

# CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 150/TT/2020

**Coram:**

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

**Date of Order: 26.09.2021**

**In the Matter of:**

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing-up of transmission tariff of 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for LILO of existing Neyveli TS-II–Pondicherry 400 kV Single circuit at NNTPS generation switchyard under “Transmission system for evacuation of power from 2X500 MW Neyveli Lignite Corporation Ltd. TS-1 (Replacement) (NNTPS)” in Southern Region.

**And in the Matter of:**

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

**...Petitioner**

**Versus**

1. Karnataka Power Transmission Corporation Limited,  
Kaveri Bhavan,  
Bangalore - 560009.
2. Transmission Corporation of Andhra Pradesh Limited,  
Vidyut Soudha,  
Hyderabad - 500082.
3. Kerala State Electricity Board,  
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,  
P&T Colony, Seethmmadhara,  
Vishakhapatnam, Andhra Pradesh.
7. Southern Power Distribution Company of Andhra Pradesh Limited,  
Srinivasasa Kalyana Mandapam Backside,  
Tiruchanoor Road, Kesavayana Gunta, Tirupati - 517501,  
Chittoor District, Andhra Pradesh.
8. Central Power Distribution Company of Andhra Pradesh Limited,  
Corporate Office, Mint Compound,  
Hyderabad - 500063, Andhra Pradesh.
9. Northern Power Distribution Company of Andhra Pradesh Limited,  
Opp. NIT Petrol Pump, Chaitanyapuri, Kazipet,  
Warangal - 506004, Telangana.
10. Bangalore Electricity Supply Company Limited,  
Corporate Office, K.R.Circle,  
Banglore - 560001, Karnataka.
11. Gulbarga Electricity Supply Company Limited,  
Station Main Road,  
Gulburga, Karnataka.
12. Hubli Electricity Supply Company Limited,  
Navanagar, PB Road,  
Hubli, Karnataka.
13. MESCOM Corporate Office,  
Paradigm Plaza, AB Shetty Circle,  
Mangalore - 575001, Karnataka.
14. Chamundeswari Electricity Supply Corporation Limited,  
# 927, L J Avenue, Ground Floor, New Kantharaj Urs Road,  
Saraswaturam, 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. Tamil Nadu Generation and Distribution Corporation Limited,  
(Formerly Tamil Nadu Electricity Board -TNEB),  
NPKRR Maaligai, 800, Anna Salai,  
Chennai – 600002.
19. NLC India Limited,  
Corporate Office, Neyveli - 607801,  
Tamil Nadu.

....Respondents

**For Petitioner:** Shri S.S. Raju, PGCIL  
Shri D.K. Biswal, PGCIL  
Shri V.P. Rastogi, PGCIL  
Shri A.K. Verma, PGCIL

**For Respondent:** Shri B. Vinodh Kanna, Advocate, TANGEDCO  
Ms. R. Ramalakshmi, TANGEDCO  
Shri. R. Srinivasan, TANGEDCO

### **ORDER**

The Petitioner, Power Grid Corporation of India Limited, a deemed transmission licensee, has filed the instant petition for truing up of transmission tariff for the 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and for determination of tariff for the period from 1.4.2019 to



31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “ the 2019 Tariff Regulations”) in respect of **Asset-1**: LILO of existing Neyveli TS-II – Pondicherry 400 kV S/C at NNTPS generation switchyard under “Transmission system for evacuation of power from 2X500 MW Neyveli Lignite Corporation Ltd. TS-1 (Replacement) (NNTPS)” in the Southern Region (hereinafter referred to as “the transmission system”).

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

- “1) Approve the trued up Transmission Tariff for 2014-19 block and transmission tariff for 2019-24 block for the assets covered under this petition, as per para 10.2 and 11.0 above.*
- 2) Approve the Completion cost and additional capitalization incurred during 2014-19, also allow the projected additional capitalization during 2019-24.*
- 3) Allow the petitioner to submit the Revised Cost estimate for the project.*
- 4) Allow the petitioner to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission as provided in Tariff Regulation 2014 and Tariff regulations 2019 as per para 10.2 and 11.0 above for respective block.*
- 5) Approve the reimbursement of expenditure by the beneficiaries towards petition filing fee, and expenditure on publishing of notices in newspapers in terms of Regulation 70 (1) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, and other expenditure ( if any) in relation to the filing of petition.*
- 6) Allow the petitioner to bill and recover Licensee fee and RLDC fees and charges, separately from the respondents in terms of Regulation 70 (3) and (4) Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.*
- 7) Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the respondents.*
- 8) Allow the petitioner to file a separate petition before Hon’ble Commission for claiming the overall security expenses and consequential IOWC on that security expenses as mentioned at para 11.6 above.*



9) Allow the 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 Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.”

### **Background**

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

a) The Investment Approval (IA) of the transmission system was accorded by the Board of Directors of the Petitioner Company on 11.5.2017 and the same was issued vide Memorandum Ref.: C/CP/PA 1718-06-0A-IA006 dated 6.6.2017, at an estimated cost of ₹18617 lakh Including IDC of ₹951 lakh at February 2017 price level.

b) The scope of the transmission system was discussed and agreed in the 35<sup>th</sup>, 37<sup>th</sup> and 39<sup>th</sup> meeting of Standing Committee on Power System Planning in the Southern Region held on 4.1.2013, 31.7.2014 and 28.12.2015 respectively. Further, the transmission system has also been agreed in the 26<sup>th</sup> and 29<sup>th</sup> meeting of Southern Region Power Committee (SRPC) held on 20.12.2014 and 5.3.2016 respectively. Ministry of Power (MoP) vide letter dated 14.3.2016 has approved implementation of the transmission system by the Petitioner under compressed time schedule through regulated tariff mechanism.

c) The details of the transmission assets under the transmission system are as follows:

Sl. No.	Asset Name	COD	Petition No.
1	LILO of existing Neyveli TS-II – Pondicherry 400 kV S/C at NNTPS generation switchyard	26.6.2018	150/TT/2020 (Instant petition)
2	400 kV D/C Twin Line NNTPS Switchyard - Ariyalur (Villupuram) (The said line could not be terminated at Ariyalur Sub-station due to non-readiness of new Ariyalur Sub-station being implemented by TANTRANSOCO. The said line is connected with one circuit of LILO section of	9.7.2020	Petition yet to be filed



	existing Pugalur- Kalivindapattu 400 KV D/C Line at Ariyalur to form NNTPS-Pugalur 400 kV circuit and NNTPS- Kalivindapattu 400 kV circuit as an interim arrangement as per the approval given by CEA vide letter dated. 9.3.2020)		
3	2 Numbers of 400 kV line bays at Ariyalur Sub-station (TANTRANSCO) for terminating NNTPS switchyard–Ariyalur (Villupuram) 400KV D/C line	30.11.2020 (Anticipated)	

\* The complete scope of the work is not covered in the instant petition.

d) The details of commercial operation (COD) of Asset-I are as follows:

Asset	SCOD	COD	Time Over-run
Asset-1	10.6.2018	26.6.2018	16 days

e) The Commission *vide* order dated 12.4.2019 in Petition No. 233/TT/2018 approved COD of Asset-I as 26.6.2018 under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations.

f) Based on the admitted capital cost of ₹1384.93 lakh as on COD and the projected Additional Capital Expenditure (ACE) of ₹621.85 lakh during 2014-19 period, the transmission tariff in respect of Asset-I was approved by the Commission *vide* order dated 12.4.2019 in Petition No. 233/TT/2018 for the 2014-19 period.

4. The Respondents are distribution licensees, power departments, power utilities and transmission licensees who 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 of this petition has been published in the newspaper in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notice published in the newspaper by the Petitioner. Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO), Respondent No. 18, *vide* affidavit dated 5.6.2021 has filed its reply



and has raised the issues of cost overrun, reasons for Additional Capital Expenditure (ACE) claimed in 2014-19 period, effect of CGST and sharing of transmission charges. The Petitioner has filed rejoinder to the reply of TANGEDCO vide affidavit dated 21.6.2021. The issues raised by TANGEDCO and the clarifications given by the Petitioner are considered in the relevant portions of this order.

6. The hearing in this matter was held on 8.6.2021 through video conference and the order was reserved.

7. This order is issued considering the submissions made by the Petitioner in the petition *vide* affidavit dated 4.1.2020 and affidavit dated 23.9.2020, reply filed by TANGEDCO and the Petitioner's rejoinder thereto.

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

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

9. The details of the trued-up transmission charges claimed by the Petitioner for Asset-I is as follows:

Particulars	(₹ in lakh)
	2018-19 (Pro-rata 279 days)
Depreciation	68.42
Interest on Loan	68.34
Return on Equity	76.67
O&M Expenses	2.43
Interest on Working Capital	4.55
<b>Total</b>	<b>220.41</b>

10. The details of the trued-up Interest on Working Capital (IWC) claimed by the Petitioner in respect of the for Asset-I is as follows:



(₹ in lakh)

Particulars	2018-19 (Pro-rata 279 days)
O&M Expenses	0.27
Maintenance spares	0.48
Receivables	48.06
<b>Total working capital</b>	<b>48.81</b>
Rate of interest	12.20
<b>Interest on Working Capital</b>	<b>4.55</b>

### **Weighted Average Life (WAL) of the Transmission System**

11. WAL has been determined based on the admitted capital cost of individual elements as on COD and their respective life as specified in the 2014 Tariff Regulations. Accordingly, WAL of Asset-I commissioned during 2014-19 period has been worked out as 35 years as follows:

Particulars	Life (in years) (1)	Capital Cost (as on COD) (₹ in lakh) (2)	Weighted Cost (₹ in lakh) (3) = (1) * (2)	Weighted Average Life of Asset (in years) (4) = (3) / (2)
Transmission Line	35	1370.24	47958.49	<b>34.7900</b> <b>(Rounded off to 35 years)</b>
PLCC	15	14.54	218.07	
<b>Total</b>		<b>1384.78</b>	<b>48176.56</b>	

### **Capital Cost**

12. The capital cost of Asset-I is allowed in accordance with Regulation 9(3) of the 2014 Tariff Regulations. The Commission vide order dated 12.4.2019 in Petition No. 233/TT/2018 had allowed the capital cost and the projected ACE during the period from COD to 31.3.2019 as follows:

(₹ in lakh)

Asset	Apportioned Approved Capital Cost (as per FR)	Admitted Capital Cost (as on COD)	Projected ACE (2014-19)	Total Capital Cost (as on 31.3.2019)
Asset-1	1929.28	1384.93	621.85	2006.78





13. The Petitioner in the instant true up petition, as per auditor certificate dated 29.6.2019, has submitted the capital cost as on COD and actual ACE during 2014-19 period after considering IDC discharge as follows:

(₹ in lakh)

Asset	Apportioned approved Capital Cost (as per FR)	Capital Cost (as on COD)	ACE Claimed	Total Capital Cost (as on 31.3.2019)
			2018-19	
Asset-1	1929.28	1385.11*	614.08**	1999.19

\* IDC of ₹30.36 lakh deducted as on COD (The Petitioner has submitted undischarged IDC of ₹30.36 lakh, whereas the Commission determined un-discharged IDC of ₹30.54 lakh vide order dated 12.4.2019 in Petition No. 233/TT/2018)

\*\*includes undischarged IDC of ₹30.18 lakh

### Cost over-run

14. The Petitioner has submitted RCE (revised cost estimates) vide affidavit dated 23.9.2020. The estimated completion cost claimed by the Petitioner are as follows:

(₹ in lakh)

Assets	Apportioned approved FR Capital Cost	Apportioned Approved Capital Cost (as per RCE)	Estimated Completion Cost
Asset-1	1929.28	2431.66	2148.07

15. TANGEDCO has submitted that the Petitioner has not submitted the justification for cost over-run and stated that the reasons for cost over-run has already been explained in Petition No. 233/TT/2018. TANGEDCO has submitted that there is difference of ₹218.79 lakh between FR cost and final cost as on 31.3.2019. Despite the restriction of the cost over-run and direction to furnish RCE and justification for cost over-run by the Commission vide order dated 12.4.2019 in Petition No. 233/TT/2018, the Petitioner has failed to comply the directions of the Commission. Hence, TANGEDCO has submitted that in the absence of RCE and justification for cost over-run, the excess amount over and above the FR cost may be disallowed and



the Petitioner may be directed to bestow diligence while preparing estimates so that there is no abnormal variation between the completion cost and FR cost.

16. In response, the Petitioner has submitted that the details of estimated completion cost vis-à-vis apportioned approved cost (FR) in respect Asset-I as follows:

(₹ in lakh)

Asset	Apportioned approved FR Capital Cost	Apportioned approved Capital Cost (as per RCE)	Estimated Completion Cost	Variation (+ Within, -increase) w.r.t. FR	Variation (+ within, -increase) w.r.t. RCE
1	2	3	4	5=(2-4)	6=(3-4)
Asset-1	1929.28	2431.66	2148.07	-218.79	283.59

17. The Petitioner has submitted that the estimated completion cost in respect of Asset-I is within the apportioned approved RCE cost. The reasons for item-wise cost variation between approved cost as per FR and estimated completion cost is explained in Form-5 which has been submitted by the Petitioner. Further, the Petitioner has submitted the item-wise cost variation observed during the execution of Asset-I as follows:

(₹ in lakh)

Sr. No.	Particulars	As per FR	As per RCE	As per Estimated Completion Cost	Variation (+ within, -increase) w.r.t. FR	Variation (+ within, -increase) w.r.t. RCE
1	Compensation	139.29	380.15	445.21	-305.92	-65.06
2	Tower Steel	709.91	810.27	753.91	-44.00	56.36
3	Conductor	150.63	197.27	123.01	27.62	74.26
4	GS Earth Wire	28.61	14.08	9.90	18.71	4.18
5	Insulators	12.38	45.27	39.90	-27.52	5.37
6	Hardware Fittings	24.34	59.51	23.95	0.39	35.56
7	Erection, Stringing and Civil works including foundation	428.97	361.68	393.67	35.30	-31.99
8	Taxes & Duties	130.53	246.15	217.12	-86.59	29.03



9	IEDC	228.14	164.37	63.82	164.32	100.55
10	IDC	46.15	134.05	40.95	5.2	93.10
11	Others	30.33	18.86	36.63	-6.3	-17.77
	<b>TOTAL</b>	<b>1929.28</b>	<b>2431.66</b>	<b>2148.07</b>	<b>-218.79</b>	<b>283.59</b>

18. The Petitioner has submitted the following reasons for cost variation:

a) There is increase of cost of about ₹305.92 lakh with respect to FR on account of compensation paid towards crop, tree, PTCC, etc. The variation is due to the actual assessment of crops/ trees/ land, household and forest area encountered in line corridor by concerned Government officials of revenue department, the quantity and value of which are much lesser than the notional estimate. Tree compensation has been worked out/ paid based on tree enumeration in the corridor and rates obtained from Horticulture Department/ DC. Similarly, crop compensation has been paid/ estimated based on the rates obtained from Agriculture Department. Corridor compensation for construction of the line has been estimated based on the individual orders received from respective Deputy Commissioners of the District through which the line is passing and are in line with the MoP guidelines dated 15.10.2015 for tower footing and corridor.

b) The FR costs of individual items/ materials are exclusive of taxes and duties which have been indicated under a separate head while the cost of items as per the actual expenditure is inclusive of taxes and duties. Increase of about ₹86.59 lakh is mainly on accounts of actual taxes & duties, octroi, excise duty, GST, etc. paid based on the prevailing rate and charges raised by respective district, state and statutory authorities at the time of execution of the transmission system.

c) IEDC including contingencies, establishment and other overheads for Asset-I in approved FR was estimated at ₹228.14 lakh, whereas, based on the actual expenditure incurred, IEDC works out to ₹63.82 lakh. Thus, IEDC under the transmission system has decreased by ₹164.32 lakh with respect to FR in case of Asset-I. It is submitted that during estimation for FR, 3% and 10.75% of equipment cost and civil works has been considered for contingency and IEDC



respectively. The actual amount of IEDC, establishment and contingency has been considered at the time of claim of tariff.

d) Regarding variation in cost of individual item, it is submitted that the packages under subject scope of works comprise of a large number of items and the same are awarded through open competitive bidding. In the said bidding process, bids are received from multiple parties quoting different rates for various BOQ items under the said package. Further, lowest bidder can be arrived at/ evaluated on overall basis only. Hence, item-wise unit prices in contracts and its variation over unit rate considered in FR estimates are beyond the control of the petition. Here it may be mentioned that being a Government enterprise, the Petitioner has been following a well laid down procurement policy which ensures both transparency and competitiveness in the bidding process. Through this process, lowest possible market prices for required product/ services are obtained and contracts are awarded on the basis of lowest evaluated eligible bidder. The best competitive bid prices against tenders may vary as compared to the cost estimate depending upon prevailing market forces, bidder's perception and site requirements. Whereas the estimates are prepared by the petitioner as per well-defined procedures. The FR cost estimate is broad indicative cost worked out generally on the basis of average unit rates of recently awarded contracts/ general practice.

19. The Petitioner has further submitted that the tariff in respect of Asset-I has been claimed on basis of the capital cost as on COD and actual/ projected expenditure up to 31.3.2020. Further, RCE was approved by the competent authority of the Petitioner company *vide* letter dated 27.3.2020, at an estimated cost of ₹21966.00 lakh, including IDC of ₹1211.00 lakh. The completion cost of Asset-I is within the apportioned approved cost of RCE.

20. We have considered the submissions of the Petitioner and TANGEDCO. As compared to apportioned approved FR cost, the estimated completion cost is ₹218.79 lakh more which is approximately 11.34% of the approved FR cost. However, the



estimated completion cost is within the capital cost as per RCE as submitted by the Petitioner. Therefore, there is no cost over-run in Asset-I .

**Time over-run**

21. As per IA, Asset-I was scheduled to be commissioned within 13-26 months progressively from the date of IA, i.e. 11.5.2017. The Petitioner has stated that the commissioning schedule of Asset-I was 10.6.2018 against which its COD has been approved as 26.6.2018. Hence, there is time over-run of 16 days.

22. The Commission *vide* order dated 12.4.2019 in Petition No. 233/TT/2018 approved COD of Asset-I as 26.6.2018 under proviso (ii) of Regulation 4(3) of the 2014 Tariff Regulations and no liberty was given to the Petitioner for revision of the same. Therefore, we are not inclined to condone the time over-run of 16 days.

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

23. The Commission *vide* order dated 12.4.2019 in Petition No. 233/TT/2018 had allowed the capital cost of ₹1384.93 lakh after adjusting the total un-discharged IDC as on COD and IDC of ₹30.54 lakh was disallowed for determination of tariff for 2014-19 period.

24. The Petitioner has claimed IDC on the basis of cash out flow. The details of IDC claimed by the Petitioner are as follows:

(₹ in lakh)				
Asset	IDC (as per Auditor’s Certificate)	IDC discharged (up to COD)	IDC discharged (2018-19)	IDC discharged (2019-20)
Asset-1	40.95	10.59	30.18	0.18



25. The Petitioner in the instant petition has claimed undischarged IDC as on COD of ₹30.36 lakh. Based on the Auditor's certificate, the un-discharged IDC as on COD to be allowed as ACE on actual payment has been worked out and is as follows:

(₹ in lakh)

Asset	IDC (as per Auditor's Certificate) (A)	Allowable IDC (B)	IDC discharged (up to COD) (C)	IDC Discharged (2018-19) (D)=(B)-(C)	IDC Disallowed (E)=(A)-(B)
Asset-1	40.95	37.49	10.26	27.23	3.46

26. The Petitioner had claimed IEDC of ₹63.82 lakh in respect of Asset-I in Petition No. 233/TT/2018. The Petitioner had submitted that IEDC had been discharged on or before COD of Asset-I and the same was allowed *vide* order dated 12.4.2019 in Petition No. 233/TT/2018. Further, the Petitioner has not claimed any additional IEDC in the instant petition. The claimed IEDC as on COD is within the permissible percentage of hard cost as indicated in the approved abstract cost estimate.

27. In case of Asset-I, the time over-run of 16 days is disallowed. Hence, there is disallowance of IEDC. IEDC claimed in respect of Asset-I. IEDC disallowed due to the time over-run and IEDC considered as on COD for the purpose of tariff determination is as follows:

(₹ in lakh)

Asset	IEDC (as per Auditor's Certificate) (A)	IEDC (disallowed due to time over-run not condoned) (B)	IEDC (allowed) (C)
Asset-1	63.82	1.34	62.48

28. The Petitioner has not claimed any additional initial spares in the instant petition.



### Capital Cost as on COD

29. The capital cost of the transmission system has been calculated in accordance with the Regulation 9(3) of the 2014 Tariff Regulations.

30. The details of the capital cost as on COD now approved after adjustment of IDC and IEDC, are as follows:

(₹ in lakh)					
Approved Appportioned Capital Cost (as per FR)	Capital Cost (as per Auditor's Certificate)	IDC (discharged after COD)	IDC (disallowed for time over-run)	IEDC (disallowed for time over-run)	Capital Cost allowed (as on COD)
	A	B	C	D	E=(A-B-C-D)
1929.28	1415.47	27.23	3.46	1.34	1383.44

### Additional Capital Expenditure (ACE)

31. The Commission *vide* order dated 12.4.2019 in Petition No. 233/TT/2018 had allowed ACE of ₹621.85 lakh on account of balance and retention payments falling within Regulation 14(1)(i) of the 2014 Tariff Regulations and the details are as follows:

(₹ in lakh)	
Asset	ACE
	2018-19
Asset-1	621.85*

*\*includes undischarged IDC of ₹27.25 lakh on cash basis for 2018-19*

32. Against this, the Petitioner has claimed ACE of ₹583.90 lakh in accordance with Regulation 14(1)(i) (undischarged liabilities recognized to be payable at a future date) and 14(1)(ii) (works deferred for execution) respectively of the 2014 Tariff Regulations. The details of ACE claimed by the Petitioner in respect of Asset-I are as follows:

(₹ in lakh)		
Particulars	Regulation	ACE claimed (2018-19)
Balance and retention payments for liabilities other than IDC	14(1)(i)	583.90



Works deferred for execution	14(1)(ii)	
Discharge of IDC Liability	14(1)(i)	30.18
<b>Total ACE</b>		<b>614.08</b>

33. TANGEDCO has submitted that the Petitioner has stated the reason for ACE for the true-up for 2014-19 period and transmission tariff for 2019-24 period as "Un-discharged liability & unexecuted works". TANGEDCO has further submitted that in Form-7, the reason for ACE is given as balance and retention work and in the main petition, the reason given is on account of un-discharged liability & unexecuted works. TANGEDCO has asked for clarification for this discrepancy by the Petitioner and stated that the Petitioner is not disclosing the reason for withholding the payment and the name of contractors in detail. There is no list of unexecuted works by the Petitioner and mere mentioning of the amount or filing of Auditor's certificate does not entitle the Petitioner to the claim. TANGEDCO has further submitted that the provisions of Regulation 14 are very clear and the Petitioner is required to prove the claim made by it. TANGEDCO has requested that ACE claimed by the Petitioner may be allowed only on submission of clarifications and justification.

34. In response, the Petitioner has submitted that ACE allowed by the Commission were based on projections. The Petitioner has submitted that while projecting the estimated ACE, contracts are not closed and liabilities do not get finalized. However, in the instant true up Petition, ACE is claimed on the basis of actual payments made to the contractor after receipt of final invoices from the contractor and incorporating the amendments. The Petitioner has also submitted that ACE incurred by the Petitioner after closing of contract may happen to be higher or lower than the estimated ACE prepared and submitted. The payments were made after submission of invoice and after reconciliation in accordance with contractual clause as per





provisions of contract. ACE claimed in respect of Asset-I is within the cut-off date and the same is as per the original scope of work. Also, ACE claimed in 2019-24 period is on account of undischarged liability towards final payment/ withheld payment due to contractual exigencies for works executed within cut-off date and work to be executed within cutoff date. ACE for 2019-20 period for Asset-I has been claimed under Regulation 24(1)(a) (Undischarged liabilities) and Regulation 24(1)(b) (Unexecuted works) of 2019 Tariff Regulations. The details of underlying reasons for ACE for Asset-I is given in Form-7 enclosed with the instant petition.

35. We have considered the submission of the Petitioner and TANGEDCO. The COD of Asset-I is 26.6.2018. Accordingly, the cut-off date for Asset-I is 31.3.2021. Therefore, ACE claimed in 2018-19 period in respect of Asset-I is within cut-off date.

36. The contractor-wise details submitted by the Petitioner are as follows:

(₹ in lakh)

Particulars	Year of ACE	Party Name	Amount	Remarks
Transmission line	2018-19	M/S Unitech Power Transmission Ltd	582.37	Liability Payment
PLCC			1.53	
<b>TOTAL</b>			<b>583.91</b>	

37. The un-discharged IDC liability of ₹27.23 lakh as on COD has been allowed as ACE during the year of its discharge i.e. 2018-19 period. ACE for 2018-19 period in respect of Asset-I is allowed under Regulation 14(1)(i) of 2014 Regulations (undischarged liabilities) and Regulation 14(1)(ii) of 2014 Regulations (unexecuted works) within the cut-off date and the details are as follows:

(₹ in lakh)

Particulars	Regulation	ACE approved for 2018-19
Balance and retention payments for liabilities other than IDC	14(1)(i)	583.90



Works deferred for execution	14(1)(ii)	
Discharge of IDC Liability	14(1)(i)	27.23
<b>Total ACE</b>		<b>611.13</b>

38. Accordingly, capital cost considered for 2014-19 tariff period is as follows:

(₹ in lakh)			
RCE Apportioned Approved Capital Cost	Capital Cost (as on COD)	Approved ACE	Total Capital Cost (as on 31.3.2019)
		2018-19	
2431.66	1383.44	611.13	1994.57

### Debt-Equity ratio

39. The Petitioner has claimed debt-equity ratio of 70:30 as on COD. Debt-equity ratio has been considered in accordance with Regulation 19 of the 2014 Tariff Regulations. The details of the debt-equity as on COD and as on 31.3.2019 in respect of Asset-I for 2014-19 period is as follows:

Funding	Capital Cost (as on COD) (₹ in lakh)	(in %)	ACE (2014-19) (₹ in lakh)	(in %)	Total Cost (as on 31.3.2019) (₹ in lakh)	(in %)
Debt	968.41	70.00	427.79	70.00	1396.20	70.00
Equity	415.03	30.00	183.34	30.00	598.37	30.00
<b>Total</b>	<b>1383.44</b>	<b>100.00</b>	<b>611.13</b>	<b>100.00</b>	<b>1994.57</b>	<b>100.00</b>

### Depreciation

40. The Gross Block during 2014-19 period has been depreciated at weighted average rate of depreciation (WAROD). WAROD at Annexure-I has been worked out after taking into account the depreciation rates of assets as prescribed in the 2014 Tariff Regulations. Depreciation in respect of Asset-I is as follows:

(₹ in lakh)	
Particulars	2018-19 (Pro-rata 279 days)
<b>Depreciation</b>	
Opening Gross Block	1383.44
ACE	611.13
Closing Gross Block	1994.57
Average Gross Block	1689.00
Weighted average rate of Depreciation (WAROD) (in %)	5.29



Balance useful life of the asset (Year)	35
Lapsed life (Year)	0
Aggregated Depreciable Value	1520.10
<b>Depreciation during the year</b>	<b>68.29</b>
Cumulative depreciation at the end of the year	68.29
Remaining Depreciable Value at the end of the year	1451.81

41. The details of the depreciation allowed *vide* order dated 12.4.2019 in Petition No. 233/TT/2018, as claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

Particulars	(₹ in lakh)
	2018-19 (Pro-rata 279 days)
Allowed <i>vide</i> order dated 12.4.2019 in Petition No. 233/TT/2018	68.40
Claimed by Petitioner in the instant petition	68.42
Approved after true-up in this order	68.29

#### **Interest on Loan (IoL)**

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

Particulars	(₹ in lakh)
	2018-19 (Pro-rata 279 days)
<b>Interest on Loan</b>	
Gross Normative Loan	968.41
Cumulative Repayments up to Previous Year	0.00
Net Loan-Opening	968.41
Additions due to ACE	427.79
Repayment during the year	68.29
Net Loan-Closing	1327.91
Average Loan	1148.16
Weighted Average Rate of Interest on Loan (in %)	7.7719
<b>Interest on Loan</b>	<b>68.21</b>



43. The details of IoL allowed *vide* order dated 12.4.2019 in Petition No. 233/TT/2018, IoL claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

<b>Particular</b>	<b>(₹ in lakh)</b>
	<b>2018-19 (Pro-rata 279 days)</b>
Allowed vide order dated 12.4.2019 in Petition No. 233/TT/2018	67.68
Claimed by Petitioner in the instant petition	68.34
Approved after true-up in this order	68.21

**Return on Equity (RoE)**

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

<b>Year</b>	<b>Claimed effective tax rate (in %)</b>	<b>Grossed up RoE [(Base Rate)/(1-t)] (in %)</b>
2018-19	21.549	19.758

45. We have considered the submission of the Petitioner. The Commission *vide* order dated 27.4.2020 in Petition No. 274/TT/2019 arrived at the effective tax rate for the Petitioner based on the notified MAT rates and the same is given in the table below:

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

46. The MAT rates considered *vide* order dated 27.4.2020 in Petition No. 274/TT/2019 are considered for the purpose of grossing up of rate of RoE for truing



up of the tariff of 2014-19 period in terms of the provisions of 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 %)
2018-19	21.549	15.50	19.758

47. The Petitioner has claimed RoE for 2014-19 period after grossing up RoE of 15.50% with Effective Tax rates (based on MAT rates) for each year as per 2014 Tariff Regulations. RoE is trued up on the basis of the MAT rate applicable in the respective years and is allowed as follows:

(₹ in lakh)	
Particulars	2018-19 (Pro-rata 279 days)
<b>Return on Equity</b>	
Opening Equity	415.03
Additions due to ACE	183.34
Closing Equity	598.37
Average Equity	506.70
Return on Equity (Base Rate) (%)	15.500
MAT Rate for respective year (%)	21.549
Rate of Return on Equity (%)	19.758
<b>Return on Equity</b>	<b>76.52</b>

48. The details of RoE allowed *vide* order dated 12.4.2019 in Petition No. 233/TT/2018, RoE claimed by the Petitioner in the instant petition and trued-up in the instant order is as follows:

(₹ in lakh)	
Particular	2018-19 (Pro-rata 279 days)
Allowed <i>vide</i> order dated 12.4.2019 in Petition No. 233/TT/2018	76.21
Claimed by Petitioner in the instant petition	76.67
Approved after true-up in this order	76.52

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

49. O&M Expenses claimed by the Petitioner in respect of Asset-I are as follows:



Particulars	2018-19 (Pro-rata 279 days)
D/C Twin/Triple Conductor	
<b>AP-1/0 TO NNTPS GTY D/C (km)</b>	0.47
Norms (₹ lakh/bay)	0.806
<b>O&amp;M Expenses (₹ in lakh)</b>	<b>0.29</b>
Multi Ckt Twin/ Triple	
<b>LILO TO AP-1/0 M/C PORTION (km)</b>	1.98
Norms (₹ lakh/bay)	1.413
<b>O&amp;M Expenses (₹ in lakh)</b>	<b>2.14</b>
<b>Total O&amp;M Expenses (₹ in lakh)</b>	<b>2.43</b>

50. We have considered the submissions of the Petitioner. O&M Expenses norms specified for the elements covered in Asset-I under Regulation 29(3) of the 2014 Tariff Regulations are as follows:

Particulars	2018-19 (Pro-rata 279 days)
D/C Twin/Triple Conductor	
<b>AP-1/0 TO NNTPS GTY D/C (km)</b>	<b>0.47</b>
Norms (₹ lakh/bay)	0.806
<b>O&amp;M Expenses (₹ in lakh)</b>	<b>0.29</b>
Multi Ckt Twin/ Triple	
<b>LILO TO AP-1/0 M/C PORTION (km)</b>	<b>1.98</b>
Norms (₹ lakh/bay)	1.413
<b>O&amp;M Expenses (₹ in lakh)</b>	<b>2.14</b>
<b>Total O&amp;M Expenses (₹ in lakh)</b>	<b>2.43</b>

51. The details of O&M expenses allowed *vide* order dated 12.4.2019 in Petition No. 233/TT/2018, O&M expenses claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

Particulars	(₹ in lakh) 2018-19 (Pro-rata 279 days)
Allowed <i>vide</i> order dated 12.4.2019 in Petition No. 233/TT/2018	2.43
Claimed by Petitioner in the instant petition	2.43
Approved after true-up in this order	2.43



### **Interest on Working Capital (IWC)**

52. IWC has been worked out as per the methodology provided in Regulation 28 of the 2014 Tariff Regulations and is allowed in respect of Asset-I as follows:

(₹ in lakh)

Particulars	2018-19 (Pro-rata 279 days)
<b>Interest on Working Capital</b>	
O&M Expenses (O&M Expenses for One month)	0.26
Maintenance Spares (15% of O&M Expenses)	0.48
Receivables (Equivalent to Two months of annual fixed cost)	47.97
<b>Total Working Capital</b>	<b>48.71</b>
Rate of Interest (in %)	12.20
<b>Interest on Working Capital</b>	<b>4.54</b>

53. The details of IWC allowed *vide* order dated 12.4.2019 in Petition No. 233/TT/2018, IWC claimed by the Petitioner in the instant petition and trued-up in the instant order are as follows:

(₹ in lakh)

Particulars	2018-19 (Pro-rata 279 days)
Allowed vide order dated 12.4.2019 in Petition No. 233/TT/2018	4.53
Claimed by Petitioner in the instant petition	4.55
Approved after true-up in this order	4.54

### **Approved Annual Fixed Charges for 2014-19 Period**

54. The trued-up Annual Fixed Charges approved in respect of Asset-I for 2014-19 tariff period are as follows:

(₹ in lakh)

Particulars	2018-19 (Pro-rata 279 days)
Depreciation	68.29
Interest on Loan	68.21
Return on Equity	76.52
O&M Expenses	2.43
Interest on Working Capital	4.54
<b>Total</b>	<b>219.99</b>



55. Accordingly, Annual Transmission Charges allowed *vide* order dated 12.4.2019 in Petition No. 233/TT/2018, as claimed by the Petitioner in the instant petition and as approved after truing up in the instant order are as follows:

Particulars	(₹ in lakh)
	2018-19 (Pro-rata 279 days)
Allowed vide order dated 12.4.2019 in Petition No. 233/TT/2018	219.24
Claimed by the Petitioner in the instant petition	220.41
Approved after true-up in this order	219.99

**Determination of Annual Fixed Charges for 2019-24 Tariff Period**

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

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	109.66	113.59	113.59	113.59	113.59
Interest on Loan	104.97	100.27	91.29	82.30	73.24
Return on Equity	122.91	127.32	127.32	127.32	127.32
O&M Expenses	3.80	3.92	4.04	4.18	4.32
Interest on Working Capital	5.24	5.32	5.19	5.06	4.91
<b>Total</b>	<b>346.58</b>	<b>350.42</b>	<b>341.43</b>	<b>332.45</b>	<b>323.38</b>

57. The Petitioner has claimed the following IWC in respect of Asset-I for 2019-24 period:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	0.32	0.33	0.34	0.35	0.36
Maintenance Spares	0.57	0.59	0.61	0.63	0.65
Receivables	42.61	43.20	42.09	40.99	39.76
<b>Total Working Capital</b>	<b>43.50</b>	<b>44.12</b>	<b>43.04</b>	<b>41.97</b>	<b>40.77</b>
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
<b>Interest on Working Capital</b>	<b>5.24</b>	<b>5.32</b>	<b>5.19</b>	<b>5.06</b>	<b>4.91</b>

**Capital Cost**

58. Regulation 19 of the 2019 Tariff Regulations provide 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 renovation and modernisation as admitted by this Commission in accordance with these regulations;*
- (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*



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

59. The Petitioner has claimed capital cost of ₹1999.19 lakh as on 31.3.2019 in respect of Asset-I vide Auditor's Certificate dated 29.6.2019. The admitted capital cost as on 31.3.2019 is considered as the opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations. The Commission has approved the closing capital cost of ₹1994.57 lakh as on



31.3.2019 and the same has been considered as the opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

### **Additional Capital Expenditure (ACE)**

60. Regulation 24 and Regulation 25 of the 2019 Tariff Regulations provide as follows:

***“24. Additional Capitalisation within the original scope and upto the cut-off date:***

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

- (a) Undischarged liabilities recognized to be payable at a future date;*
- (b) Works deferred for execution;*
- (c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;*
- (d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;*
- (e) Change in law or compliance of any existing law; and*
- (f) Force Majeure events:*

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

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

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

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

- (a) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law;*
- (b) Change in law or compliance of any existing law;*
- (c) Deferred works relating to ash pond or ash handling system in the original scope of work;*
- (d) Liability for works executed prior to the cut-off date;*
- (e) Force Majeure events;*



(f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and  
 (g) Raising of ash dyke as a part of ash disposal system.

(2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:

(a) The useful life of the assets is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;

(b) The replacement of the asset or equipment is necessary on account of change in law or Force Majeure conditions;

(c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and

(d) The replacement of such asset or equipment has otherwise been allowed by the Commission.”

61. The Petitioner vide Auditor's Certificate dated 29.6.2019 has claimed ACE of ₹148.88 lakh during 2019-24 in respect of Asset-I under Regulation 24(1)(a) (undischarged liability) and 24(1)(b) (unexecuted works) of the 2019 Tariff Regulations. The Petitioner has claimed ACE on account of undischarged liability towards final payment/ withheld payment due to compensation for works executed within the cut-off date as follows:

(₹ in lakh)		
Particulars	Regulation	ACE claimed for 2019-20
Undischarged liabilities recognized to be payable at a future date	24(1)(a) & 24(1)(b)	148.70
Change in law or compliance of any existing law		
Discharge of IDC Liability		0.18
<b>Total ACE</b>		<b>148.88</b>

62. We have considered the submissions of the Petitioner. ACE claimed by the Petitioner has been allowed under Regulation 25(1)(a) and 25(1)(b) of the 2019 Tariff Regulations, as it is towards undischarged liabilities for works executed prior to the cut-off date. The total capital expenditure as on 31.3.2024 is within the apportioned approved cost of ₹2431.66 lakh.



63. The contractor-wise details submitted by the Petitioner are as follows:

(₹ in lakh)				
Transmission line	2019-20	Tree and Crop Compensation	49.68	Liability Payment
Transmission line		M/S Unitech Power Transmission Ltd	99.02	Unexecuted works
<b>TOTAL</b>			<b>148.70</b>	

64. Accordingly, ACE for 2019-20 and the capital cost as on 31.3.2024 in respect of Asset-I considered are as follows:

(₹ in lakh)		
Capital Cost admitted (as on 1.4.2019)	ACE (2019-20)	Capital Cost allowed (as on 31.3.2024)
1994.57	148.70	2143.27

65. Therefore, the admitted capital cost of ₹1994.57 lakh as on 1.4.2019 and ₹2143.57 lakh as on 31.3.2024 has been considered for the purpose of determination of transmission tariff for 2019-24 period in accordance with Regulation 19 of the 2019 Tariff Regulations.

### **Debt-Equity ratio**

66. Regulation 18 of the 2019 Tariff Regulations provide as follows:

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

Provided that:

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

**Explanation-**The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding



of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.

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

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

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

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

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

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.”

67. The details of debt-equity ratio considered for the purpose of tariff determination for 2019-24 period is as follows:

<b>Funding</b>	<b>Capital cost (as on 1.4.2019) (₹ in lakh)</b>	<b>(in %)</b>	<b>ACE (2019-24) (₹ in lakh)</b>	<b>(in %)</b>	<b>Capital cost (as on 31.3.2024) (₹ in lakh)</b>	<b>(in %)</b>
Debt	1396.20	70.00	104.09	70.00	1500.29	70.00
Equity	598.37	30.00	44.61	30.00	642.98	30.00
<b>Total</b>	<b>1994.57</b>	<b>100.00</b>	<b>148.70</b>	<b>100.00</b>	<b>2143.27</b>	<b>100.00</b>





## Depreciation

68. Regulation 33 of the 2019 Tariff Regulations provide 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 there of including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:*

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

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

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

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

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

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

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

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



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

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

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

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

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

69. The Gross Block during 2019-24 tariff period has been depreciated at WAROD. WAROD at Annexure-II has been worked out after taking into account the depreciation rates of Asset-I as prescribed in the 2019 Tariff Regulations and depreciation allowed is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Depreciation</b>					
Opening Gross Block	1994.57	2143.27	2143.27	2143.27	2143.27
Addition during the year due to projected ACE	148.70	0.00	0.00	0.00	0.00
Closing Gross Block	2143.27	2143.27	2143.27	2143.27	2143.27
Average Gross Block	2068.92	2143.27	2143.27	2143.27	2143.27
Weighted Average Rate of Depreciation (in %)	5.29	5.29	5.29	5.29	5.29
Balance useful life at the beginning of the year (Year)	35	34	33	32	31
Lapsed Life at the beginning of the year (Year)	0	1	2	3	4
Aggregate Depreciable Value	1862.03	1928.94	1928.94	1928.94	1928.94
<b>Depreciation during the year</b>	<b>109.41</b>	<b>113.34</b>	<b>113.34</b>	<b>113.34</b>	<b>113.34</b>
Cumulative depreciation at the end of year	177.70	291.04	404.37	517.71	631.05





Remaining Depreciable Value at the end of year	1684.33	1637.91	1524.57	1411.23	1297.90
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**Interest on Loan (IoL)**

70. Regulation 32 of the 2019 Tariff Regulations provide 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.*

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

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

71. The weighted average rate of IoL has been considered on the basis of rate prevailing as on 1.4.2019. The Petitioner has prayed that the change in interest rate due to floating rate of interest applicable, if any, during 2019-24 tariff period will be



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

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	1396.20	1500.29	1500.29	1500.29	1500.29
Cumulative Repayments up to Previous Year	68.29	177.70	291.04	404.37	517.71
Net Loan-Opening	1327.91	1322.59	1209.25	1095.92	982.58
Additions due to ACE	104.09	0.00	0.00	0.00	0.00
Repayment during the year	109.41	113.34	113.34	113.34	113.34
Net Loan-Closing	1322.59	1209.25	1095.92	982.58	869.24
Average Loan	1325.25	1265.92	1152.58	1039.25	925.91
Weighted Average Rate of Interest on Loan (in %)	7.9026	7.9026	7.9026	7.9009	7.8921
<b>Interest on Loan</b>	<b>104.73</b>	<b>100.04</b>	<b>91.08</b>	<b>82.11</b>	<b>73.07</b>

### **Return on Equity (RoE)**

72. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations specify 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 due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;*

*Provided further that:*

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



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

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

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

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

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

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

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

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

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

**Illustration-**

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

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

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

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

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



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

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

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

73. The Petitioner has submitted that MAT rate is applicable to the Petitioner's company. Accordingly, MAT rate applicable in 2019-20 period has been considered for the purpose of RoE, which shall be trued-up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed in respect of Asset-I is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	598.37	642.98	642.98	642.98	642.98
Additions due to ACE	44.61	0.00	0.00	0.00	0.00
Closing Equity	642.98	642.98	642.98	642.98	642.98
Average Equity	620.68	642.98	642.98	642.98	642.98
Return on Equity (Base Rate) (in %)	15.50	15.50	15.50	15.50	15.50
MAT Rate for respective year (in %)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (in %)	18.782	18.782	18.782	18.782	18.782
<b>Return on Equity</b>	<b>116.57</b>	<b>120.76</b>	<b>120.76</b>	<b>120.76</b>	<b>120.76</b>

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

74. O&M expenses claimed by the Petitioner in respect of Asset-I for 2019-24 period are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
D/C Twin/Triple Conductor					
<b>AP-1/0 TO NNTPS GTY D/C (km)</b>	0.47	0.47	0.47	0.47	0.47
Norms (₹ lakh/bay)	0.881	0.912	0.944	0.977	1.011



<b>O&amp;M Expenses (₹ in lakh)</b>	<b>0.41</b>	<b>0.43</b>	<b>0.44</b>	<b>0.46</b>	<b>0.48</b>
Multi Ckt Twin/ Triple					
<b>LILO TO AP-1/0 M/C PORTION (km)</b>	<b>1.98</b>	<b>1.98</b>	<b>1.98</b>	<b>1.98</b>	<b>1.98</b>
Norms (₹ lakh/bay)	1.544	1.598	1.654	1.713	1.773
<b>O&amp;M Expenses (₹ in lakh)</b>	<b>3.06</b>	<b>3.16</b>	<b>3.27</b>	<b>3.39</b>	<b>3.51</b>
<b>O&amp;M Expenses for PLCC</b>	<b>0.33</b>	<b>0.33</b>	<b>0.33</b>	<b>0.33</b>	<b>0.33</b>
<b>Total O&amp;M Expenses (₹ in lakh)</b>	<b>3.80</b>	<b>3.92</b>	<b>4.04</b>	<b>4.18</b>	<b>4.32</b>

75. Regulation 35(3)(a) and Regulation 35(4) of the 2019 Tariff Regulations provide as follows:

**“35. Operation and Maintenance Expenses:**

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

<b>Particulars</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
<b>Norms for sub-station Bays (₹ Lakh per bay)</b>					
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
<b>Norms for Transformers (₹ Lakh per MVA)</b>					
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
<b>Norms for AC and HVDC lines (₹ Lakh per km)</b>					
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
<b>Norms for HVDC stations</b>					
HVDC Back-to-Back stations (Rs Lakh per 500 MW)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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

*Provided further that:*

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





*out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.*

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

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

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

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

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

77. O&M Expenses have been worked out in respect of Asset-I in accordance with Regulation 35(3)(a) of the 2019 Tariff Regulations as follows:



Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023
D/C Twin/Triple Conductor					
<b>AP-1/0 TO NNTPS GTY D/C (km)</b>	0.47	0.47	0.47	0.47	
Norms (₹ lakh/bay)	0.881	0.912	0.944	0.977	
<b>O&amp;M Expenses (₹ in lakh)</b>	<b>0.41</b>	<b>0.43</b>	<b>0.44</b>	<b>0.46</b>	
Multi Ckt Twin/ Triple					
<b>LILO TO AP-1/0 M/C PORTION (km)</b>	1.98	1.98	1.98	1.98	
Norms (₹ lakh/bay)	1.544	1.598	1.654	1.713	
<b>O&amp;M Expenses (₹ in lakh)</b>	<b>3.06</b>	<b>3.16</b>	<b>3.27</b>	<b>3.39</b>	
<b>Total O&amp;M Expenses (₹ in lakh)</b>	<b>3.47</b>	<b>3.59</b>	<b>3.72</b>	<b>3.85</b>	

### **Interest on Working Capital (IWC)**

78. 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:-*

.....

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





79. The Petitioner has submitted that it has computed IWC for 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%.

80. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. 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, whereas, ROI for 2020-21 onwards has been considered as 11.25% (SBI 1year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) and 10.50% (SBI 1-year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points) for 2021-22 onwards. The components of the working capital and interest thereon allowed is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses (O&M Expenses for One month)	0.29	0.30	0.31	0.32	0.33
Maintenance Spares (15% of O&M Expenses)	0.52	0.54	0.56	0.58	0.60
Receivables (Equivalent to 45 days of annual transmission charges)	41.72	42.24	41.09	39.99	38.77
<b>Total Working Capital</b>	<b>42.53</b>	<b>43.07</b>	<b>41.96</b>	<b>40.89</b>	<b>39.70</b>
Rate of Interest (in %)	12.05	11.25	10.50	10.50	10.50
<b>Interest on Working Capital</b>	<b>5.12</b>	<b>4.85</b>	<b>4.41</b>	<b>4.29</b>	<b>4.17</b>

### Annual Fixed Charges for 2019-24 Tariff Period

81. The transmission charges allowed in respect of Asset-I for 2019-24 tariff period are summarised as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	109.41	113.34	113.34	113.34	113.34
Interest on Loan	104.73	100.04	91.08	82.11	73.07
Return on Equity	116.57	120.76	120.76	120.76	120.76
O&M Expenses	3.47	3.59	3.72	3.85	3.99
Interest on Working Capital	5.12	4.85	4.41	4.29	4.17
<b>Total</b>	<b>339.31</b>	<b>342.58</b>	<b>333.31</b>	<b>324.35</b>	<b>315.33</b>



### **Filing Fee and the Publication Expenses**

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

### **Licence Fee & RLDC Fees and Charges**

83. 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 2019-24 tariff period.

### **Goods and Services Tax**

84. 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.

85. TANGEDCO has submitted that the Government of India has exempted the charges of transmission of electricity hence, if GST is levied at any point of time in future, the same should not be allowed retrospectively. Relying upon the judgment of Hon'ble Gujarat High Court delivered on 9.12.2018 in Special Civil Appeal No. 5343 of 2018 in the matter of Torrent Power Ltd. v. Union of India, TANGEDCO has submitted that the Hon'ble High Court has quashed the clarification with regard to levy of GST



which was issued in para 4(1) of the impugned Circular No. 34/8/2018-GST dated 1.3.2018 by the Government of India as ultra vires the provisions of the GST laws as well as the notifications issued thereunder and made the rule absolute. TANGEDCO has further submitted that the claim of GST by the Petitioner is premature and the Commission may direct the Petitioner to restrain from including the paragraph related to GST in all the petitions.

86. In response, the Petitioner has reiterated its submission and submitted that while no GST is levied on the transmission service at present, but if it is levied at any time in the future, the same shall be borne and to be in addition paid by the Respondents directly to the Petitioner.

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

### **Security Expenses**

88. The Petitioner has submitted that security expenses in respect of Asset-I are not claimed in the instant petition and it would file a separate petition for claiming the overall security expenses and consequential IWC.

89. 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 and approved security expenses from 1.4.2019 to 31.3.2024. Therefore, security expenses will be shared in terms of the order dated 3.8.2021 in Petition No. 260/MP/2020. 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**

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

### **Sharing of Transmission Charges**

91. TANGEDCO has submitted that the second unit (500 MW) of NNTPS (2x500 MW) was brought under commercial operation by the generator on 31.1.2021. TANGEDCO's share allocation is 654.9 MW and out of this 600 MW is drawn through the State network and the balance 54.9 MW is drawn through ISTS. TANGEDCO has further submitted that Asset-I was brought under commercial operation on 26.6.2018 against SCOD of 10.6.2018. Since the generating unit was not commissioned on 26.6.2018, and the power from Unit-I has been evacuated through State network, TANGEDCO is not liable for payment of transmission charges from 26.6.2018 to 31.1.2021 and the generator M/s NLCIL is liable to pay the transmission charges due to delay in commissioning of the generating unit. TANGEDCO has submitted that the Petitioner may be directed to bring on record, the details of bilateral billing made against the generator and recovery made so far. TANGEDCO has further submitted that the trued-up capital cost for 2014-19 period has to be shared among the beneficiaries as per the Sharing Regulations, 2010. However, the new Sharing Regulations, 2020 has been notified on 4.5.2021 that came into force with effect from 1.11.2020. Under these circumstances, it is essential to segregate the additional cost and tariff liability up to 31.10.2020 and from 1.11.2020 so as to allocate the charges



based on Sharing Regulations, 2010 and Sharing Regulations, 2020 respectively. Hence, TANGEDCO has requested that the Commission may issue suitable directions to allocate the trued up YTC up to 31.10.2020 as per Sharing Regulations, 2010 and YTC from 1.11.2020 as per the Sharing Regulations, 2020 and recover the trued-up transmission tariff up to 31.1.2021 from the generator.

92. In response, the Petitioner has submitted that the instant petition has been filed for truing up of transmission tariff for 2014-19 tariff period and determination of transmission tariff for 2019-24 tariff period for Asset-I. After the truing up and determination of transmission tariff, sharing of transmission charges for 2014-19 period and 2019-24 period up to 31.10.2020 shall be done as per the Sharing Regulations, 2010 and thereafter from 1.11.2020 onwards shall be done as per the Sharing Regulations, 2020. The Petitioner has further submitted that the tariff determination and Sharing of transmission charges are two independent activities and same cannot be interlinked. After the determination of tariff of the assets by the Commission, the aspects of YTC bifurcation as raised by TANGEDCO shall be taken care of by CTU at the time of billing.

93. The Petitioner has further submitted that the billing has been raised in accordance with tariff order dated 12.4.2019 in Petition No. 233/TT/2018.

94. Accordingly, the transmission charges were billed on NLC from COD i.e. 26.6.2018 for Asset-I to 12.2.2019 i.e. till the commissioning of associated bays at NNTPP implemented by NLC and thereafter being billed through PoC. The Petitioner has also submitted the copy of RLDC certificate.



95. We have considered the submission of the Petitioner and TANGEDCO. The Commission *vide* order dated 12.4.2019 in Petition No. 233/TT/2018 had decided that the transmission charges of Asset-I from COD to the commissioning of associated bays at NNTPP will be borne by NLC and accordingly, the same shall be considered.

96. With effect from 1.11.2020, the 2010 Sharing Regulations has been repealed and sharing of transmission charges is governed by the provisions of the 2020 Sharing Regulations. Accordingly, the liabilities of DICs for arrears of transmission charges determined through this order shall be computed DIC-wise in accordance with the provisions of respective Tariff Regulations and shall be recovered from the concerned DICs through Bill 2 under Regulation 15(2)(b) of the 2020 Sharing Regulations. Billing, collection and disbursement of transmission charges for subsequent period shall be recovered in terms of provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

97. To summarise,

- a. The trued-up Annual Fixed Charges (AFC) approved in respect of Asset-I for 2014-19 tariff period are as follows:

(₹ in lakh)	
Particulars	2018-19 (Pro-rata 279 days)
AFC	219.99

- b. AFC allowed in respect of Asset-I for 2019-24 tariff period in this order are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
AFC	339.31	342.58	333.31	324.35	315.33

98. Annexure-I and Annexure-II given hereinafter shall form part of the instant order.



99. This order disposes of Petition No. 150/TT/2020 in terms of the above discussions and findings.

**sd/-**  
**(P.K. Singh)**  
**Member**

**sd/-**  
**(I.S. Jha)**  
**Member**

**sd/-**  
**(P. K. Pujari)**  
**Chairperson**



**ANNEXURE-I**

2014-19	Admitted Capital Cost as on 1.4.2014/COD (₹ in lakh)	ACE	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		2018-19			2018-19
Transmission Line	1368.91	609.32	1978.23	5.28%	88.36
PLCC	14.52	1.82	16.34	6.33%	0.98
<b>Total</b>	<b>1383.44</b>	<b>611.13</b>	<b>1994.57</b>		<b>89.34</b>
<b>Average Gross Block</b>					<b>1689.00</b>
<b>Weighted Average Rate of Depreciation</b>					<b>5.29%</b>

**ANNEXURE-II**

2019-24	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)				
		2020-21	Total			2020-21	2021-22	2022-23	2023-24	
Transmission Line	1978.23	148.70	148.70	2126.93	5.28%	108.38	112.30	112.30	112.30	112.30
PLCC	16.34	0.00	0.00	16.34	6.33%	1.03	1.03	1.03	1.03	1.03
<b>Total</b>	<b>1994.57</b>	<b>148.70</b>	<b>148.70</b>	<b>2143.27</b>		<b>109.41</b>	<b>113.34</b>	<b>113.34</b>	<b>113.34</b>	<b>113.34</b>





<b>Average Gross Block</b>	<b>2068.92</b>	<b>2143.27</b>	<b>2143.27</b>	<b>2143.27</b>	<b>2143.27</b>
<b>Weighted Average Rate of Depreciation</b>	<b>5.29%</b>	<b>5.29%</b>	<b>5.29%</b>	<b>5.29%</b>	<b>5.29%</b>

