar, PB Road, Hubli, Karnataka
13. MESCOM Corporate Office,
Paradigm Plaza, AB Shetty Circle,
Mangalore-575001, Karnataka.
14. Chamundeswari Electricity Supply Corporation Limited (CESC),
927, L J Avenue, Ground Floor, New Kantharaj Urs Road,
Saraswatipuram, Mysore-570009, Karnataka.
15. Electricity Department,
Government of Goa,
Vidyuti Bhawan, Panaji, Goa-403001.
16. Transmission Corporation of Telangana Limited,
Vidhyut Sudha, Khairatabad,
Hyderabad-500082.



17. Tamil Nadu Transmission Corporation,
NPKRR Maaligai, 800, Anna Salai,
Chennai-600002.
18. Andhra Pradesh Solar Power Corporation Private Limited,
6-3-856/A3, Neeraj Public School Lane,
Opposite to Green Park Hotel, Ameerpet,
Hyderabad-500016.
19. Tamil Nadu Transmission Corporation Limited (TANTRANSCO),
(Formerly Tamil Nadu Electricity Board -TNEB),
5B Block 144, Anna Salai,
Chennai-600002.

...Respondent(s)

For Petitioner: Shri Zafrul Hasan, PGCIL
Shri S.S. Raju, PGCIL
Shri D.K. Biswal, PGCIL
Shri Ranjeet Kumar Pandey, PGCIL
Shri A.N. Kumar, PGCIL

For Respondents: Shri S. Vallinayagam, Advocate, TANGEDCO

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited, a deemed transmission licensee, for truing up of transmission tariff of the period from the date of commercial operation (COD) to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and determination of transmission tariff for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of the following assets (hereinafter referred to as “the transmission assets”) under “Transmission System for Ultra Mega Solar Park in Anantapur District, Andhra Pradesh-Part C (Phase-III)” in the Southern Region (hereinafter referred as “the transmission scheme”):



Asset-1: 1 number 500 MVA 400/220 kV transformer along with associated bays at NP Kunta Sub-station;

Asset-2: 2 numbers 220 kV Line bays (Bay numbers 210 & 212) at NP Kunta Sub-station; and

Asset-3: 2 numbers 220 kV Line bays (Bay number 209 & 211) at NP Kunta sub-station

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

- “1) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 9.1 and 10.0 above.*
 - 2) Approve the Completion cost and additional capitalization incurred during 2014-19 and allow the projected additional capitalization during 2019-24.*
 - 3) Allow the depreciation on the claim of IT equipment in the current true up petition as Bifurcation of Substation cost.*
 - 4) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 9.1 and 10.0 above for respective block.*
 - 5) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure (if any) in relation to the filing of petition.*
 - 6) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.*
 - 7) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the respondents.*
 - 8) Allow the Petitioner to claim the overall security expenses and consequential IOWC on that security expenses separately.*
 - 9) Allow the petitioner to claim the capital spares at the end of tariff block as per actual.*
 - 10) Allow the Petitioner to bill and recover GST on Transmission Charges separately from the respondents, if GST on transmission is levied at any rate in future. Further, any taxes including GST and duties including cess etc. imposed by any statutory/Govt./municipal authorities shall be allowed to be recovered from the beneficiaries.*
- and pass such other relief as Hon’ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.”*



Background

3. The facts of the case succinctly stated are as follows:

- a) The Investment Approval (IA) for the transmission scheme was accorded by the Board of Directors of the Petitioner Company in its 327th meeting held on 2.4.2016 (notified vide Memorandum Ref number C/CP/Solarpark A.P.-C dated 8.4.2016) at an estimated cost of ₹4091 lakh including IDC of ₹181 lakh based on October, 2015 price level. The transmission scheme was to be completed within 19 months from date of IA i.e. by 2.11.2017.
- b) The scope of the transmission scheme was discussed and agreed in the 38th meeting of Standing Committee on Power System Planning of Southern Region held on 7.3.2015. The scope of the transmission scheme was later discussed and agreed in the 27th SRPC meeting held on 12.5.2015 and 28th SRPC meeting held on 10.10.2015.
- c) The scope of work covered under the transmission scheme as per IA is as follows:

Sub-station

- (i) 400/220 kV NP Kunta Sub-station

400 kV

- a) 500 MVA, 400/220 kV transformer: 1 number
- b) Transformer bay: 1 number

220 kV

- a) Line Bays: 4 numbers
- b) Transformer bay: 1 number



d) The entire scope of the transmission scheme is covered in the instant petition. The details of scheduled COD, actual COD approved for Asset-1, Asset-2 and Asset-3 vide order dated 5.2.2021 in Petition No. 87/TT/2019 and the details of time over-run for the transmission assets are as follows:

Assets	SCOD	COD	Time over-run	condoned/ not condoned
Asset-1:	2.11.2017	30.9.2018	332 days	Not Condoned
Asset-2	2.11.2017	3.7.2018	243 days	Not Condoned
Asset-3: 2 numbers 220 kV line bays (Bay Number 209 & 211) at NP Kunta Sub-station*	2.11.2017	3.7.2018	243 days	Not Condoned

* COD of asset-3 is approved as 3.7.2018 under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations.

e) The transmission tariff of the transmission assets from their respective COD of 30.9.2018, 3.7.2018 and 3.7.2018 to 31.3.2019 was allowed by the Commission vide order dated 5.2.2021 in Petition No. 87/TT/2019.

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

5. The Petitioner has served the petition on the Respondents and notice regarding filing of this petition has been published in the newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or objections have been received from the general public in response to the aforesaid notices published in the newspapers.

6. The hearing in this matter was held on 20.12.2022 and the order was reserved.



7. This order is issued considering the submissions made by the Petitioner in the petition vide affidavits dated 27.9.2021, 2.8.2022 and 15.12.2022.

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

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

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

Particulars	(₹ in lakh)		
	Asset-1 2018-19 (Pro-rata 183 days)	Asset-2 2018-19 (Pro-rata 272 days)	Asset-3 2018-19 (Pro-rata 272 days)
Depreciation	47.92	10.59	10.59
Interest on Loan	49.07	11.13	11.13
Return on Equity	53.80	11.89	11.89
O&M Expenses	58.57	71.69	71.69
Interest on Working Capital	6.05	4.27	4.27
Total	215.41	109.57	109.57

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

Particulars	(₹ in lakh)		
	Asset-1 2018-19 (Pro-rata 183 days)	Asset-2 2018-19 (Pro-rata 272 days)	Asset-3 2018-19 (Pro-rata 272 days)
O&M Expenses	9.73	8.02	8.02
Maintenance Spares	17.52	14.43	14.43
Receivables	71.61	24.91	24.84
Total Working Capital	98.86	47.36	47.29
Rate of Interest (in %)	12.20	12.20	12.20
Interest on Working Capital	6.05	4.31	4.30



Capital Cost

11. The Commission *vide* order dated 5.2.2021 in Petition No. 87/TT/2019 allowed capital cost as on COD for Asset-1, Asset-2 and Asset-3 and projected ACE for the 2014-19 period. The details of the capital cost approved by the Commission in the aforesaid order are as follows:

(₹ in lakh)

Assets	Capital cost allowed as on COD	ACE allowed	Capital cost allowed as on
		2018-19	31.3.2019
Asset-1	1810.20	25.39	1835.59
Asset-2	269.04	43.48	312.52
Asset-3	269.04	42.62	311.66
Total	2348.28	111.49	2459.77

12. The Petitioner in the instant true-up petition has submitted the details of the FR approved apportioned cost along with capital cost as on COD, actual ACE for 2014-19 tariff period claimed by the Petitioner *vide* Auditor Certificate dated 22.4.2021 as follows:

(₹ in lakh)

Assets	FR apportioned Cost	Capital cost as on COD (Auditor Certificate)	ACE claimed	Capital cost claimed as on 31.3.2019
			2018-19	
Asset-1	3263.90	2425.93	0.00	2425.93
Asset-2	413.90	274.92	43.48	318.40
Asset-3	413.90	274.92	38.61	313.53
Total	4091.70	2975.77	82.09	3057.86

13. The Petitioner *vide* affidavit dated 15.12.2022 submitted that the Petitioner had inadvertently added the CFA grant of ₹51.88 lakh which is yet to be received in the ACE of 2018-19 for Asset-2 (₹28.27 lakh) and Asset-3 (₹23.51 lakh). Accordingly, the Petitioner submitted the revised actual ACE for 2014-19 tariff period as follows:

(₹ in lakh)

Assets	Apportioned FR cost	Capital cost as on COD (Auditor Certificate)	ACE claimed	Capital cost claimed as on 31.3.2019
			2018-19	
Asset-1	3263.90	2425.93	0.00	2425.93



Asset-2	413.90	274.92	28.37	297.41
Asset-3	413.90	274.92	23.51	292.55
Total	4091.70	2975.77	51.88	3015.89

Cost over-run

14. The Petitioner has submitted that the estimated completion cost for the transmission assets are within the approved cost. Hence, there is no cost over-run in respect of the transmission assets. We have considered the submissions of the Petitioner. It is observed that the cost of the transmission assets is within the apportioned approved cost. Further, the total FR approved cost of ₹4091.70 lakh, the estimated completion cost including ACE of the transmission assets is of ₹3015.89 lakh which is within the approved cost. Therefore, there is no cost over-run.

Time over-run

15. As per the Investment Approval dated 2.4.2016, the scheduled COD of the transmission assets was 2.11.2017. However, there was time over-run in case of the transmission assets. The details of COD and time over-run in case of the transmission assets is as follows:

Assets	Scheduled COD	Actual COD	Time over-run	Time over-run condoned	Time over-run not condoned
Asset-1	2.11.2017	30.9.2018	332 days	Nil	332 days
Asset-2		3.7.2018	243 days	Nil	243 days
Asset-3		3.7.2018	243 days	Nil	243 days

16. The time over-run in case of the transmission assets was not condoned by the Commission. We have considered the same in the instant petition.



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

17. The Petitioner has claimed IDC for the transmission assets covered in the instant petition and has submitted the statement showing IDC claim along with the year-wise details of the IDC discharged which is summarized as follows:

(₹ in lakh)

Assets	IDC as per Auditor Certificate	IDC discharged upto COD	IDC discharged during the year	Total IDC
			2018-19	
Asset-1	76.96	45.78	31.18	76.96
Asset-2	0.84	0.77	0.07	0.84
Asset-3	0.84	0.77	0.07	0.84

18. We have considered the submissions of the Petitioner. As stated above in this order, there is time over-run in case of all the transmission assets, which was not condoned. The Petitioner has submitted IDC computation statement which contains the name of loan, drawl date, loan amount, interest rate and interest claimed. The IDC is worked out based on the details given in the IDC statement. Further, the loan amount as on the COD has been mentioned in Form-6 and Form-9C. On scrutiny of these documents, certain discrepancies have been observed such as mismatch in loan amount between IDC statement and Form-6 and Form-9C. The allowable IDC has been worked out based on the information available on record and relying on loan amount as per Form-9C. The IDC considered as on COD and summary of discharge of IDC liability up to COD and thereafter for the purpose of tariff determination is as follows:



(₹ in lakh)

Assets	IDC as per Auditor Certificate	IDC disallowed due to time over-run not condoned	IDC allowed	IDC discharged upto COD	IDC discharged during the year
					2018-19
1	2	3	4=2-3	5	6
Asset-1	76.96	48.29	28.67	48.29	0.00
Asset-2	0.84	0.84	0.00	0.00	0.00
Asset-3	0.84	0.84	0.00	0.00	0.00

19. The Petitioner has claimed the following IEDC for the transmission assets:

(₹ in lakh)

Assets	IEDC as per Auditor's Certificate dated 22.4.2021
Asset-1	66.69
Asset-2	17.05
Asset-3	17.05

20. The Petitioner has claimed IEDC for the transmission assets as per the Auditor's Certificates and also considered the IEDC disallowed due to time over-run not condoned. The Petitioner has submitted that the IEDC mentioned in the Auditor's Certificate is on cash basis and has been discharged up to the COD.

21. We have considered the submissions of the Petitioner. The time over-run of Asset-1, Asset-2 and Asset-3 has been not condoned. There is disallowance of IEDC for the transmission assets due to time over-run not condoned. The IEDC considered as on COD for the purpose of tariff determination is as follows:

(₹ in lakh)

Assets	IEDC as per Auditor's Certificate	IEDC disallowed due to time over-run not condoned	IEDC allowed
Asset-1	66.69	24.30	42.39
Asset-2	17.05	5.04	12.01
Asset-3	17.05	5.04	12.01



Initial Spares

22. Regulation 13(d) of the 2014 Tariff Regulations provides that Initial Spares shall be capitalised as a percentage of plant and machinery cost up to cut-off date, subject to the following ceiling norms:

“(d) Transmission System

- (i) Transmission line - 1.00%*
- (ii) Transmission Sub-station (Green Field) - 4.00%*
- (iii) Transmission Sub-station (Brown Field) - 6.00%*
- (iv) Series Compensation devices and HVDC Station - 4.00%*
- (v) Gas Insulated Sub-station (GIS) - 5.00%*
- (vi) Communication system - 3.5%”*

23. The Initial Spares claimed by the Petitioner are as follows:

(₹ in lakh)				
Assets	Plant and machinery cost (excluding IDC/IEDC, land cost and cost of civil works)	Initial spares claimed	Initial spares as % of capital cost	Ceiling limit as per Regulation 13(d) of 2014 tariff Regulations (in %)
Asset-1	2282.28	69.72	3.05	6.00
Asset-2	Nil			
Asset-3				

24. We have considered the submissions of the Petitioner. The Petitioner has not claimed any initial spares for Asset-2 and Asset-3. The initial spares claimed towards Asset-1 is within ceiling limit of 6% as per Regulation 13(d) of the 2014 Tariff Regulations. The Initial Spares allowed for the transmission assets as per percentage specified in the 2014 Tariff Regulations is as follows:



Assets	Particulars	Plant and Machinery cost (excluding IDC and IEDC, land cost & cost of civil works) upto cut-off date (₹ in lakh)	Initial Spares claimed (₹ in lakh)	Norms as per the 2014 Tariff Regulations	Initial Spares allowable (₹ in lakh)	Excess Initial Spares (₹ in lakh)	Initial Spares allowed (₹ in lakh)
		A	B	C	$D = (A - B) * C / (100 - C)$	E - B	
Asset-1	Sub-station	2282.28	69.72	6.00	141.23	0.00	69.72

Central Finance Assistance (CFA)

25. The Petitioner has submitted that the CFA for development of Solar Park and external transmission system has been provided by the Ministry of New and Renewable Energy (MNRE). MNRE issued Administrative Guidelines for release of fund for implementation of Scheme for development of Solar Park and Ultra Mega Solar Power projects vide letter number 30/26/2014-15/NSM, dated 12.12.2014. Further, amendment in guidelines have been issued by MNRE vide office Memorandum number F. Number 30/26/2014-15/NSM dated 29.9.2016 which as follows:

“The CFA for development of solar park and for development of external transmission system will be apportioned in the ratio of 60:40 i.e. Rs 12 lakh per MW or 30% of the project cost, whichever is lower may be provided to the Solar Power Park Developers (SPPDs) towards development of solar parks and Rs. 8 lakh per MW or 30% of the project cost, whichever is lower will be provided to the CTU or STU towards development of external transmission system.....”

26. Accordingly, the Petitioner submitted the details for release of CFA by MNRE to the Petitioner vide letter dated 27.10.2016 and 28.12.2016.

27. The Petitioner has further submitted that the MNRE sanction the CFA grant vide office Memorandum number F. Number 30/52/2014-15/NSM dated 28.2.2017. The extracts of order are as follows:

“2. I am also directed to convey approval for setting up external power evacuation system for Anathapuramu Solar Park, Andhra Pradesh by PGCIL for evacuation of 1500MW solar



power from Anathapuramu Solar Park, Andhra Pradesh with total Central Finance Assistance (CFA) of Rs 120, 00, 00,000/- (Rupees One Hundred and Twenty Crore only).

3. As per Administrative Guidelines 30/26/2014-15/NSM, dated 12.12.2014 and subsequent clarification vide OM no. 30/26/2014-15/NSM dated 29.09.2016, an amount of Rs 60,26,47,625/- (Rupees Sixty Crore Twenty Six Lakh Forty Seven Thousand Six Hundred and Twenty Five only) is due to SECI, New Delhi towards award of work for external power evacuation system of for Anathapuramu Solar Park. The amount of Rs 60,26,47,625/- (Rupees Sixty Crore Twenty Six Lakh Forty Seven Thousand Six Hundred and Twenty Five only) includes Rs 60,00,00,000/- (Rupees Sixty Crore only) towards development of external power evacuation system for Anathapuramu Solar Park, Andhra Pradesh and Rs 26,47,625/- (Rupees Twenty Six Lakh Forty Seven Thousand Six Hundred and Twenty Five only) towards fund handling charges to SECI.

4. Accordingly, sanction of the President of India is hereby conveyed for release of Rs. 26,74,10,125/- (Rupees Twenty Six Crore Seventy Four Lakh Ten Thousand and Twenty Five only) to Solar Energy Corporation of India (SECI), New Delhi after adjusting Rs 33,52,37,500/- (Rs Thirty Three Crore Fifty Two Lakh Thirty Seven Thousand and Five Hundred only) of excess amount of CFA released to Andhra Pradesh Solar Power Corporation Ltd. (APSPCL) for development of internal infrastructure of Anathapuramu Solar Park, Andhra Pradesh by this Ministry under the Solar Park scheme, APSPCL will release Rs 33,52,37,500/- (Rs Thirty Three Crore Fifty Two Lakh Thirty Seven Thousand and Five Hundred only) to PGCIL as CFA towards development of external power evacuation system of Anathapuramu Solar Park.”

28. The Petitioner has further submitted that the Petitioner has received a grant of ₹109,55,54,100/- from SECI (₹26,47,62,500 on 30.8.2017), (₹33,52,37,500 on 31.1.2018) during 2017-18 and (₹49,55,54,000 on 16.10.2019) during 2019-20 towards transmission system for Ultra Mega Solar Park in Anantapur (Phase-I, II and III). The balance amount of ₹10,44,46,000 from CFA for Phase-I, II and III is yet to be disbursed and the same will be adjusted accordingly.

29. The details of total grant received and adjustment in the capital cost of projects Phase-I, II and III are as follows:

Project	Total CFA grant	CFA grant received (30.8.2017)	CFA grant received (31.1.2018)	CFA grant received (16.10.2019)	(₹ in lakh)
					Balance yet to be received
Transmission System for Ultra Mega Solar Park in Anantapur District, Andhra Pradesh- (Part-A) (Phase-I)	12000.00	2647.63	3352.38	4955.54	1044.46



Transmission System for Ultra Mega Solar Park in Anantpur District, Andhra Pradesh - Part B (Phase-II)					
Transmission System for Ultra Mega Solar Park in Anantpur District, Andhra Pradesh - Part C (Phase-III)					

(₹ in lakh)

Project	Grant received till 2019-20 and adjusted	Balance to be received and adjusted	Total Grant
Transmission System for Ultra Mega Solar Park in Anantpur District, Andhra Pradesh-(Part-A) (Phase-I)	6755.30	696.31	7451.61
Transmission System for Ultra Mega Solar Park in Anantpur District, Andhra Pradesh - Part B (Phase-II)	3626.98	293.50	3920.48
Transmission System for Ultra Mega Solar Park in Anantpur District, Andhra Pradesh - Part C (Phase-III)	573.26	54.65	627.91
Total	10955.54	1044.46	12000.00

30. The details of total grant allocated to transmission assets covered under instant petition are as follows:

(₹ in lakh)

Assets	Upto COD	Grant adjusted during 2018-19	Balance to be received and adjust in 2018-19	Total
Asset-1	543.05	0.00	0.00	543.05
Asset-2	0.00	15.11	28.37	43.48
Asset-3	0.00	15.10	23.51	38.61
Total	543.05	30.21	51.88	625.14

31. We have considered the submissions of the Petitioner.

32. Proviso to clause (d) of Regulation 9(6) of the 2014 Tariff Regulations provides as follows:

“Provided that 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 shall be excluded from the Capital Cost for the purpose of computation of interest on loan, return on equity and depreciation.”

33. Proviso (iii) of Regulation 19(1) of the 2014 Tariff Regulations provides as follows:

“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.”

34. We have considered the submission of the Petitioner and noted that in line with the above provisions, funding through grant is not required to be considered for debt-equity ratio. Therefore, grant would not be a part of the capital structure for the purpose of debt-equity ratio as per Regulation 19 of the 2014 Tariff Regulations and the same has been considered in the relevant paragraph of this order.

Capital cost as on COD

35. We have considered the submissions of the Petitioner. The capital cost of the transmission assets has been calculated in accordance with Regulation 9(3) of the 2014 Tariff Regulations. The details of the capital cost now approved as on COD after adjustment of IDC, IEDC and Initial Spares are as follows:

(₹ in lakh)

Assets	Capital cost claimed as on COD (A)	Un-discharged IDC (B)	IDC disallowed due to time over-run (C)	IEDC disallowed due to time over-run (D)	Excess initial spares disallowed (E)	Less grant received and adjusted upto COD (F)	Capital cost allowed as on COD (E) = (A-B-C-D-E-F)
Asset-1	2425.93	0.00	48.29	24.30	0.00	543.05	1810.29
Asset-2	274.92	0.00	0.84	5.04	0.00	0.00	269.04
Asset-3	274.92	0.00	0.84	5.04	0.00	0.00	269.04

Additional Capital Expenditure (ACE)

36. The Commission had allowed ACE for the transmission assets for the 2014-19 period *vide* order dated 5.2.2021 in Petition No. 87/TT/2019 under Regulation 14(1)(i) of the 2014 Tariff Regulations.



37. The details of ACE allowed *vide* order dated 5.2.2021 in Petition No. 87/TT/2019 for the transmission assets are as follows:

(₹ in lakh)

Assets	Capital cost as on COD	ACE	Capital cost as on 31.3.2019
		2018-19	
Asset-1	1810.20	25.39	1835.59
Asset-2	269.04	43.48	312.52
Asset-3	269.04	42.62	311.66

38. The Petitioner in the instant true-up petition has claimed the following ACE for 2014-19 tariff period and the same is as follows:

(₹ in lakh)

Assets	Name of the Vendor	Work executed 2018-19	Liability Release 2018-19
Asset-1	M/s Techno Electric and Engineering Co. Ltd.	0.00	0.00
Asset-2		0.00	43.48
Asset-3		0.00	38.61

39. We have considered the submissions of the Petitioner. The ACE claimed for Asset-2 and Asset-3 for the year 2018-19 is towards liability payment is allowed under Regulation 14(1)(i) of the 2014 Tariff Regulations. Accordingly, the capital cost considered for truing up of transmission tariff for the 2014-19 period is as follows:

(₹ in lakh)

Assets	Apportioned approved capital cost	Capital cost as on COD	ACE allowed	Less grant received and adjusted in ACE	Capital cost as on 31.3.2019
			2018-19		
Asset-1	2425.93	1810.29	0.00	0.00	1810.29
Asset-2	274.92	269.04	43.48	15.11	297.41
Asset-3	274.92	269.04	38.61	15.10	292.55

Debt-Equity ratio

40. The Petitioner has claimed debt-equity ratio of 70:30 as on COD of the transmission assets. Debt-Equity ratio of 70:30 is considered as provided under Regulation 19 of the 2014 Tariff Regulations. The details of the debt and equity as on



COD and as on 31.3.2019 for Asset-1, Asset-2 and Asset-3 considered on normative basis for the purpose of tariff of the 2014-19 period are as follows:

Asset-1

Particulars	Capital Cost as on COD (₹ in lakh)	(in %)	Capital Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	1267.20	70.00	1267.20	70.00
Equity	543.09	30.00	543.09	30.00
Total	1810.29	100.00	1810.29	100.00

Asset-2

Particulars	Capital Cost as on COD (₹ in lakh)	(in %)	ACE in 2014-19 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	188.33	70.00	19.86	70.00	208.19	70.00
Equity	80.71	30.00	8.51	30.00	89.22	30.00
Total	269.04	100.00	28.37	100.00	297.41	100.00

Asset-3

Particulars	Capital Cost as on COD (₹ in lakh)	(in %)	ACE in 2014-19 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	188.33	70.00	16.46	70.00	204.78	70.00
Equity	80.71	30.00	7.05	30.00	87.76	30.00
Total	269.04	100.00	23.51	100.00	292.55	100.00

Depreciation

41. The depreciation has been allowed as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. Depreciation has been allowed considering capital expenditure as on COD and approved ACE during the 2014-19 tariff period. The Gross Block during 2014-19 tariff period has been depreciated at Weighted Average Rate of Depreciation (WAROD). WAROD is at Annexure-I to Annexure-III has been worked out considering the depreciation rates as specified in the 2014 Tariff Regulations and trued-up depreciation allowed for the transmission scheme for 2014-19 tariff period are as follows:



(₹ in lakh)

	Particulars	Asset-1	Asset-2	Asset-3
		2018-19 (Pro-rata 183 days)	2018-19 (Pro-rata 272 days)	2018-19 (Pro-rata 272 days)
	Depreciation			
A	Opening Gross Block	1810.29	269.04	269.04
B	Additional Capitalisation	0.00	28.37	23.51
C	Closing Gross Block (A+B)	1810.29	297.41	292.55
D	Average Gross Block (A+C)/2	1810.29	283.22	280.79
E	Freehold land	0.00	0.00	0.00
F	Weighted Average Rate of Depreciation (in %)	5.28	5.28	5.28
G	Balance useful life of the asset (Year)	25	25	25
H	Elapsed life at the beginning of the year (Year)	0	0	0
I	Aggregate Depreciable Value	1629.26	254.90	252.72
J	Combined Depreciation during the year	47.92	11.14	11.05
K	Aggregate Cumulative Depreciation	47.92	11.14	11.05
L	Remaining Depreciable Value (I-K)	1581.34	243.76	241.67

42. The details of depreciation approved *vide* order dated 5.2.2021 in Petition No. 87/TT/2019 for Asset-1, Asset-2 and Asset-3 depreciation claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

(₹ in lakh)

Particulars	Asset-1	Asset-2	Asset-3
	2018-19 (Pro-rata 183 days)	2018-19 (Pro-rata 272 days)	2018-19 (Pro-rata 272 days)
Approved <i>vide</i> order dated 5.2.2021 in Petition No. 87/TT/2019	48.26	11.44	11.42
Claimed by the Petitioner in the instant petition	47.92	10.59	10.59
Allowed after true-up in this order	47.92	11.14	11.05

Interest on Loan (IoL)

43. The Petitioner has claimed the weighted average rate of IoL based on its actual loan portfolio and rate of interest. We have considered the submissions of the Petitioner. IoL has been calculated based on actual interest rate submitted by the Petitioner and in



accordance with Regulation 26 of the 2014 Tariff Regulations. The trued-up IoL allowed in respect of the transmission assets is as follows:

		(₹ in lakh)		
	Particulars	Asset-1	Asset-2	Asset-3
		2018-19 (Pro-rata 183 days)	2018-19 (Pro-rata 272 days)	2018-19 (Pro-rata 272 days)
	Interest on Loan			
A	Gross Normative Loan	1267.20	188.33	188.33
B	Cumulative Repayments upto Previous Year	0.00	0.00	0.00
C	Net Loan-Opening (A-B)	1267.20	188.33	188.33
D	Additions	0.00	19.86	16.46
E	Repayment during the year	47.92	11.14	11.05
F	Net Loan-Closing (C+D-E)	1219.28	197.04	193.74
G	Average Loan (C+F)/2	1243.24	192.69	191.03
H	Weighted Average Rate of Interest on Loan (in %)	7.8729	8.1633	8.1633
I	Interest on Loan (G*H)	49.07	11.72	11.62

44. The details of IoL approved *vide* order dated 5.2.2021 in Petition No. 87/TT/2019 for Asset-1, Asset-2 and Asset-3, IoL claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

		(₹ in lakh)		
Particulars	Asset-1	Asset-2	Asset-3	
	2018-19 (Pro-rata 183 days)	2018-19 (Pro-rata 272 days)	2018-19 (Pro-rata 272 days)	
Approved <i>vide</i> order dated 5.2.2021 in Petition No. 87/TT/2019	48.88	11.76	11.75	
Claimed by the Petitioner in the instant petition	49.07	11.13	11.13	
Allowed after true-up in this order	49.07	11.72	11.62	

Return on Equity (RoE)

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



Year	Claimed effective tax rate (in %)	Grossed up RoE (in %) [(Base Rate)/(1-t)]
2014-15	21.018	19.624
2015-16	21.382	19.716
2016-17	21.338	19.705
2017-18	21.337	19.704
2018-19	21.549	19.758

46. The Commission, vide order dated 27.4.2020 in Petition No. 274/TT/2019, had arrived at the effective tax rate for the Petitioner based on the notified MAT rates and the same is as follows:

Year	Notified MAT rates (inclusive of surcharge & cess)	Effective tax (in %)	Grossed up RoE [(Base Rate)/(1-t)] (in %)
2014-15	20.961	20.961	19.611
2015-16	21.342	21.342	19.706
2016-17	21.342	21.342	19.706
2017-18	21.342	21.342	19.706
2018-19	21.549	21.549	19.758

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

48. The Petitioner has claimed RoE for 2014-19 tariff period after grossing up the RoE @15.50% with Effective Tax rates (based on MAT rates) each year as per the above said Regulation. RoE is trued up on the basis of MAT rates applicable in the respective years and is allowed for the transmission assets as follows:



		(₹ in lakh)		
	Particulars	Asset-1	Asset-2	Asset-3
		2018-19 (Pro-rata 183 days)	2018-19 (Pro-rata 272 days)	2018-19 (Pro-rata 272 days)
	Return on Equity			
A	Opening Equity	543.09	80.71	80.71
B	Additions	0.00	8.51	7.05
C	Closing Equity (A+B)	543.09	89.22	87.76
D	Average Equity (A+C)/2	543.09	84.97	84.24
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	21.549	21.549	21.549
G	Rate of Return on Equity (in %)	19.758	19.758	19.758
H	Return on Equity (D*G)	53.80	12.51	12.40

49. The details of RoE approved *vide* order dated 5.2.2021 in Petition No. 87/TT/2019 for Asset-1 Asset-2 and Asset-3, RoE claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

		(₹ in lakh)		
Particulars	Asset-1	Asset-2	Asset-3	
	2018-19 (Pro-rata 183 days)	2018-19 (Pro-rata 272 days)	2018-19 (Pro-rata 272 days)	
Approved <i>vide</i> order dated 5.2.2021 in Petition No. 87/TT/2019	54.17	12.84	12.83	
Claimed by the Petitioner in the instant petition	53.80	11.89	11.89	
Allowed after true-up in this order	53.80	12.51	12.40	

Operation & Maintenance Expenses (O&M Expenses)

50. The O&M Expenses claimed by the Petitioner for the transmission assets are as follows:

Particulars	Asset-1
	2018-19 (Pro-rata 183 days)
400 kV bays of:	
(i) 1 number 400 kV bay for ICT	
220 kV bays of:	
(i) 1 number 220 kV bay for ICT	
400 kV Bays	1



Norms (₹ lakh/Bay)	68.71
220 kV Bays	1
Norms (₹ lakh/Bay)	48.1
Total O&M Expense (₹ in lakh)	58.57

Particulars	Asset-2
	2018-19 (Pro-rata 272 days)
220 kV bays of:	
(i) 2 nos. 220 kV bays (Bay No 210 & 212) at NP Kunta Sub-station	
220 kV Bays	2
Norms (₹ lakh/Bay)	48.1
Total O&M Expense (₹ in lakh)	71.69

Particulars	Asset-3
	2018-19 (Pro-rata 272 days)
220 kV bays of:	
(i) 2 nos. 220 kV bays (Bay No 209 & 211) at NP Kunta Sub-station	
220 kV Bays	2
Norms (₹ lakh/Bay)	48.1
Total O&M Expense (₹ in lakh)	71.69

51. We have considered the submissions of the Petitioner. The O&M Expenses allowed for the transmission assets as per norms specified in the 2014 Tariff Regulations are as follows:

Particulars	Asset-1
	2018-19 (Pro-rata 183 days)
400 kV bays of:	
(ii) 1 number 400 kV bay for ICT	
220 kV bays of:	
(ii) 1 number 220 kV bay for ICT	
400 kV Bays	1
Norms (₹ lakh/Bay)	68.71
220 kV Bays	1
Norms (₹ lakh/Bay)	48.1
Total O&M Expense (₹ in lakh)	58.57



Particulars	Asset-2
	2018-19 (Pro-rata 272 days)
220 kV bays of:	
(ii) 2 numbers 220 kV bays for (Bay No 210 & 212) at NP Kunta Sub-station	
220 kV Bays	2
Norms (₹ lakh/Bay)	48.1
Total O&M Expense (₹ in lakh)	71.69

Particulars	Asset-3
	2018-19 (Pro-rata 272 days)
220 kV bays of:	
(ii) 2 numbers 220 kV bays for (Bay No 209 & 211) at NP Kunta Sub-station	
220 kV Bays	2
Norms (₹ lakh/Bay)	48.1
Total O&M Expense (₹ in lakh)	71.69

52. The details of O&M Expenses approved *vide* order dated 5.2.2021 in Petition No. 87/TT/2019 for Asset-1, Asset-2 and Asset-3 O&M Expenses claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

Particulars	(₹ in lakh)		
	Asset-1 2018-19 (Pro-rata 183 days)	Asset-2 2018-19 (Pro-rata 272 days)	Asset-3 2018-19 (Pro-rata 272 days)
Approved <i>vide</i> order dated 5.2.2021 in Petition No. 87/TT/2019	58.57	71.69	71.69
Claimed by the Petitioner in the instant petition	58.57	71.69	71.69
Allowed after true-up in this order	58.57	71.69	71.69

Interest on Working Capital (IWC)

53. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and is allowed for the transmission assets as follows:



(₹ in lakh)

	Particulars	Asset-1	Asset-2	Asset-3
		2018-19 (Pro-rata 183 days)	2018-19 (Pro-rata 272 days)	2018-19 (Pro-rata 272 days)
	Interest on Working Capital			
A	Working Capital for O&M Expenses (O&M Expenses for one month)	9.73	8.02	8.02
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	17.52	14.43	14.43
C	Working Capital for Receivables (equivalent to two months of Annual Fixed Charges/Annual Transmission Charges)	71.61	24.91	24.84
D	Total Working Capital (A+B+C)	98.86	47.35	47.29
E	Rate of Interest (in %)	12.20	12.20	12.20
F	Interest of working capital (D*E)	6.05	4.31	4.30

54. The details of IWC approved *vide* order dated 5.2.2021 in Petition No. 87/TT/2019 for Asset-1, Asset-2 and Asset-3, IWC claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

(₹ in lakh)

Particulars	Asset-1	Asset-2	Asset-3
	2018-19 (Pro-rata 183 days)	2018-19 (Pro-rata 272 days)	2018-19 (Pro-rata 272 days)
Approved <i>vide</i> order dated 5.2.2021 in Petition No. 87/TT/2019	6.06	4.32	4.32
Claimed by the Petitioner in the instant petition	6.05	4.27	4.27
Allowed after true-up in this order	6.05	4.31	4.30

Approved Annual Fixed Charges for 2014-19 Tariff Period

55. The trued-up AFC approved for the transmission assets for 2014-19 tariff period are as follows:

(₹ in lakh)

	Particulars	Asset-1	Asset-2	Asset-3
		2018-19 (Pro-rata 183 days)	2018-19 (Pro-rata 272 days)	2018-19 (Pro-rata 272 days)
	Annual Transmission Charges			
A	Depreciation	47.92	11.14	11.05
B	Interest on Loan	49.07	11.72	11.62



	Particulars	Asset-1	Asset-2	Asset-3
		2018-19 (Pro-rata 183 days)	2018-19 (Pro-rata 272 days)	2018-19 (Pro-rata 272 days)
C	Return on Equity	53.80	12.51	12.40
D	O & M Expenses	58.57	71.69	71.69
E	Interest on Working Capital	6.05	4.31	4.30
F	Total (A+B+C+D+E)	215.41	111.37	111.06

56. The details of AFC Approved vide order dated 5.2.2021 in Petition No. 87/TT/2019 for Asset-1, Asset-2 and Asset-3, AFC claimed by the Petitioner in the instant petition and trued up in the instant order are as follows:

Particulars	(₹ in lakh)		
	Asset-1 2018-19 (Pro-rata 183 days)	Asset-2 2018-19 (Pro-rata 272 days)	Asset-3 2018-19 (Pro-rata 272 days)
Approved vide order dated 5.2.2021 in Petition No. 87/TT/2019	215.93	112.06	112.00
Claimed by the Petitioner in the instant petition	215.41	109.57	109.57
Allowed after true-up in this order	215.41	111.37	111.06

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

57. The Petitioner had combined the transmission assets covered in the transmission scheme into one single Combined Asset and has filed a consolidated petition claiming tariff for the Combined Asset as a whole for the 2019-24 tariff period as provided in Regulation 8(1) of the 2019 Tariff Regulations. The Petitioner vide affidavit dated 15.12.2022 submitted that as per order dated 5.2.2021 in Petition No. 87/TT/2019, the transmission charges for Asset-3 will be borne by Andhra Pradesh Solar Power Corporation Private Limited (APSPCPL), Respondent No. 18 bilaterally till COD of the associated generating system under the scope of APSPCL. The relevant portion of the order dated 5.2.2021 are as follows:

“91. TANGEDCO has also contended that the Petitioner should raise bilateral bill on the solar generator, from COD of the transmission asset to the date of commissioning of the



generating plant if the generating station is not commissioned. It is observed that 400 MW of solar generation has been commissioned and Asset-I and Asset-II are in use. Therefore, the transmission charges for Asset-I and Asset-II shall be recovered through PoC mechanism as provided in the 2010 Sharing Regulations. As regards Asset-III, the Petitioner has claimed its COD as 3.7.2018 under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations as the associated generating system under the scope of APSPCL is not ready. Therefore, the transmission charges of Asset-III from 3.7.2018 to COD of the associated upstream generating system under the scope of APSPCL shall be borne by APSPCL..... ”

58. The Petitioner has further submitted that in the petition, combined tariff for 2019-24 tariff period was claimed. However, since the bilateral billing of Asset-3 is continuing in 2019-24 tariff period, the tariff for the transmission assets covered under the instant petition has been claimed asset wise for 2019-24 tariff period as well.

59. We have considered the submissions of the Petitioner. As transmission charges of Asset-3 has to be borne by APSPCPL till the commissioning of the associated generation, asset-wise tariff for the 2019-24 period for Asset-1, Asset-2 and Asset-3 is approved in this order.

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

Asset-1

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	95.58	95.58	95.58	95.58	95.58
Interest on Loan	92.58	85.02	79.00	73.47	65.54
Return on Equity	102.00	102.00	102.00	102.00	102.00
O&M Expenses	233.66	242.08	250.57	259.62	268.25
Interest on Working Capital	14.55	14.82	15.10	15.41	15.65
Total	538.37	539.50	542.25	546.08	547.02

Asset-2

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	15.70	15.70	15.70	15.70	15.70
Interest on Loan	15.65	14.35	13.05	11.75	10.46
Return on Equity	16.76	16.76	16.76	16.76	16.76
O&M Expenses	45.02	46.60	48.24	49.02	51.68



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Interest on Working Capital	2.68	2.74	2.79	2.85	2.90
Total	95.81	96.15	96.54	96.08	97.50

Asset-3

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	15.45	15.45	15.45	15.45	15.45
Interest on Loan	15.38	14.11	12.83	11.55	10.28
Return on Equity	16.48	16.48	16.48	16.48	16.48
O&M Expenses	45.02	46.60	48.24	49.92	51.68
Interest on Working Capital	2.67	2.73	2.78	2.83	2.89
Total	95.00	95.37	95.78	96.23	96.78

61. The details of IWC claimed by the Petitioner for the 2019-24 tariff period in respect of the Combined Asset are as follows:

Asset-1

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	19.47	20.17	20.88	21.64	22.35
Maintenance Spares	35.05	36.31	37.59	38.94	40.24
Receivables	66.19	66.51	66.85	67.32	67.26
Total Working Capital	120.71	122.99	125.32	127.90	129.85
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	14.55	14.82	15.10	15.41	15.65

Asset-2

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	3.75	3.88	4.02	4.16	4.31
Maintenance Spares	6.75	6.99	7.24	7.49	7.75
Receivables	11.78	11.85	11.90	11.96	11.99
Total Working Capital	22.28	22.72	23.16	23.61	24.05
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	2.68	2.74	2.79	2.85	2.90

Asset-3

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	3.75	3.88	4.02	4.16	4.31
Maintenance Spares	6.75	6.99	7.24	7.49	7.75



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Receivables	11.68	11.76	11.81	11.86	11.90
Total Working Capital	22.18	22.63	23.07	23.51	23.96
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	2.67	2.73	2.78	2.83	2.89

Capital Cost

62. 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;*

(l) *Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;*

(m) *Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;*

(n) *Expenditure on account of change in law and force majeure events; and*

(o) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and*



Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.

- (3) *The Capital cost of an existing project shall include the following:*
- (a) *Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;*
 - (b) *Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
 - (c) *Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
 - (d) *Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
 - (e) *Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*
 - (f) *Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.”*
- (4) *The capital cost in case of existing or new hydro generating station shall also include:*
- (a) *cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and*
 - (b) *cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.*
- (5) *The following shall be excluded from the capital cost of the existing and new projects:*
- (a) *The assets forming part of the project, but not in use, as declared in the tariff petition;*
 - (b) *De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:*

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

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

- (c) *In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;*
- (d) *Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and*
- (e) *Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment.”*



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

(₹ in lakh)				
Assets	Apportioned approved capital cost (FR)	Capital cost claimed as on 31.3.2019	ACE claimed in 2019-24	Estimated completion cost
Asset-1	3263.90	1810.29	0.00	1810.29
Asset-2	413.9	297.41	0.00	297.41
Asset-3	413.9	292.55	0.00	292.55

64. The Petitioner has not claimed any ACE in 2019-24 tariff period.

Debt-Equity ratio

65. 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.

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

66. The debt-equity considered for the purpose of computation of tariff for the 2019-24 tariff period is allowed as per Regulation 18(3) of the 2019 Tariff Regulations. The debt-equity considered for the purpose of computation of tariff for the 2019-24 tariff period is as follows:

Asset-1

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	1267.20	70.00	1267.20	70.00
Equity	543.09	30.00	543.09	30.00
Total	1810.29	100.00	1810.29	100.00

Asset-2

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	208.19	70.00	208.19	70.00
Equity	89.22	30.00	89.22	30.00



Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Total	297.41	100.00	297.41	100.00

Asset-3

Particulars	Capital Cost as on 1.4.2019 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	204.79	70.00	204.79	70.00
Equity	87.76	30.00	87.76	30.00
Total	292.55	100.00	292.55	100.00

Depreciation

67. Regulation 33 of the 2019 Tariff Regulations provides as follows:

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

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

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

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

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

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

Provided also that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the



percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

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

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

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

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

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

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

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

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

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

a) twenty five years, in case the generating station or unit thereof is in operation for fifteen years or less as on the date of operation of the emission control system; or

b) balance useful life of the generating station or unit thereof plus fifteen years, in case the generating station or unit thereof is in operation for more



than fifteen years as on the date of operation of the emission control system; or
c) ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher, in case the generating station or unit thereof has completed its useful life.”

68. WAROD has been worked out considering the depreciation rates of the assets as prescribed in the 2019 Tariff Regulations and the WAROD is placed at Annexure-IV to Annexure-VI. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and accumulated depreciation up to 31.3.2019. The depreciation allowed for assets are as follows:

Asset-1

						(₹ in lakh)
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Depreciation					
A	Opening Gross Block	1810.29	1810.29	1810.29	1810.29	1810.29
B	Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
C	Closing Gross Block (A+B)	1810.29	1810.29	1810.29	1810.29	1810.29
E	Average Gross Block (A+C)/2	1810.29	1810.29	1810.29	1810.29	1810.29
D	Freehold Land	0.00	0.00	0.00	0.00	0.00
F	Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.28	5.28	5.28	5.28
G	Balance useful life of the asset (Year)	25	24	23	22	21
H	Aggregate Depreciable Value	1629.26	1629.26	1629.26	1629.26	1629.26
I	Depreciation during the year	95.58	95.58	95.58	95.58	95.58
J	Cumulative Depreciation	143.50	239.08	334.66	430.24	525.82
K	Remaining Depreciable Value (H-J)	1485.76	1390.18	1294.60	1199.02	1103.44

Asset-2

						(₹ in lakh)
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Depreciation					
A	Opening Gross Block	297.41	297.41	297.41	297.41	297.41
B	Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
C	Closing Gross Block (A+B)	297.41	297.41	297.41	297.41	297.41
E	Average Gross Block (A+C)/2	297.41	297.41	297.41	297.41	297.41
D	Freehold Land	0.00	0.00	0.00	0.00	0.00
F	Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.28	5.28	5.28	5.28



	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
G	Balance useful life of the asset (Year)	25	24	23	22	21
H	Aggregate Depreciable Value	267.67	267.67	267.67	267.67	267.67
I	Depreciation during the year	15.70	15.70	15.70	15.70	15.70
J	Cumulative Depreciation	26.84	42.54	58.24	73.94	89.64
K	Remaining Depreciable Value (H-J)	240.82	225.12	209.42	193.72	178.02

Asset-3

(₹ in lakh)						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Depreciation					
A	Opening Gross Block	292.55	292.55	292.55	292.55	292.55
B	Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
C	Closing Gross Block (A+B)	292.55	292.55	292.55	292.55	292.55
E	Average Gross Block (A+C)/2	292.55	292.55	292.55	292.55	292.55
D	Freehold Land	0.00	0.00	0.00	0.00	0.00
F	Weighted average rate of Depreciation (WAROD) (in %)	5.28	5.28	5.28	5.28	5.28
G	Balance useful life of the asset (Year)	25	24	23	22	21
H	Aggregate Depreciable Value	263.29	263.29	263.29	263.29	263.29
I	Depreciation during the year	15.45	15.45	15.45	15.45	15.45
J	Cumulative Depreciation	26.50	41.95	57.40	72.85	88.30
K	Remaining Depreciable Value (H-J)	236.80	221.35	205.90	190.45	175.00

Interest on Loan (IoL)

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

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be



considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

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

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

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

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

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

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

70. 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 may be adjusted.

71. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. Accordingly, the floating rate of interest, if any, shall be considered at the time of true-up. IoL has been allowed in accordance with Regulation 32 of the 2019 Tariff Regulations. IoL allowed for the 2019-24 tariff period is as follows:

Asset-1

						(₹ in lakh)
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Interest on Loan					
A	Gross Normative Loan	1267.20	1267.20	1267.20	1267.20	1267.20
B	Cumulative Repayments upto Previous Year	47.92	143.50	239.08	334.66	430.24
C	Net Loan-Opening (A-B)	1219.28	1123.70	1028.12	932.54	836.96
D	Additions	0.00	0.00	0.00	0.00	0.00
E	Repayment during the year	95.58	95.58	95.58	95.58	95.58
F	Net Loan-Closing (C+D-E)	1123.70	1028.12	932.54	836.96	741.38
G	Average Loan (C+F)/2	1171.49	1075.91	980.33	884.75	789.17
H	Weighted Average Rate of Interest on Loan (in %)	7.9029	7.9029	8.0587	8.3041	8.3058



	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
I	Interest on Loan (G*H)	92.58	85.03	79.00	73.47	65.55

Asset-2

						(₹ in lakh)
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Interest on Loan					
A	Gross Normative Loan	208.19	208.19	208.19	208.19	208.19
B	Cumulative Repayments upto Previous Year	11.14	26.84	42.54	58.24	73.94
C	Net Loan-Opening (A-B)	197.05	181.35	165.65	149.95	134.25
D	Additions	0.00	0.00	0.00	0.00	0.00
E	Repayment during the year	15.70	15.70	15.70	15.70	15.70
F	Net Loan-Closing (C+D-E)	181.35	165.65	149.95	134.25	118.55
G	Average Loan (C+F)/2	189.20	173.50	157.80	142.10	126.40
H	Weighted Average Rate of Interest on Loan (in %)	8.2701	8.2701	8.2701	8.2705	8.2719
I	Interest on Loan (G*H)	15.65	14.35	13.05	11.75	10.46

Asset-3

						(₹ in lakh)
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Interest on Loan					
A	Gross Normative Loan	204.79	204.79	204.79	204.79	204.79
B	Cumulative Repayments upto Previous Year	11.05	26.50	41.95	57.40	72.85
C	Net Loan-Opening (A-B)	193.74	178.29	162.84	147.39	131.94
D	Additions	0.00	0.00	0.00	0.00	0.00
E	Repayment during the year	15.45	15.45	15.45	15.45	15.45
F	Net Loan-Closing (C+D-E)	178.29	162.84	147.39	131.94	116.49
G	Average Loan (C+F)/2	186.02	170.57	155.12	139.67	124.22
H	Weighted Average Rate of Interest on Loan (in %)	8.2701	8.2701	8.2701	8.2705	8.2719
I	Interest on Loan (G*H)	15.38	14.11	12.83	11.55	10.28

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 cut-off date beyond the original scope, excluding additional capitalization on account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%.

Provided further that:

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

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

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

a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;

b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

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

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

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



from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.

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

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

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

Illustration-

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

$$\text{Rate of return on equity} = 15.50 / (1 - 0.2155) = 19.758\%$$

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

(a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1,000 crore;

(b) Estimated Advance Tax for the year on above is Rs 240 crore;

(c) Effective Tax Rate for the year 2019-20 = Rs 240 Crore / Rs 1000 Crore = 24%;

(d) Rate of return on equity = $15.50 / (1 - 0.24) = 20.395\%$.

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after trueing 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 MAT rate is applicable to the Petitioner's company. Accordingly, the MAT rate applicable for 2019-20 has been considered for the purpose of RoE, which shall be trueed up with actual tax rate in accordance with



Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed for the transmission assets are as follows:

Asset-1

						(₹ in lakh)
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Return on Equity					
A	Opening Equity	543.09	543.09	543.09	543.09	543.09
B	Additions	0.00	0.00	0.00	0.00	0.00
C	Closing Equity (A+B)	543.09	543.09	543.09	543.09	543.09
D	Average Equity (A+C)/2	543.09	543.09	543.09	543.09	543.09
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
H	Return on Equity (D*G)	102.00	102.00	102.00	102.00	102.00

Asset-2

						(₹ in lakh)
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Return on Equity					
A	Opening Equity	89.22	89.22	89.22	89.22	89.22
B	Additions	0.00	0.00	0.00	0.00	0.00
C	Closing Equity (A+B)	89.22	89.22	89.22	89.22	89.22
D	Average Equity (A+C)/2	89.22	89.22	89.22	89.22	89.22
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
H	Return on Equity (D*G)	16.76	16.76	16.76	16.76	16.76

Asset-3

						(₹ in lakh)
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Return on Equity					
A	Opening Equity	87.76	87.76	87.76	87.76	87.76
B	Additions	0.00	0.00	0.00	0.00	0.00
C	Closing Equity (A+B)	87.76	87.76	87.76	87.76	87.76
D	Average Equity (A+C)/2	87.76	87.76	87.76	87.76	87.76



	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
G	Rate of Return on Equity (%)	18.782	18.782	18.782	18.782	18.782
H	Return on Equity (D*G)	16.48	16.48	16.48	16.48	16.48

Operation & Maintenance Expenses (O&M Expenses)

74. The O&M Expenses claimed by the Petitioner for 2019-24 tariff period are as follows:

Particulars	Asset-1				
	2019-20	2020-21	2021-22	2022-23	2023-24
400 kV bays of:					
(i) 1 number 400 kV bay for ICT					
220 kV bays of:					
(i) 1 number 220 kV bay for ICT					
400 kV Bays	1	1	1	1	1
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91
220 kV Bays	1	1	1	1	1
Norms (₹ lakh/Bay)	22.51	23.30	24.12	24.96	25.84
Sub Station:					
(i) SR1-NP Kunta: ICT IV Bay (400/220 kV)-NP Kunta-Np Kunta					
400/220 kV ICT	500	500	500	500	500
Norms ((₹ lakh/MVA)	0.358	0.371	0.384	0.398	0.411
Total O&M Expense (₹ in lakh)	233.66	242.08	250.57	259.62	268.25

Particulars	Asset-2				
	2019-20	2020-21	2021-22	2022-23	2023-24
220 kV bays of:					
(iii) 2 numbers 220 kV line bays (Bay No 210 & 212) at NP Kunta Sub-station					
220 kV Bays	2	2	2	2	2
Norms (₹ lakh/Bay)	22.51	23.30	24.12	24.96	25.84
Total O&M Expense (₹ in lakh)	45.02	46.60	48.24	49.92	51.68

Particulars	Asset-3				
	2019-20	2020-21	2021-22	2022-23	2023-24
220 kV bays of:					
(iii) 2 numbers 220 kV line bays (Bay No 209 & 211) at NP Kunta Sub-station					
220 kV Bays	2	2	2	2	2
Norms (₹ lakh/Bay)	22.51	23.30	24.12	24.96	25.84
Total O&M Expense (₹ in lakh)	45.02	46.60	48.24	49.92	51.68



75. Regulation 35(3)(a) of the 2019 Tariff Regulations provides 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	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					



<i>HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)</i>	834	864	894	925	958
<i>Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)</i>	1,666	1,725	1,785	1,848	1,913
<i>500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)</i>	2,252	2,331	2,413	2,498	2,586
<i>±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)</i>	2,468	2,555	2,645	2,738	2,834
<i>±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)</i>	1,696	1,756	1,817	1,881	1,947
<i>±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)</i>	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;*
- ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;*
- iii. the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (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 year

(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.”

76. We have considered the submission of the Petitioner. The O&M Expenses are approved as per the norms specified in the 2019 Tariff Regulations and are as follows:

Particulars	Asset-1				
	2019-20	2020-21	2021-22	2022-23	2023-24
400 kV bays of:					
(ii) 1 number 400 kV bay for ICT					
220 kV bays of:					
(ii) 1 number 220 kV bay for ICT					
400 kV Bays	1	1	1	1	1
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91
220 kV Bays	1	1	1	1	1
Norms (₹ lakh/Bay)	22.51	23.30	24.12	24.96	25.84
Sub Station:					
(i) SR1-NP Kunta:ICT IV Bay (400/220 kV)-NP Kunta-NP Kunta					
400 kV	500	500	500	500	500
Norms ((₹ lakh/MVA)	0.358	0.371	0.384	0.398	0.411
Total O&M Expenses allowed (₹ in lakh)	233.66	242.08	250.57	259.62	268.25

Particulars	Asset-2				
	2019-20	2020-21	2021-22	2022-23	2023-24
220 kV bays of:					
(iv) 2 numbers 220 kV bays for (Bay No 210 & 212) at NP Kunta Sub-station					
220 kV Bays	2	2	2	2	2
Norms (₹ lakh/Bay)	22.51	23.30	24.12	24.96	25.84
Total O&M Expenses allowed (₹ in lakh)	45.02	46.60	48.24	49.92	51.68



Particulars	Asset-3				
	2019-20	2020-21	2021-22	2022-23	2023-24
220 kV bays of:					
(iv) 2 numbers 220 kV line bays for (Bay No 209 & 211) at NP Kunta Sub-station					
220 kV Bays	2	2	2	2	2
Norms (₹ lakh/Bay)	22.51	23.30	24.12	24.96	25.84
Total O&M Expenses allowed (₹ in lakh)	45.02	46.60	48.24	49.92	51.68

Interest on Working Capital (IWC)

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

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

.....

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

- (i) Receivables equivalent to 45 days of annual fixed cost;
- (ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and
- (iii) Operation and maintenance expenses, including security expenses for one month.

.....

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

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

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

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

‘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;”

78. The Petitioner has submitted that it has computed IWC for the 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has



considered the rate of IWC as 12.05%. The IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (ROI) considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-21 and from 2021-22 onwards has been considered as 10.50% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.00% plus 350 basis points). The components of the working capital and interest thereon allowed is as follows:

(₹ in lakh)

Asset-1						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Interest on Working Capital					
A	Working Capital for O&M Expenses (O&M Expenses for one month)	19.47	20.17	20.88	21.64	22.35
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	35.05	36.31	37.59	38.94	40.24
C	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	66.19	66.39	66.61	67.08	67.01
D	Total Working Capital (A+B+C)	120.71	122.88	125.08	127.66	129.60
E	Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
F	Interest on working capital (D*E)	14.55	13.82	13.13	13.40	13.61

(₹ in lakh)

Asset-2						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Interest on Working Capital					
A	Working Capital for O&M Expenses (O&M Expenses for one month)	3.75	3.88	4.02	4.16	4.31
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	6.75	6.99	7.24	7.49	7.75
C	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	11.78	11.83	11.86	11.91	11.94
D	Total Working Capital (A+B+C)	22.29	22.70	23.11	23.56	24.00
E	Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
F	Interest on working capital (D*E)	2.69	2.55	2.43	2.47	2.52



(₹ in lakh)

Asset-3						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Interest on Working Capital					
A	Working Capital for O&M Expenses (O&M Expenses for one month)	3.75	3.88	4.02	4.16	4.31
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	6.75	6.99	7.24	7.49	7.75
C	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	11.68	11.73	11.76	11.82	11.85
D	Total Working Capital (A+B+C)	22.18	22.61	23.02	23.47	23.91
E	Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
F	Interest on working capital (D*E)	2.67	2.54	2.42	2.46	2.51

Annual Fixed Charges of the 2019-24 Tariff Period

79. The transmission charges allowed in respect of the transmission assets for the 2019-24 tariff period are as follows:

(₹ in lakh)

Asset-1					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	95.58	95.58	95.58	95.58	95.58
Interest on Loan	92.58	85.03	79.00	73.47	65.55
Return on Equity	102.00	102.00	102.00	102.00	102.00
O & M Expenses	233.66	242.08	250.57	259.62	268.25
Interest on Working Capital	14.55	13.82	13.13	13.40	13.61
Total	538.37	538.51	540.28	544.07	544.99

(₹ in lakh)

Asset-2					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	15.70	15.70	15.70	15.70	15.70
Interest on Loan	15.65	14.35	13.05	11.75	10.46
Return on Equity	16.76	16.76	16.76	16.76	16.76
O & M Expenses	45.02	46.60	48.24	49.92	51.68
Interest on Working Capital	2.69	2.55	2.43	2.47	2.52
Total	95.82	95.96	96.18	96.60	97.12



(₹ in lakh)

Asset-3					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	15.45	15.45	15.45	15.45	15.45
Interest on Loan	15.38	14.11	12.83	11.55	10.28
Return on Equity	16.48	16.48	16.48	16.48	16.48
O & M Expenses	45.02	46.60	48.24	49.92	51.68
Interest on Working Capital	2.67	2.54	2.42	2.46	2.51
Total	95.00	95.18	95.42	95.86	96.40

Filing Fee and Publication Expenses

80. The Petitioner has sought reimbursement of fee paid by it for filing the Petition and publication expenses in terms of Regulation 70 of the 2019 Tariff Regulations

81. We have considered the submissions of the Petitioner. 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.

License Fee and RLDC Fees and Charges

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

Goods and Services Tax

83. The Petitioner has submitted that, if GST is levied at any rate and at any point of time in future on charges of transmission of electricity, the same shall be borne and additionally paid by the 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.

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

Security Expenses

85. The Petitioner has submitted that security expenses for the transmission assets are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and consequential IWC.

86. We have considered the submissions of the Petitioner. The Petitioner has claimed consolidated security expenses on projected basis for 2019-24 tariff period on the basis of actual security expenses incurred in 2018-19 in Petition No. 260/MP/2020. The said petition has already been disposed of by the Commission vide order dated 3.8.2021. Therefore, the Petitioner's prayer in the instant petition for allowing it to file a separate petition for claiming the overall security expenses and consequential IWC has become infructuous.

Capital Spares

87. 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

88. The Petitioner has prayed that transmission charges for 2014-19 period may be allowed to be recovered on monthly basis in accordance with Regulation 43 of the 2014



Tariff Regulations and may be shared by the beneficiaries as per applicable Sharing Regulations.

89. The Petitioner has prayed that tariff for 2019-24 period may be allowed to be recovered on monthly basis in accordance with Regulation 57 of the 2019 Tariff Regulations and may be shared by the beneficiaries as per applicable 2010 Sharing Regulations.

90. The Commission vide order dated 5.2.2021 in Petition No. 87/TT/2019 held as follows:

“91. TANGEDCO has also contended that the Petitioner should raise bilateral bill on the solar generator, from COD of the transmission asset to the date of commissioning of the generating plant if the generating station is not commissioned. It is observed that 400 MW of solar generation has been commissioned and Asset-I and Asset-II are in use. Therefore, the transmission charges for Asset-I and Asset-II shall be recovered through PoC mechanism as provided in the 2010 Sharing Regulations. As regards Asset-III, the Petitioner has claimed its COD as 3.7.2018 under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations as the associated generating system under the scope of APSPCL is not ready. Therefore, the transmission charges of Asset-III from 3.7.2018 to COD of the associated upstream generating system under the scope of APSPCL shall be borne by APSPCL. Thereafter, billing, collection and disbursement of the transmission charges approved for the instant asset shall be governed by the provisions of the 2010 Sharing Regulations, as provided in Regulation 43 of the 2014 Tariff Regulations, subject to the outcome of the Appeal filed by TANGEDCO before APTEL.”

91. We have considered the submissions of the Petitioner. As per the above decision, the transmission charges for Asset-1 and Asset-2 shall be recovered through PoC mechanism as provided in the Sharing Regulations. The COD of Asset-3 has been approved under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations as the associated generating system under the scope of APSPCL is not ready. Therefore, the transmission charges of Asset-3 from its COD on 3.7.2018 to commissioning of the associated upstream generating system under the scope of APSPCL shall be borne by APSPCL. Thereafter, billing, collection and disbursement of the transmission charges



approved for the instant asset shall be governed by the provisions of the Sharing Regulations, subject to the outcome of the Appeal filed by TANGEDCO before APTEL.

92. The COD of Asset-1 and Asset-2 has been approved as 3.7.2018. With effect from 1.7.2011, sharing of transmission charges for Inter-State transmission systems was governed by the 2010 Sharing Regulations and with effect from 1.11.2020 (after repeal of the 2010 Sharing Regulations), sharing of transmission charges is governed by the 2020 Sharing Regulations. Accordingly, the billing, collection and disbursement of the transmission charges of Asset-1 and Asset-2 shall be recovered in terms of provisions of the 2010 Sharing Regulations and 2020 Sharing Regulations as provided in Regulation 43 of the 2014 Tariff Regulations and Regulation 57 of the 2019 Tariff Regulations respectively.

93. To summarise:

- a. The trued-up Annual Fixed Charges (AFC) allowed for 2014-19 tariff period is as follows:

Particulars	(₹ in lakh)		
	Asset-1 2018-19 (Pro-rata 183 days)	Asset-2 2018-19 (Pro-rata 272 days)	Asset-3 2018-19 (Pro-rata 272 days)
AFC	215.41	111.37	111.06

- b. Annual Fixed Charges allowed for the 2019-24 tariff period is as follows:

Asset-1

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
AFC	538.37	538.51	540.28	544.07	544.99



Asset-2

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
AFC	95.82	95.96	96.18	96.60	97.12

Asset-3

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
AFC	95.00	95.18	95.42	95.86	96.40

94. Annexure-I to Annexure-VI given hereinafter form part of the instant order.

95. This order disposes of Petition No. 185/TT/2022 in terms of above discussions and findings.

sd/-
(P. K. Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(I.S. Jha)
Member



Asset-1

2014-19	Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh)	ACE (₹ in lakh)	Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)
Capital Expenditure		Total			2018-19
Sub Station	1810.29	-	1810.29	5.28%	95.58
Total	1810.29	-	1810.29		95.58
Average Gross Block (₹ in lakh)					1810.29
Weighted Average Rate of Depreciation					5.28%



Asset-2

2014-19 Capital Expenditure	Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh)	ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)
		2018-19	Total			2018-19
Sub Station	269.04	28.37	28.37	297.41	5.28%	14.95
Total	269.04	28.37	28.37	297.41		14.95
Average Gross Block (₹ in lakh)						283.22
Weighted Average Rate of Depreciation						5.28%



Asset-3

2014-19 Capital Expenditure	Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh)	ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)
		2018-19	Total			2018-19
Sub Station	269.04	23.51	23.51	292.55	5.28%	14.83
Total	269.04	23.51	23.51	292.55		14.83
Average Gross Block (₹ in lakh)						280.79
Weighted Average Rate of Depreciation						5.28%



Asset-1

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
		2019-24	Total			2019-20	2020-21	2021-22	2022-23	2023-24
Sub Station	1810.29	0.00	0.00	1810.29	5.28%	95.58	95.58	95.58	95.58	95.58
Total	1810.29	0.00	0.00	1810.29		95.58	95.58	95.58	95.58	95.58
Average Gross Block (₹ in lakh)						1810.29	1810.29	1810.29	1810.29	1810.29
Weighted Average Rate of Depreciation						5.28%	5.28%	5.28%	5.28%	5.28%



Asset-2

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
		2019-24	Total			2019-20	2020-21	2021-22	2022-23	2023-24
Sub Station	297.41	0.00	0.00	297.41	5.28%	15.70	15.70	15.70	15.70	15.70
Total	297.41	0.00	0.00	297.41		15.70	15.70	15.70	15.70	15.70
Average Gross Block (₹ in lakh)						297.41	297.41	297.41	297.41	297.41
Weighted Average Rate of Depreciation						5.28%	5.28%	5.28%	5.28%	5.28%



Asset-3

2019-24 Capital Expenditure	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	Projected ACE (₹ in lakh)		Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation as per Regulations	Annual Depreciation as per Regulations (₹ in lakh)				
		2019-24	Total			2019-20	2020-21	2021-22	2022-23	2023-24
Sub Station	292.55	0.00	0.00	292.55	5.28%	15.45	15.45	15.45	15.45	15.45
Total	292.55	0.00	0.00	292.55		15.45	15.45	15.45	15.45	15.45
Average Gross Block (₹ in lakh)						292.55	292.55	292.55	292.55	292.55
Weighted Average Rate of Depreciation						5.28%	5.28%	5.28%	5.28%	5.28%

