

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 91/TT/2022

Coram:

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

Date of order: 15.05.2023

In the Matter of

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 for revision of transmission tariff of 2004-09 and 2009-14 tariff periods, truing up of transmission tariff of 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for transmission system associated with Kudankulam Atomic Power Project in 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. Tamil Nadu Generation and Distribution Corporation Limited,
(Formerly Tamil Nadu Electricity Board -TNEB),
NPKRR Maaligai, 800, Anna Salai, Chennai-600002.
2. Transmission Corporation of Andhra Pradesh Limited (APTRANSCO),
Vidyut Soudha, Near Axis Bank ATM, Eluru Road,
Gunadala,Vijaywada-520004.
3. Kerala State Electricity Board (KSEB),
Vaidyuthi Bhavanam, Pattom,
Thiruvananthapuram-695004.
4. Electricity Department,
Government of Goa, Vidyuti Bhawan,
Panaji, Goa-403001.



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),
Srinivasasa Kalyana Mandapam Backside,
Tiruchanoor Road, Kesavayana Gunta,
Tirupati-517501, 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, Karnataka.
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. Transmission Corporation of Telangana Limited,
Vidhyut Sudha, Khairatabad,
Hyderabad, 500082.
16. Karnataka Power Transmission Corporation Limited (KPTCL),
Kaveri Bhavan, Bangalore-560009.

...Respondent(s)



For Petitioner : Shri S. S. Raju, PGCIL
Shri D. K. Biswal, PGCIL
Shri Zafrul Hasan, PGCIL
Shri Naresh Kumar, PGCIL
Shri Ranjeet Kumar Pandey, PGCIL
Shri Aman Siddiqui, PGCIL

For Respondents : Shri S. Vallinayagam, Advocate, TANGEDCO

ORDER

The Petitioner, Power Grid Corporation of India Limited, has filed the instant petition for revision of transmission tariff of 2004-09 and 2009-14 periods and truing up of transmission tariff of 2014-19 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 transmission tariff of 2019-24 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of the following assets (herein after referred to as the “Combined Asset”) for transmission system associated with Kudankulam Atomic Power Project (herein after referred to as the “transmission project”) in Southern Region:

Asset-1: LILO of both circuits of Madurai-Trivandrum 400 kV D/C line at Tirunelveli

Asset-2: ICT-II and downstream system at Thirunelveli Sub-station

Asset-3: 400 kV, 63 MVAR Bus Reactor-II at Thirunelveli Sub-station

Asset-4: ICT-I and downstream system at Thirunelveli Sub-station

Asset-5: 3 Numbers of 400 kV Line Reactors at Thirunelveli Sub-station

Asset-6: Kudamkulam-Thirunelveli 400 kV D/C lines

Asset-7: 3rd 315 MVA ICT at Udumalpet Sub-station

Asset-8: 3rd 315 MVA ICT at Trivandrum Sub-station



Asset-9: Thirunelveli-Udumalpet D/C Line along with bay extension at Thirunelveli and Udumalpet Sub-station

Asset-10: 1 x 63 MVAR Reactor at Thirunelveli Sub-station

Asset-11: Thirunelveli-Edamon 400 kV D/C line (initially to be operated at 220 kV) with associated bays and equipments at Thirunelveli and Edamon (KSEB)

Asset-12: 1st Switchable Line Reactor at Udumalpet Sub-station

Asset-13: 2nd Switchable Line Reactor at Udumalpet Sub-station

Asset-14: 2 Numbers of 220 kV Bays at Trivandrum Sub-station

Asset-15: Cochin (Muvattapuzha)-Thrichur 400 kV D/C Quad line

Asset-16: 2 x 315 MVAR Transformers at Cochin

Asset-17: 01 Number 400 kV 63 MVAR line reactor at Cochin

Asset-18: 01 Number 400 kV 63 MVAR line reactor at Cochin

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

"1) Allow the add cap expenditure claimed during 2014-19 and 2019-24 block.

2) 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 and 11 above.

3) Allow the petitioner to claim the initial spares based on over all project cost at the time of combining of all the assets under subject 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 and 11 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 claim the overall security expenses and consequential IOWC on that security expenses separately.

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

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

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

Background

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

- a) The Investment Approval (IA) of the transmission project was accorded by the Government of India vide Memorandum No. 12/18/2003-PG dated 25.5.2005 of Ministry of Power at an estimated cost of ₹1779 29 lakh including Interest During Construction (IDC) of ₹7141 lakh at 4th Quarter, 2004 price level.
- b) The Revised Cost Estimates-I (RCE-I) of the transmission project have been approved by Board of Directors of the Petitioner in its 238th meeting held on 6.8.2010, communicated vide Memorandum Ref. No. C/CP/Kudankulam dated 3.9.2010 at an estimated cost of ₹215907 lakh including IDC of ₹22342 lakh at 1st Quarter, 2010 price level.
- c) The Revised Cost Estimates-II (RCE-II) of the transmission project have been approved by the Board of Directors of the Petitioner in its 324th meeting held on 12.1.2016, communicated vide Memorandum Ref. No. C/CP/RCE-II-Kudankulam dated on 19.1.2016 at an estimated cost of ₹218732 lakh including IDC of ₹29487 lakh based on June, 2015 price level.
- d) The Revised Cost Estimates-III (RCE-III) of the transmission project have been approved by the Board of Directors of the Petitioner in its 374th meeting held on 6.3.2020, communicated vide Memorandum Ref. No. C/CP/PA1920-12-0AQ-RCE012 dated 17.3.2020 at an estimated cost of ₹257723 lakh including IDC of ₹29929 lakh at September, 2019 price level.



e) The Revised Cost Estimates-IV (RCE-IV) of the transmission project have been approved by the Board of Directors of the Petitioner in its 411th meeting held on 17.12.2022, communicated vide Memorandum Ref. No. C/CP/PA2223-09-0AH-RCE010 dated 23.12.2022 at an estimated cost of ₹277344 lakh including IDC of ₹29113 lakh at July, 2022 price level.

f) The scope of work covered under the transmission project is as follows:

A. Transmission Lines:

- i. Kudankulam (NPC) - Tirunelveli (Powergrid) 400 kV (Quad) D/C Line -I
- ii. Kudankulam (NPC) - Tirunelveli (Powergrid) 400 kV (Quad) D/C Line - II
- iii. Tirunelveli (Powergrid) - Udumalpet (Powergrid) 400 kV D/C Line
- iv. Tirunelveli (Powergrid) - Edamon (Kerala State Electricity Board) 400 kV Multi Circuit Line
- v. Edamon (Kerala State Electricity Board) - Muvattupuzha (Powergrid) 400 kV (Quad) D/C Line
- vi. Muvattupuzha (Powergrid) - North Trichur (Powergrid) 400 kV (Quad) D/C Line
- vii. LILO of both Circuits of Madurai (Powergrid) - Trivandrum (Powergrid) 400 kV D/C Line at Tirunelveli

B. Sub-stations:

- i. 400/220 kV Tirunelveli (Powergrid) Sub-Station (New)
- ii. 400/220 kV Muvattupuzha (Powergrid) Sub-Station (New)
- iii. 400/220 kV North Trichur (Powergrid) Sub-Station (Extension)
- iv. 400/220 kV Udumalpet (Powergrid) Sub-Station (Extension)
- v. 400/220 kV Trivandrum (Powergrid) Sub-Station (Extension)

g) The transmission assets covered under the transmission project are as follows:

Assets	Description of Assets	COD	Tariff details
Asset-1	LILO of both circuits of Madurai-Trivandrum 400 kV D/C line at Tirunelveli	1.5.2008	The transmission tariff of 2009-14 tariff period was trued up transmission tariff for 2014-19 was
Asset-2	ICT-II and downstream system at Thirunelveli Sub-station	1.5.2008	
Asset-3	400 kV, 63 MVAR Bus Reactor-II at Thirunelveli Sub-station	1.11.2008	
Asset-4	ICT-I and downstream system at Thirunelveli Sub-station	1.11.2008	
Asset-5	3 Numbers of 400 kV Line Reactors at Thirunelveli Sub-station	1.2.2009	
Asset-6	Kudankulam-Thirunelveli 400 kV D/C Lines	1.4.2009	



Asset-7	3 rd 315 MVA ICT at Udumalpet Sub-station	1.4.2009	determined vide order dated 21.4.2016 in Petition No. 53/TT/2015	
Asset-8	3 rd 315 MVA ICT at Trivandrum Sub-station	1.7.2009		
Asset-9	Thirunelveli-Udumalpet D/C Line along with bay extension at Thirunelveli and Udumalpet Sub-station	1.11.2009		
Asset-10	1 x 63 MVAR Reactor at Thirunelveli Sub-station	1.2.2010		
Asset-11	Thirunelveli-Edamon 400 kV D/C line (initially to be operated at 220 kV) with associated bays and equipments at Thirunelveli and Edamon (KSEB)	1.7.2010		
Asset-12	1 st Switchable Line Reactor at Udumalpet Sub-station	1.12.2010		
Asset-13	2 nd Switchable Line Reactor at Udumalpet Sub-station	1.3.2011		
Asset-14	2 Numbers of 220 kV Bays at Trivandrum Sub-station	1.9.2011		
Asset-15	Cochin (Muvattapuzha)-Thrighur 400 kV D/C Quad Line	1.12.2011		
Asset-16	2 x 315 MVAR Transformers at Cochin	1.12.2011		
Asset-17	01 Number 400 kV 63 MVAR line reactor at Cochin	1.1.2012		
Asset-18	01 Number 400 kV 63 MVAR line reactor at Cochin	1.6.2012		
Asset-19	Circuit-I of Tirunelveli-Muvathapuza (Cochin) 400 kV Quad D/C line (Tirunelveli to Edamon on Multi Ckt Line and Edamon to Cochin on D/C Line)	27.9.2019		Tariff determined vide order dated 30.4.2022 in Petition No. 663/TT/2020
Asset-20	Circuit-II of Tirunelveli-Muvattupuzha (Cochin) 400 kV (Quad) D/C line (Tirunelveli (Powergrid) to Edamon (KSEB) 400 kV Multi Ckt Line and Edamon (KSEB) to Muvattupuzha (Powergrid) 400 kV (Quad) D/C line)	20.12.2019		

- h) The Assets-1 to 5 were put into commercial operation in 2004-09 tariff period and Asset-6 to 18 were put into commercial operation in 2009-14 tariff period and Assets-19 and 20 was put into commercial operation during the 2019-24 tariff period.
- i) The transmission tariff of 2009-14 tariff period was trued-up and transmission tariff for 2014-19 period was determined for Assets-1 to 18 vide order dated 21.4.2016 in Petition No. 53/TT/2015. The Petitioner filed Review Petition No. 35/RP/2016



against the order dated 21.4.2016 in Petition No. 53/TT/2015 which was disallowed vide order dated 7.9.2016.

- j) Further, the matter was reheard in the light of the APTEL's direction in judgement dated 14.9.2019 in Appeal No.74 of 2017 on the aspect of Initial Spares and the Commission vide order dated 4.9.2021 in Petition No. 53/TT/2015 observed that the Initial Spares will be reviewed on the basis of the APTEL's judgement at the time of truing up the tariff of the 2014-19 tariff period. However, the overall project of the transmission project in the instant case will be arrived only in the 2019-24 tariff period, when Assets-1 to 18 and Assets-19 and 20 are combined. Accordingly, the Initial Spares will be considered on the basis of the overall project cost at the time of the truing up of the 2019-24 tariff period. The relevant extract of the said order is as follows:

“9. We have heard the learned counsel for PGCIL and TANGEDCO. Initial spares allowed for the various transmission assets of the Petitioner have been revised on the basis of overall project cost, wherever the individual assets have been combined and overall project cost has been arrived at, as per the principle laid down by APTEL in judgment dated 14.9.2019 in Appeal No. 74 of 2017 while truing up the tariff of 2014-19 tariff period.”

- k) In the instant order, the tariff of 2014-19 tariff period is trued up and tariff of 2019-24 is determined for Assets-1 to 18 (hereinafter referred to as Combined Asset).
- l) The Petitioner has mentioned about revision of transmission tariff of 2004-09 and 2009-14 tariff periods in the “subject” of the petition (ostensibly in terms of the APTEL's judgements dated 22.1.2007 in Appeal No. 81 of 2005 and batch matters and 13.6.2007 in Appeal No. 139 of 2006 and batch matters). However, no such pleadings were made in the petition. Accordingly, we are not going into revision of tariff of the 2004-09 and 2009-14 tariff periods. Hence, TANGEDCO's contentions regarding revision of tariff for the said periods are infructuous.



4. The Respondents are distribution licensees, power departments, transmission utilities and transmission licensees 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 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) i.e. Respondent No. 1, has filed its reply vide affidavit dated 19.12.2022. In response, the Petitioner has filed its rejoinder vide affidavit dated 11.1.2023. TANGEDCO and the Petitioner have also filed their Written Submissions on 20.1.2023 and 25.1.2023 respectively.

6. During the hearing on 20.4.2023, the Petitioner sought the Commission's permission to submit additional information w.r.t O&M Expenses, which was allowed by the Commission. Accordingly, the Petitioner vide affidavit dated 27.4.2023 has submitted revised tariff forms pertaining to 2019-24 period. We have considered the same in the instant order.

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

8. Having heard the representatives of the Petitioner and learned counsel of TANGEDCO and having perused 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 Combined Asset are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	8033.59	8037.05	8038.65	8045.29	8086.90
Interest on Loan	3915.25	3500.15	3266.48	2901.98	2645.65
Return on equity	9203.54	9252.01	9253.80	9261.22	9332.37
Interest on Working Capital	672.33	670.13	671.18	669.69	673.17
O&M Expenses	3356.85	3468.38	3583.41	3702.40	3825.23
Total	25181.56	24927.72	24813.52	24580.58	24563.32

10. The details of the Interest on Working Capital (IWC) claimed by the Petitioner in respect of the Combined Asset are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
O&M expenses	279.74	289.03	298.62	308.53	318.77
Maintenance Spares	503.53	520.26	537.51	555.36	573.78
Receivables	4196.93	4154.62	4135.59	4096.76	4093.89
Total	4980.20	4963.91	4971.72	4960.65	4986.44
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest	672.33	670.13	671.18	669.69	673.17

Capital Cost as on 1.4.2014

11. The capital cost of the Combined Asset has been calculated in accordance with Regulation 9(3) of the 2014 Tariff Regulations.

12. The Commission vide order dated 21.4.2016 in Petition No. 53/TT/2015 admitted the capital cost of ₹155952.27 lakh as on 31.3.2014. Therefore, the admitted capital cost of ₹155952.27 lakh as on 31.3.2014 has been considered as on 1.4.2014 for working out the trued-up tariff for 2014-19 tariff period.

Additional Capital Expenditure (“ACE”)

13. The Petitioner has not claimed any ACE in Petition No. 53/TT/2015 in 2014-19 tariff period. However, in the instant petition, the Petitioner has claimed the actual ACE incurred upto 31.3.2019 and the same is as follows:



(₹ in lakh)

Asset	RCE-III* Apportioned approved cost	Capital cost as on 1.4.2014	ACE 2014-19					Completion Cost as on 31.3.2019
			2014- 15	2015- 16	2016- 17	2017- 18	2018- 19	
Combined Asset	160540.82*	155952.27	88.27	43.02	17.59	233.58	1342.55	157677.28

* Details of RCE-III is submitted vide affidavit dated 15.6.2021 in Petition No. 663/TT/2020.

14. The Petitioner has submitted that ACE has been claimed for Asset-11 and Asset-15 only in 2014-19 tariff period.

15. The Petitioner in the instant true-up petition has claimed the total ACE of ₹1725.01 lakh for 2014-19 tariff period for Asset-11 and Asset-15 and has submitted Auditor's Certificate in support of the same. The Petitioner has submitted that the ACE incurred in the contextual asset is on account of undischarged liability towards final payment against land compensation as per court orders and the same has been claimed under Regulation 14(3)(i) of the 2014 tariff Regulations.

16. The Commission vide RoP for hearing dated 20.12.2022 directed the Petitioner to submit the justification for claiming ACE in 2014-19 tariff period. In response, the Petitioner vide affidavit dated 18.1.2023 has submitted the following:

(a) Asset 11 and Asset-15 mainly passes through the district of Kollam, Ernakulam and Thrissur of Kerala state. During the execution of said transmission lines, tree crop compensation was paid as per KSEB Manual and compensations for diminution of land was paid as per GO (Rt)No. 581/2010/RD dated 4.2.2010 introduced by Government of Kerala. However, many cases were filed before the jurisdictional courts seeking enhancement of initial compensation awarded by the Petitioner, claiming enhancement of tree/ crop compensation and diminution of land value as heads of compensation u/s 16 of the Indian Telegraph Act, 1885 as follows:



.....(3) If any dispute arises concerning the sufficiency of the compensation to be paid under section 10, clause (d), it shall, on application for that purpose by either of the disputing parties to the District Judge within whose jurisdiction the property is situate, be determined by him.

(b) A few of the cases were initially settled in Lok Adalat. However, later on the land owners refused to settle the cases in Lok Adalat and the matters were heard on merits.

(c) The District Courts in these matters awarded enhanced compensation towards tree crops or/ and diminution of land, based on the following justification:

- Various precedents of Supreme Court, KSEB vs. Livisha, Shaik Imambi vs. Spl. Dy. Collector etc.
- “Section 10(d) - In the exercise of the powers conferred by this section, the telegraph authority shall do as little damage as possible, and, when it has exercised those powers in respect of any property other than that referred to in clause (c), shall pay full compensation to all persons interested for any damage sustained by them by reason of the exercise of those powers.”
- Evidences submitted by the land owners/ Petitioners
- Report submitted by the advocate commissioner.

(d) While awarding the compensation towards tree crops, the courts adopted multiplier of 8-10 years as upheld by the Hon’ble Supreme Court in KSEB vs. Livisha, Shaik Imambi vs. Spl. Dy. Collector etc. Such orders where only tree crop compensation was enhanced by the courts, were complied by the Petitioner and the eligible amount were released to the parties, as per directions given in court orders.

(e) However, the District Courts in majority of the matters along with tree crop enhancement also awarded exorbitant compensation towards diminution of land. As a result, such orders were challenged by the Petitioner before the Hon’ble High Court of Kerala by filing Civil Revision Petitions (CRP).



(f) Although CRP were filed, after receiving the District Court orders in their favour, the parties/ land owners filed execution petitions for execution of the orders and seek attachment of the Petitioner's movables and bank account. Hence, obtaining stay against the district court orders became necessary.

(g) The Hon'ble High Court while admitting the CRP, only granted interim stay on the order on the condition that the Petitioner deposits 50-60% of the amount with interest before the lower court and further allows the land owner/ Petitioner, the liberty to withdraw these amounts. Hence, the Petitioner complied with the interim stay orders of the High Court and deposited these amounts in court to avoid any adverse orders in these matters. Those CRPs are currently pending adjudication.

(h) Considering the trend, the High Court granted the interim stay only after the Petitioner deposited some portion of the amount in the court, to avoid any attachment order against the Petitioner, 25-50% of the district amount was initially deposited in certain cases and the matter was simultaneously challenged before the Hon'ble High Court.

(i) As regards compensation paid for Cochin Sub-station during 2014-15 to 2020-21, the land for the said station was obtained through land acquisition proceedings as per notification dated 28.2.2005 issued under Section 4(1) of the Land Acquisition Act, 1894. The amount of compensation to the affected persons were paid as per the amount fixed by revenue authorities in all the cases. Aggrieved by the compensation amount, various land owners approached the District Collector for reference and the cases were referred to courts of North Paravoor and Perumbavoor. In certain cases, the reference was allowed and compensation was enhanced which was complied/ challenged by the Petitioner through appeal before the Hon'ble High Court of Kerala. In certain cases the lower court did not grant any enhancement of the awards, hence, the parties approached the Hon'ble High Court in appeal. The High Court decided the appeals and increased the compensation eligible to the parties. Therefore, as per the court orders, land compensation has been paid.



(j) In this regard, ACE has been claimed for Asset-11 and Asset-15 as per the Auditor's Certificates dated 26.8.2021 towards compensations and the same is tabulated as follows:

Sl. No.	Particulars	Asset-11		Asset-15		Total
		Sub-station	Transmission Line	Sub-station	Transmission Line	
1	Expenditure From 1.4.2014 to 31.3.2015	0.00	73.36	0.00	14.91	88.27
2	Expenditure From 1.4.2015 to 31.3.2016	0.00	5.38	37.64	0.00	43.02
3	Expenditure From 1.4.2016 to 31.3.2017	0.00	16.71	0.88	0.00	17.59
4	Expenditure From 1.4.2017 to 31.3.2018	0.00	105.62	34.38	93.58	233.58
5	Expenditure From 1.4.2018 to 31.3.2019	0.00	373.50	13.51	955.54	1342.55

17. We have considered the submissions of the Petitioner. Out of 18 numbers of assets covered in the instant petition, the Petitioner has claimed ACE in 2014-19 tariff period only in case of Asset-11 and Asset-15. ACE claimed is on account of compensations paid in the state of Kerala as per the Court orders/ Lok Adalat towards tree crops and diminution of land in transmission line and also towards land compensation paid for Cochin (Muvattapuzha) Sub-station as per Regulation 14(3)(i) of the 2014 tariff Regulations which provides as follows:

“14. Additional Capitalisation and De-capitalisation:

(3) The capital expenditure, in respect of existing generating station or the transmission system including communication system, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:

(i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;”

18. The COD of the Asset-11 and Asset-15 is 1.7.2010 and 1.12.2011 respectively, and the ACE claimed by the Petitioner is beyond the cut-off date and is on account of court orders w.r.t. land compensation. The Petitioner has submitted the court orders



and details of compensation paid. ACE claimed by the Petitioner for Asset-11 and Asset-15 is allowed under Regulation 14(3)(i) of the 2014 Tariff Regulations and the same is as follows:

(₹ in lakh)					
Assets	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-11	73.36	5.38	16.71	105.62	373.50
Asset-15	14.91	37.64	0.88	127.96	969.05
Total	88.27	43.02	17.59	233.58	1342.55

Capital Cost considered for truing-up of tariff for 2014-19 period

19. The capital cost considered for truing-up of tariff for 2014-19 period is as follows:

(₹ in lakh)							
RCE-III Apportioned approved cost	Capital cost as on 1.4.2014	ACE					Capital cost as on 31.3.2019
		2014-15	2015-16	2016-17	2017-18	2018-19	
160540.82	155952.27	88.27	43.02	17.59	233.58	1342.55	157677.28

Debt-Equity Ratio

20. Debt-equity ratio has been allowed in accordance with Regulation 19(3) of the 2014 Tariff Regulations. As per Regulation 19(3) of the 2014 Tariff Regulations, the debt-equity ratio allowed by the Commission for determination of tariff for the period ending on 31.3.2014 shall be considered. Accordingly, the admitted debt-equity ratio for the period ending on 31.3.2014 has been considered as opening debt-equity ratio as on 1.4.2014 and debt-equity ratio of 70:30 has been considered for ACE during 2014-19 for the purpose of truing-up of tariff of 2014-19 tariff period in respect of the Combined Asset. The details of the debt-equity ratio in respect of the Combined Asset as on 1.4.2014 and 31.3.2019 are as follows:



Funding	Capital cost as on 1.4.2014 (₹ in lakh)	(in %)	Total cost as on 31.3.2019 (₹ in lakh)	(in %)
Debt	109166.97	70.00	110374.48	70.00
Equity	46785.30	30.00	47302.80	30.00
Total	155952.27	100.00	157677.28	100.00

Depreciation

21. The Petitioner has considered cumulative depreciation of ₹32150.80 lakh.

22. The depreciation has been allowed as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations considering the capital expenditure and cumulative depreciation as on 1.4.2014 as approved by the Commission vide order dated 21.4.2016 in Petition No. 53/TT/2015 and approved ACE during 2014-19 tariff period. WAROD has been worked out and placed as Annexure-I. Depreciation allowed during 2014-19 period in respect of the Combined Asset is as follows:

(₹ in lakh)						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Gross Block	155952.27	156040.54	156083.56	156101.15	156334.73
B	ACE	88.27	43.02	17.59	233.58	1342.55
C	Closing Gross Block (A+B)	156040.54	156083.56	156101.15	156334.73	157677.28
D	Average Gross Block (A+C)/2	155996.41	156062.05	156092.36	156217.94	157006.01
E	Freehold Land	2867.52	2867.52	2867.52	2867.52	2867.52
F	Average Gross Block (D-E)	153128.89	153194.53	153224.84	153350.42	154138.49
G	Depreciable Value (F*90%)	137816.00	137875.08	137902.35	138015.38	138724.64
H	Weighted average Rate of Depreciation (in %)	5.15	5.15	5.15	5.15	5.15
I	Lapsed life (at the beginning of the year) (Year)	5.00	6.00	7.00	8.00	9.00
J	Balance useful life (at the beginning of the year) (Year)	27.00	26.00	25.00	24.00	23.00
K	Depreciation during the year	8033.59	8037.05	8038.65	8045.28	8086.89
L	Cumulative depreciation at the end of the year	40184.39	48221.44	56260.09	64305.37	72392.26
M	Remaining Depreciable Value at the end of the year (G-L)	97631.61	89653.64	81642.26	73710.01	66332.37



23. The details of depreciation approved vide order dated 21.4.2016 in Petition No. 53/TT/2015, claimed in the instant petition and trued-up depreciation allowed in the instant order in respect of the Combined Asset are as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 21.4.2016 in Petition No. 53/TT/2015	8031.25	8031.25	8031.25	8031.25	8031.25
Claimed by the Petitioner in the instant petition	8033.59	8037.05	8038.65	8045.29	8086.90
Allowed after true-up in this order	8033.59	8037.05	8038.65	8045.28	8086.89

Interest on Loan ("IoL")

24. The Petitioner has claimed the weighted average rate of IoL, based on its actual loan portfolio and rate of interest. IoL is calculated based on actual interest rate, in accordance with Regulation 26 of the 2014 Tariff Regulations. The details of trued up IoL allowed in respect of the Combined Asset are as follows:

	Particulars	(₹ in lakh)				
		2014-15	2015-16	2016-17	2017-18	2018-19
A	Gross Normative Loan	109166.97	109228.76	109258.87	109271.19	109434.69
B	Cumulative Repayments up to Previous Year	32150.80	40184.39	48221.44	56260.09	64305.37
C	Net Loan-Opening (A-B)	77016.17	69044.37	61037.44	53011.10	45129.32
D	Additions due to ACE	61.79	30.11	12.31	163.51	939.79
E	Repayment during the year	8033.59	8037.05	8038.65	8045.28	8086.89
F	Net Loan-Closing (C+D-E)	69044.37	61037.44	53011.10	45129.32	37982.21
G	Average Loan (C+F)/2	73030.27	65040.91	57024.27	49070.21	41555.77
H	Weighted Average Rate of Interest on Loan (in %)	5.39	5.42	5.78	5.97	6.45
I	Interest on Loan (G*H)	3939.76	3526.01	3293.81	2930.42	2678.52

25. The details of IoL approved vide order dated 21.4.2016 in Petition No. 53/TT/2015, claimed by the Petitioner in the instant petition and allowed after truing up in the instant order in respect of the Combined Asset are as follows:



Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 21.4.2016 in Petition No. 53/TT/2015	3949.24	3458.80	2974.45	2500.20	2038.89
Claimed by the Petitioner in the instant petition	3915.25	3500.15	3266.48	2901.98	2645.65
Allowed after true-up in this order	3939.76	3526.01	3293.81	2930.42	2678.52

Return on Equity ("RoE")

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

Year	Claimed effective tax rate (in %)	Grossed up RoE [(Base Rate)/(1-t)] (in %)
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

27. The Commission in its order dated 27.4.2020 in Petition No. 274/TT/2019 has arrived at the effective tax rate based on the notified MAT rates and the same is as follows:

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

28. The same MAT rates as allowed 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 trueing-up



of the tariff of 2014-19 period in terms of the provisions of the 2014 Tariff Regulations and the same is as follows:

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

29. Accordingly, the trued up RoE allowed in respect of the Combined Asset for the 2014-19 tariff period is as follows:

(₹ in lakh)						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Opening Equity	46785.30	46811.78	46824.69	46829.96	46900.04
B	Addition due to ACE	26.48	12.91	5.28	70.07	402.77
C	Closing Equity (A+B)	46811.78	46824.69	46829.96	46900.04	47302.80
D	Average Equity (A+C)/2	46798.54	46818.23	46827.33	46865.00	47101.42
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	20.961	21.342	21.342	21.342	21.549
G	Applicable RoE Rate (in %)	19.610	19.705	19.705	19.705	19.758
H	Return on Equity for the year (D*G)	9177.19	9225.53	9227.32	9234.75	9306.30

30. The details of RoE approved vide order dated 21.4.2016 in Petition No. 53/TT/2015, claimed in the instant petition and trued-up RoE allowed in the instant order in respect of the Combined Asset are as follows:

(₹ in lakh)					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 21.4.2016 in Petition No. 53/TT/2015	9174.88	9174.88	9174.88	9174.88	9174.88
Claimed by the Petitioner in the instant petition	9203.54	9252.01	9253.80	9261.22	9332.37
Allowed after true-up in this order	9177.19	9225.53	9227.32	9234.75	9306.30



Operation & Maintenance Expenses (“O&M Expenses”)

31. The transmission elements covered in the transmission project for which the Petitioner has claimed the O&M Expenses are as follows:

Transmission lines	Length in km
400 kV D/C Tirunelveli- Udumalpet Transmission line	264.987 km
LILO of 400 kV D/C 400 kV Madurai-Trivandrum line at Tirunelveli	106.372 km
400 kV D/C Tirunelveli- Edamon line	2.607 km
400 kV D/C Tirunelveli- Edamon line (charged at 220 kV) on M/c tower	79.292 km
400 kV Kudankulam- Tirunelveli-1 (CKT I & II)	72.489 km
400 kV D/C Kudankulam- Tirunelveli- 2 (CKT III & IV)	79.534 km
400 kV D/C Cochin-Trichur transmission line	78.197 km

Sl No	Name of Sub-station	Voltage Level kV	No. of Bays	
			400 kV	220 kV
1	Cochin-North Trichur bay 1	400	1	
2	Cochin -North Trichur Bay 2	400	1	
3	Cochin -Bus Reactor Bay	400	1	
4	Cochin -400 kV ICT-I bay	400	1	
5	Cochin -220 kV ICT -I bay	220		1
6	Cochin-220 kV Kalamassery -I bay	220		1
7	Cochin-220 kV Kalamassery -II bay	220		1
8	Cochin-220 kV Brahmapuram-I bay	220		1
9	Cochin-220 kV Brhamapuram-II bay	220		1
10	Cochin-400 kV ICT-II bay	400	1	
11	Cochin-220 kV ICT-II Bay	220		1
12	Kochi-Thirunelveli-Line - I Bay	400	1	
13	Edamon-Tirunelveli-I	220		1
14	Edamon-Tirunelveli-II	220		1
15	Kochi-Thirunelveli-Line-II Bay	400	1	
16	Thiruvananthapuram-ICT-III Bay	400	1	
17	Thiruvananthapuram-ICT-III Bay	220		1
18	Thiruvananthapuram-Line Bay-V	220		1
19	Thiruvananthapuram-Line Bay-VI	220		1
20	Tirunelveli-ICT-II Bay	400	1	
21	Tirunelveli-ICT-II Bay	220		1
22	Tirunelveli-Sanganeri Bay	220		1



23	Tirunelveli-Kayathar Bay	220		1
24	Tirunelveli-Veeranam Bay	220		1
25	Tirunelveli-ICT-I Bay	400	1	
26	Tirunelveli-ICT-I Bay	220		1
27	Tirunelveli-Udumalpet Line Reactor Bay	400	1	
28	Tirunelveli-Udumalpet-I Bay	400	1	
29	Tirunelveli-Tirunelveli Bus Reactor-I Bay	400	1	
30	Tirunelveli-Tirunelveli Bus Reactor-II Bay	400	1	
31	Tirunelveli-Udumalpet -II Line Bay- 63 MVAR Reactor	400	1	
32	Tirunelveli-Switchable Line Reactor Bay for Udumalpet-II	400	1	
33	Tirunelveli-Kochi-I Bay	400	1	
34	Tirunelveli-Kochi-II Bay	400	1	
35	Tirunelveli-Kudankulam-I	400	1	
36	Tirunelveli-Kudankulam-II	400	1	
37	Tirunelveli-Kudankulam-III	400	1	
38	Tirunelveli-Kudankulam-IV	400	1	
39	Tirunelveli-Madurai Bay-I	400	1	
40	Tirunelveli-Madurai Bay-II	400	1	
41	Tirunelveli-Trivendram Bay-I	400	1	
42	Tirunelveli-Trivendram Bay-II	400	1	
43	Tirunelveli-Edamon-I	220		1
44	Tirunelveli-Edamon-II	220		1
45	Trichur-Cochin Bay 1	400	1	
46	Trichur-Cochin Bay 2	400	1	
47	Udumalpet-ICT III Bay	400	1	
48	Udumalpet-ICT III Bay	220		1
49	Udumalpet- Tirunelveli I Bay	400	1	
50	Udumalpet- Tirunelveli II Bay	400	1	
51	Udumalpet-Switchable Line Reactor Bay for Tirunelveli-I	400	1	
52	Udumalpet-Switchable Line Reactor Bay for Tirunelveli-II	400	1	
	TOTAL		33	19

32. O&M Expenses claimed by the Petitioner are within the norms specified under the 2014 Tariff Regulations. The trued up O&M Expenses approved in respect of the Combined Asset for 2014-19 tariff period are as follows:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
400 kV Bays (Numbers)	33	33	33	33	33
Norms (₹lakh/Bay)	60.30	62.30	64.37	66.51	68.71



Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Total O&M Expenses of 400 kV bays	1989.90	2055.90	2124.21	2194.83	2267.43
220 kV Bays (Numbers)	19	19	19	19	19
Norms (₹lakh/Bay)	42.21	43.61	45.06	46.55	48.1
Total O&M Expenses of 220 kV bays	801.99	828.59	856.14	884.45	913.90
Line: D/C bundled (4 or more sub- conductor)					
Line Length (km)	230.22	230.22	230.22	230.22	230.22
Norms (₹lakh/km)	1.062	1.097	1.133	1.171	1.21
Total O&M Expenses of 400 kV D/C (Bundled conductor) lines	244.49	252.55	260.83	269.58	278.56
Line: D/C (Twin Conductor)					
Line Length (km)	453.258	453.258	453.258	453.258	453.258
Norms (₹lakh/km)	0.707	0.731	0.755	0.780	0.806
Total O&M Expenses of 400 kV D/C (Twin conductor) lines	320.45	331.33	342.20	353.54	365.32
Total O&M Expenses (₹ lakh)	3356.84	3468.37	3583.40	3702.41	3825.22

33. The details of O&M Expenses approved vide order dated 21.4.2016 in Petition No. 53/TT/2015, claimed in the instant petition and true-up O&M Expenses allowed in the instant order in respect of the Combined Asset are as follows:

Particulars	(₹ in lakh)				
	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 21.4.2016 in Petition No. 53/TT/2015	3356.84	3468.37	3583.40	3702.41	3825.22
Claimed by the Petitioner in the instant petition	3356.85	3468.38	3583.41	3702.40	3825.23
Allowed after true-up in this order	3356.84	3468.37	3583.40	3702.41	3825.22

Interest on Working Capital (“IWC”)

34. The Petitioner has claimed IWC as per Regulation 28 of the 2014 Tariff Regulations. The components of the working capital and the Petitioner’s entitlement to interest thereon are discussed as follows:

(i) Receivables

Receivables as a component of working capital will be equivalent to two months fixed cost. The Petitioner has claimed the receivables on the basis of 2 months annual transmission charges. In the tariff being allowed, receivables have been worked out on the basis of 2 months transmission charges.



(ii) Maintenance spares

Regulation 28 of the 2014 Tariff Regulations provides for maintenance spares @ 15% per annum of the O&M expenses. The value of maintenance spares has accordingly been worked out.

(iii) O&M Expenses

Operation and maintenance expenses have been considered for one month as a component of working capital. The Petitioner has claimed O&M expenses for 1 month of the respective year as claimed in the petition. This has been considered in the working capital.

(iv) Rate of interest on working capital

As per proviso 3 of Regulation 28 of the 2014 Tariff Regulation, SBI Base rate 10.00% as on 1.4.2014 plus 350 basis points i.e. 13.50% has been considered for the asset as the rate of interest on working capital.

35. The trued-up IWC allowed in respect of the Combined Asset for 2014-19 tariff period is as follows:

(₹ in lakh)						
	Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
A	Working Capital for O&M Expenses (O&M Expenses for one Month)	279.74	289.03	298.62	308.53	318.77
B	Working Capital for Maintenance Spares (15% of O&M Expenses)	503.53	520.26	537.51	555.36	573.78
C	Working Capital for Receivables (Equivalent to two months of annual transmission charges)	4196.61	4154.51	4135.73	4097.10	4095.04
D	Total Working Capital (A+B+C)	4979.87	4963.80	4971.86	4960.99	4987.60
E	Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
F	Interest of working capital (D*E)	672.28	670.11	671.20	669.73	673.33

36. The details of IWC approved vide order dated 21.4.2016 in Petition No. 53/TT/2015, claimed in the instant petition and trued-up IWC allowed in the instant order in respect of the Combined Asset is as follows:



(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Approved vide order dated 21.4.2016 in Petition No. 53/TT/2015	672.39	667.27	662.47	658.13	654.30
Claimed by the Petitioner in the instant petition	672.33	670.13	671.18	669.69	673.17
Allowed after true-up in this order	672.28	670.11	671.20	669.73	673.33

Approved Annual Fixed Charges for 2014-19 Tariff Period

37. Accordingly, the Annual Fixed Charges (AFC) after true-up in respect of the Combined Asset for 2014-19 tariff period are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	8033.59	8037.05	8038.65	8045.28	8086.89
Interest on Loan	3939.76	3526.01	3293.81	2930.42	2678.52
Return on Equity	9177.19	9225.53	9227.32	9234.75	9306.30
O&M Expenses	3356.84	3468.37	3583.40	3702.41	3825.22
Interest on Working Capital	672.28	670.11	671.20	669.73	673.33
Total	25179.66	24927.07	24814.38	24582.59	24570.26

38. The details of annual transmission charges approved vide order dated 21.4.2016 in Petition No. 53/TT/2015, claimed in the instant petition and true-up annual transmission charges allowed in the instant order in respect of the Combined Asset are as follows:

(₹ in lakh)

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Allowed earlier in order dated 21.4.2016 in Petition No. 53/TT/2015	25184.61	24800.57	24426.45	24066.87	23724.55
Claimed by the Petitioner in the instant petition	25181.56	24927.72	24813.52	24580.58	24563.32
Allowed after true-up in this order	25179.66	24927.07	24814.38	24582.59	24570.26

DETERMINATION OF ANNUAL FIXED CHARGES FOR 2019-24 TARIFF PERIOD

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



(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	8170.25	8236.99	2678.76	2820.99	3100.32
Interest on Loan	2231.64	1729.63	1424.83	1362.11	1483.18
Return on equity	8908.54	8979.77	9073.53	9242.72	9557.50
Interest on Working Capital	415.42	415.29	332.84	341.34	356.17
O&M Expenses	2868.93	2970.46	3074.76	3183.59	3293.29
Total	22594.78	22332.14	16584.72	16950.75	17790.46

40. The details of IWC claimed for 2019-24 tariff period are as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
O&M Expenses	239.08	247.54	256.23	265.30	274.44
Maintenance Spares	430.34	445.57	461.21	477.54	493.99
Receivables	2778.05	2753.28	2044.69	2089.82	2187.35
Total	3447.47	3446.39	2762.13	2832.66	2955.78
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest	415.42	415.29	332.84	341.34	356.17

Capital Cost

41. 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 asset 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 up to 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 asset forming part of the project, but not in use, as declared in the tariff petition;
- (b) De-capitalised Asset 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 asset.

(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.”

42. The admitted capital cost of ₹157677.28 lakh as on 31.3.2019 in respect of the Combined Asset has been considered as opening capital cost as on 1.4.2019 for determination of tariff in accordance with Regulation 19 of the 2019 Tariff Regulations.

43. The capital cost as on COD and projected ACE claimed for 2019-24 tariff period are as follows:

RCE-III Apportioned approved cost	Capital cost allowed as on 1.4.2019	ACE					Capital cost as on 31.3.2024
		2019-20	2020-21	2021-22	2022-23	2023-24	
160540.82	157677.28	854.08	1674.04	1653.99	4351.50	6821.63	173032.52

Cost over-run

44. The estimated completion cost of the Combined Asset is more than the RCE-III approved cost by about ₹12491.70 lakh.

45. The Petitioner vide affidavit dated 18.1.2023 has made the following submissions:

(i) The Revised Cost Estimate-IV (RCE-IV) for the transmission project was accorded by Board of Directors of the Petitioner in its 411th meeting held on 17.12.2022, communicated vide Memorandum Ref. No.: C/CP/PA2223-09-0AH-RCE010 dated 23.12.2022, at an estimated cost of ₹ 277344 lakh including IDC of ₹29113 lakh, at July, 2022 price level.

(ii) The details of RCE-IV apportionment vis-a-vis RCE-III of the Combined Asset covered under instant petition and Asset-19 and Asset-20 covered in Petition No.



663/TT/2020 is as follows:

(₹ in lakh)		
Assets	Apportioned approved cost as per RCE-III	Apportioned approved cost as per RCE-IV
Combined Asset	160540.82	178743
Asset-19 (663/TT/2020)	81538.83	82407
Asset-20 (663/TT/2020)	15643.35	16194
Total	257723	277344

(iii) The details of cost of the Combined Asset are as follows:

(₹ in lakh)		
RCE-III apportioned approved cost	RCE-IV apportioned approved cost	Estimated Completion Cost
160540.82	178743.00	173032.52

(iv) Comparison of RCE-IV cost of the transmission project with the RCE-III cost:

Sl. No.	Variation on account of	Variation in RCE-IV from approved RCE-III	
		(₹ in lakh)	(in %)
(i)	Price Variation	(-) 841	(-) 0.33%
(ii)	Variation in quantities of approved items	(-) 340	(-) 0.13%
(iii)	Land & Compensation	22029	8.55%
(iv)	Exchange Rate Variation (ERV) on Foreign Currency Loan Revaluation	103	0.04 %
(v)	Other Reasons (IEDC and IDC)		
A	IEDC	(-) 515	(-) 0.20%
B	IDC	(-) 815	(-) 0.32%
	Sub- Total (IEDC & IDC)	(-) 1330	(-) 0.52%
	GRAND TOTAL	19621	7.61 %

(v) Reasons for variation in cost estimate:

There is an increase of ₹19621 lakh (7.61%) from the approved RCE-III cost of ₹257723 lakh. The head wise variation in cost is as follows:

a. **Price Variation (PV) (Decrease of ₹8.41 crore: (-) 0.33 %)**

Based on the actual expenditure incurred, there has been a decrease in the cost of the transmission project by ₹841 lakh on this account, which works out to (-) 0.33% of the approved RCE-III cost. The variation is attributable to actual price variation kept in RCE-IV vis-à-vis provision of PV envisaged as per RCE-III.



b. **Variation in Quantities of Approved Items (Decrease of ₹340 lakh:(-)0.13 %)**

In the subject RCE-IV, there has been a variation of (-) ₹340 lakh in quantities of Edamon (KSEB) -Muvattupuzha (Kochi) 400 kV D/C (Quad) transmission line, which works out to (-) 0.13% of the approved cost. The quantities of tower steel, foundation etc. in the proposed RCE-IV are considered as per final amendments and actual site requirement.

c. **Land Compensation (Increase of ₹22029 lakh: 8.55 %)**

In the approved RCE-III cost, there was a provision of ₹34260 lakh for land compensation. However, based on actual expenditure incurred and balance anticipated expenditure, an amount of ₹56290 lakh has incurred/ likely to be incurred under the head, resulting in an increase of ₹22029 lakh in cost of the transmission project. The details of increase in cost under the head is explained as follows:

(₹ in lakh)

Description	As per RCE-III	As per RCE-IV	Remarks
i) Land & Compensation for Sub-station	28.39	29.34	Based on the actual expenditure under the subject head in view of Kerala High court ruling for enhanced compensation for Muvattupuzha (Kochi) Sub-station.
ii) Compensation towards Crop, Tree & PTCC, etc	180.07	399.42	There is an increase of ₹21934 lakh under the subject head which is on account of the following: 1. Compensation enhancement by V 52 lakh against 400 kV D/C Edamon-Kochi line. 2. Estimated Compensation payments for an amount of ₹21414 lakh on court orders. It is to mention that various court cases are under progress against Muvathupuzha (Cochin) – North Trichur 400 kV (QQuadUAD) D/C line, Tirunelveli – Edamon (KSEB) 400 kV M/C Line (2 Ckts of Quad & 2 Ckts of Twin Moose) and Edamon-Muvathupuzha (Cochin) 400 kV (QUad) D/C line for enhanced compensation amounts. Accordingly, an amount of ₹21414 lakh has been included in RCE-IV against such court orders.
iii) Compensation towards forest including NPV	8.14	8.14	Based on the actual/ anticipated expenditure under the subject head



Description	As per RCE-III	As per RCE-IV	Remarks
iv) Compensation for tower base and diminution of land value in the width of Right of Way (RoW) corridor	126.00	126.00	Based on the actual/ anticipated expenditure under the subject head.
TOTAL	342.6	562.90	

d. **Other Reasons (IEDC & IEDC) (Decrease of ₹ 1330 lakh: (-) 0.52 %)**

Total IDC and IEDC under the transmission project has decreased by ₹1330 lakh compared with approved RCE-III cost, which works out to (-) 0.52 % of the approved RCE-III cost as per the following break-up:

Decrease in IEDC

IEDC including contingencies for the transmission project in approved RCE-III cost was estimated at ₹9699 lakh, whereas in the RCE-IV, on the basis of actual expenditure incurred, IEDC works out to ₹9184 lakh. Thus, IEDC under the transmission project has decreased by ₹515 lakh.

Decrease in IDC

Interest during Construction (IDC) for the transmission project as per approved RCE-III cost was estimated at ₹29929 lakh whereas, based on the actual funds flow, IDC for the transmission project in the RCE-IV works out to ₹ 29113 lakh. Thus, there is a decrease of ₹815 lakh in IDC.

e. **Foreign Exchange Rate Variation (FERV) on Foreign loan revaluation (Net increase of ₹ 103 lakh: 0.04 %)**

On account of deployment of ADB loan in the transmission project, there is an incidence of increase in FERV liability from RCE-III cost to the tune of ₹103 lakh due to revaluation of the said loans.

46. We have considered the submissions of the Petitioner. The estimated completion cost of the Combined Asset is more than the RCE-III apportioned approved cost by ₹12491.70 lakh. The Petitioner has submitted RCE-IV duly approved by the Board of Directors of Petitioner's company in its 411th meeting held on on 17.12.2022. As per the submissions of the Petitioner, the major reason for cost variation is compensation



towards crop, tree and PTCC, etc., compensation towards forest including NPV, compensation for tower base and diminution of land value in the width of RoW Corridor. The estimated completion of the Combined Asset is within the RCE-IV apportioned approved cost and it is approved.

Initial Spares

47. The Petitioner has submitted that the Petitioner had filed an Appeal before the APTEL with respect to computation of Initial Spares against the order dated 21.4.2016 in Petition No. 53/TT/2025. The judgment was issued in favour of Petitioner vide order dated 14.9.2019 in Appeal No. 74 of 2017 with a direction to the Commission to recompute the Initial Spares based on overall project cost. Accordingly, the matter was reheard and the Commission vide order dated 4.9.2021 in Petition No. 53/TT/2015 observed that the Initial Spares will be revised on the basis of the overall project cost as per the directions of APTEL at the time of the 2014-19 tariff period.

48. The Petitioner in the instant petition has submitted that Asset-19 and Asset-20 are put into commercial operation in 2019-24 period and all the assets covered under the transmission project will be combined only in 2024-29 period and therefore, the Petitioner is not claiming the disallowed Initial Spares in the instant petition. The Petitioner has prayed to allow it to claim the balance Initial Spares based on overall project cost at the time of true up of 2019-24 period and determination of tariff for 2024-29 period when the entire project gets completed and over all project cost is known.

49. We have considered the submissions of the Petitioner. Out of the total of 20 transmission assets covered under the scope of the transmission project, two assets (Asset-19 and Asset-20) are covered in Petition No. 663/TT/2020 and Asset-1 to Asset-



18 are covered under the instant petition as Combined Assets. The entire transmission project has been completed in 2019-24 tariff period and the overall project cost of the transmission assets is arrived at only when all the assets are combined while claiming the trued up tariff of the 2019-24 tariff period. Therefore, Initial Spares claimed by the Petitioner will be reviewed at the time of true up of 2019-24 period and determination of tariff of 2024-29 period.

Additional Capital Expenditure (“ACE”)

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

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

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

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

Provided that in case of any replacement of the Asset, the additional capitalization shall be worked out after adjusting the gross fixed Asset and cumulative depreciation of the Asset 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 Asset 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 Asset and the cumulative depreciation, subject to prudence check on the following grounds:

- (a) The useful life of the Asset is not commensurate with the useful life of the project and such Asset 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.

51. The Petitioner has submitted that an amount of ₹15355.24 lakh is proposed to be incurred on account of the land compensation to be paid as per court orders and has claimed the same as per Regulation 25(1)(a) of the 2019 Tariff Regulations.

52. The Petitioner vide affidavit dated 18.1.2023 has submitted that the proposed ACE claimed is on account of compensation paid in the state of Kerala as per court orders/Lok Adalat towards tree crops and diminution of land in transmission line and also towards land compensation paid for Cochin (Muvattapuzha) Sub-station. The Petitioner has submitted the asset wise break-up of ACE claimed. The details are as follows:

Sl. No.	Particulars	(₹ in lakh)				Total
		Asset-11		Asset-15		
		Sub-station	Transmission Line	Sub-station	Transmission Line	
1	Expenditure from 1.4.2019 to 31.3.2020	0.00	605.17	2.70	246.21	854.08
2	Expenditure from 1.4.2020 to 31.3.2021	0.00	205.77	5.72	1462.55	1674.04



3	Estimated ACE from 1.4.2021 to 31.3.2022	0.00	133.72	0.00	1520.27	1653.99
4	Estimated ACE from 1.4.2022 to 31.3.2023	0.00	101.13	0.00	4250.37	4351.50
5	Estimated ACE from 1.4.2023 to 31.3.2024	0.00	66.42	0.00	6755.21	6821.63

53. We have considered the submission of the Petitioner. COD of the Asset-11 and Asset-15 is 1.7.2010 and 1.12.2011, respectively, and the ACE claimed by the Petitioner is beyond the cut-off date and is on account of court orders w.r.t. land compensation. The Petitioner has submitted the court orders and details of comeensation paid. ACE calimed by the Petitioner for Asset-11 and Asset-15 is allowed under Regulation 25(1)(a) of the 2019 Tariff Regulations. The Petitioner has claimed ACE for 2019-20 and 2020-21 on actual basis and for 2021-22, 2022-23, 2023-24 is on estimated basis. ACE allowed for 2019-24 period is subject to true-up on the basis of actuals.

54. The details of proposed ACE allowed for 2019-24 tariff period subject to truing up are as follows:

Assets	ACE				
	2019-20	2020-21	2021-22	2022-23	2023-24
Asset-11	605.17	205.77	133.72	101.13	66.42
Asset-15	248.91	1468.27	1520.27	4250.37	6755.21
Total	854.08	1674.04	1653.99	4351.50	6821.63

Capital cost considered for 2014-19 period

55. The capital cost considered for 2019-24 tariff period is as follows:

Capital cost as on 1.4.2014	ACE					Capital cost as on 31.3.2024
	2019-20	2020-21	2021-22	2022-23	2023-24	
157677.28	854.08	1674.04	1653.99	4351.50	6821.63	173032.52

Debt-Equity Ratio

56. 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.”

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

Funding	Capital cost as on 1.4.2019 (₹ in lakh)	(in %)	Total cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	110374.48	70.00	121123.15	70.00
Equity	47302.80	30.00	51909.38	30.00
Total	157677.28	100.00	173032.52	100.00

Depreciation

58. 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 asset 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 asset 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 asset 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 asset.

(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 up to 31.3.2019 from the gross depreciable value of the asset.

(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 asset 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.”

59. We have considered the submissions of the Petitioner. Depreciation has been allowed considering capital expenditure and cumulative depreciation as on 31.3.2019 and approved ACE during 2019-24 tariff period. WAROD has been worked out and placed as Annexure-II. The Combined Asset has completed 12 years of life as on 31.3.2021. The remaining depreciable value has been spread across the balance useful life of the Combined Asset. Depreciation allowed in respect of the Combined Asset for 2019-24 tariff period is as follows:

(₹ in lakh)						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Gross Block	157677.28	158531.36	160205.40	161859.39	166210.89
B	ACE	854.08	1674.04	1653.99	4351.50	6821.63
C	Closing Gross Block (A+B)	158531.36	160205.40	161859.39	166210.89	173032.52
D	Average Gross Block (A+C)/2	158104.32	159368.38	161032.40	164035.14	169621.71
E	Freehold Land	2867.52	2867.52	2867.52	2867.52	2867.52
F	Average Gross Block (D-E)	155236.80	156500.86	158164.88	161167.62	166754.19
G	Depreciable Value (F*90%)	139713.12	140850.77	142348.39	145050.86	150078.77
H	Weighted average Rate of Depreciation (in %)	5.15	5.15	1.66	1.72	1.83
I	Lapsed life (at the beginning of the year) (Year)	10.00	11.00	12.00	13.00	14.00
J	Balance useful life (at the beginning of the year) (Year)	22.00	21.00	20.00	19.00	18.00
K	Depreciation during the year	8144.88	8211.63	2679.98	2822.22	3101.54
L	Cumulative depreciation at the end of the year	80537.15	88748.77	91428.75	94250.97	97352.51
M	Remaining Depreciable Value at	59175.97	52102.00	50919.64	50799.89	52726.25



	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	the end of the year (G-L)					

Interest on Loan (“IoL”)

60. 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 asset, 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 up to 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.

(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”.

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

		(₹ in lakh)				
	Existing Assets	2019-20	2020-21	2021-22	2022-23	2023-24
A	Gross Normative Loan	110374.48	110972.33	112144.16	113301.95	116348.00
B	Cumulative Repayments up to Previous Year	72392.26	80537.15	88748.77	91428.75	94250.97
C	Net Loan-Opening (A-B)	37982.21	30435.19	23395.39	21873.20	22097.04
D	Additions due to ACE	597.86	1171.83	1157.79	3046.05	4775.14
E	Repayment during the year	8144.88	8211.63	2679.98	2822.22	3101.54
F	Net Loan-Closing (C+D-E)	30435.19	23395.39	21873.20	22097.04	23770.63
G	Average Loan (C+F)/2	34208.70	26915.29	22634.30	21985.12	22933.83
H	Weighted Average Rate of Interest on Loan (in %)	6.53	6.44	6.32	6.22	6.48
I	Interest on Loan (G*H)	2232.50	1732.88	1429.42	1367.06	1487.16

Return on Equity (“RoE”)

62. 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 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 follows:

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

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.”

63. The Petitioner has submitted that MAT rate is applicable to the Petitioner's Company. We have considered the submissions of the Petitioner. Accordingly, MAT rate applicable in 2019-20 has been considered for the purpose of RoE which shall be trued up with actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. RoE allowed in respect of the Combined Asset under Regulation 30 of the 2019 Tariff Regulations is as follows:

		(₹ in lakh)				
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Opening Equity	47302.80	47559.03	48061.24	48557.44	49862.89



	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
B	Addition due to ACE	256.22	502.21	496.20	1305.45	2046.49
C	Closing Equity (A+B)	47559.03	48061.24	48557.44	49862.89	51909.38
D	Average Equity (A+C)/2	47430.92	47810.13	48309.34	49210.16	50886.13
E	Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
F	Tax Rate applicable (in %)	17.472	17.472	17.472	17.472	17.472
G	Applicable RoE Rate (in %)	18.782	18.782	18.782	18.782	18.782
H	Return on Equity for the year (D*G)	8908.47	8979.70	9073.46	9242.65	9557.43

Operation & Maintenance Expenses (“O&M Expenses”)

64. Regulation 35(3)(a) and Regulation 35(4) of the 2019 Tariff Regulations specify the following norms for O&M Expenses for the transmission system:

“(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



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
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 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.”

65. The O&M Expenses allowed for the elements covered in the transmission project for the 2019-24 tariff period are as follows:

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
400 kV Bays (Numbers)	33	33	33	33	33
Norms (₹ lakh/Bay)	32.15	33.28	34.45	35.66	36.91
220 kV Bays (Numbers)	19	19	19	19	19
Norms (₹ lakh/Bay)	22.51	23.30	24.12	24.96	25.84
6 no.of 315 MVA ICTS capacity in MVA	1890	1890	1890	1890	1890
Norms(₹lakh/MVA)	0.358	0.371	0.384	0.398	0.411
Line: D/C bundled (4 or more sub- conductor)					
Line Length (km)	230.22	230.22	230.22	230.22	230.22
Norms (₹ lakh/km)	1.322	1.368	1.416	1.466	1.517
Line: D/C (Twin Conductor):					
Line Length (km)	453.258	453.258	453.258	453.258	453.258
Norms (₹ lakh/km)	0.881	0.912	0.944	0.977	1.011
Total O&M Expenses (₹ lakh)	2868.93	2970.46	3074.76	3183.59	3293.29

Interest on Working Capital (“IWC”)

66. Regulations 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)...

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

- i. Receivables equivalent to 45 days of 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 ...

(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;”

67. 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 interest on working capital as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (RoI) on working capital 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 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points) for 2021-24. The components of the working capital and interest allowed thereon for the Combined Asset is as follows:

(₹ in lakh)						
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
A	Working Capital for O&M Expenses (O&M Expenses for one Month)	239.08	247.54	256.23	265.30	274.44
B	Working Capital for Maintenance Spares (15% of O&M)	430.34	445.57	461.21	477.54	493.99
C	Working Capital for Receivables (Equivalent to 45 days of annual transmission charges)	2774.98	2747.05	2040.06	2085.10	2182.28
D	Total Working Capital (A+B+C)	3444.40	3440.16	2757.50	2827.93	2950.71
E	Rate of Interest of working capital (in %)	12.05	11.25	10.50	10.50	10.50
F	Interest of working capital (D*E)	415.05	387.02	289.54	296.93	309.82



Annual Fixed Charges for 2019-24 Tariff Period

68. The transmission charges allowed in respect of the Combined Asset for 2019-24 period are as follows:

Particulars	(₹ in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	8144.88	8211.63	2679.98	2822.22	3101.54
Interest on Loan	2232.50	1732.88	1429.42	1367.06	1487.16
Return on Equity	8908.47	8979.70	9073.46	9242.65	9557.43
O&M Expenses	2868.93	2970.44	3074.76	3183.58	3293.27
Interest on Working Capital	415.05	387.02	289.54	296.93	309.82
Total	22569.83	22281.67	16547.16	16912.44	17749.22

Filing Fee and Publication Expenses

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

Licence Fee & RLDC Fees and Charges

70. The Petitioner has sought reimbursement of licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for 2019-24 period. The Petitioner has also sought reimbursement of RLDC fee and charges in accordance with Regulation 70(3) of the 2019 Tariff Regulations for 2019-24 tariff period. The Petitioner shall be entitled to Licence Fee and RLDC Fees and Charges in terms of 2019 Tariff Regulations.

Goods and Services Tax

71. 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, paid by the Petitioner on account of demand from Government/Statutory authorities, may be allowed to be recovered from the beneficiaries.

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

Security Expenses

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

74. We have considered the submissions of the Petitioner. The Petitioner has claimed consolidated security expenses for all the transmission assets owned by it 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 Commission vide order dated 3.8.2021 in Petition No. 260/MP/2020 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

75. 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

76. The Petitioner has submitted that the transmission charges for the transmission assets for 2014-19 and 2019-24 tariff period will be governed, as provided in Regulation 43 of the 2014 Tariff Regulations and Regulation 57 of the 2019 Tariff Regulations respectively, and the applicable 2010 Sharing Regulations and the 2020 Sharing Regulations.

77. TANGEDCO has submitted as follows:

- (a) Kudankulam Atomic Power Project (2X1000 MW) i.e, Unit-I (1000 MW) and Unit-II (1000 MW) have been put into commercial operation only on 30.12.2014 and 1.7.2015, respectively. There were mismatches between execution of the generating units and the associated transmission assets. The Commission approved the COD of the Kudankulam-Tirunelveli 400 kV D/C line along with associated bays as 1.4.2009 despite the objections raised by TANGEDCO on the grounds that the transmission assets were not brought into beneficial use due to non-execution of the generating units.
- (b) In Petition No. 307 of 2010 filed by the Petitioner, TANGEDCO brought it to the notice of the Commission that there was an indemnification agreement between the Petitioner and the generator, NPCIL to make good the loss on account of any mismatch between the execution of the generating units and that of the transmission assets. However, the Commission vide order dated 4.5.2011 held that the transmission charges will be shared by the SR beneficiaries.
- (c) Against the order dated 4.5.2011 in Petition No. 307 of 2010, TANGEDCO filed Appeal No. 201 of 2011 before the APTEL with a prayer to direct the Petitioner to claim the damages and losses incurred due to the delay in execution of the Nuclear power plant and also not to claim any transmission charges from TANGEDCO until the generating units are executed by NPCIL, which was dismissed by the APTEL vide judgement dated 3.10.2012,



against which an appeal has been preferred by TANGEDCO and is pending adjudication before the Hon'ble Supreme Court of India.

- (d) The Commission, in almost all the similar cases has issued clear directions to recover the transmission charges from the defaulting entity attributing to the mismatch in execution and preventing the transmission assets from bringing into beneficial use.
- (e) Request to consider the relevant provisions of the 2009-14 Tariff Regulations, 2010 Sharing Regulations and Commission's orders in various similar cases as well the directions of the APTEL in terms of treatment of mismatch in execution of the generator and the associated transmission asset and issue appropriate order to recover the tariff from NPCIL from the deemed COD of the associated lines till the execution of the generating units and also to revisit the order dated 4.5.2011 in Petition No. 307 of 2010.

78. In response, the Petitioner has submitted as follows:

- (a) The contention/objection raised by TANGEDCO is mainly regarding approval of transmission charges in respect of Kundankulam (NPC)-Tirunelveli (Powergrid) 400 kV (Quad) D/C Line-I and II with associated bays and equipment. The Commission vide order dated 24.9.2010 in Petition No. 81/2010 approved COD of the said transmission line as 1.4.2009 and allowed the Petitioner to file petition for determination and approval of transmission charges.
- (b) In compliance, Petition No. 307 of 2010 was filed wherein, the Commission vide order dated 4.5.2011 approved the tariff of the said transmission lines and directed that issue of COD of the transmission line has been settled vide Commission's order dated 24.9.2010 in Petition No. 81/2010 and the issue cannot be re-opened because the same is hit by res-judicata and the transmission charges allowed shall be shared by the Respondents in accordance with the 2009 Tariff Regulations.



(c) The APTEL upheld the Commission's order dated 4.5.2011 in Petition No. 307 of 2010 vide its judgment dated 3.10.2012 in Appeal No. 201 of 2011 filed by TANGEDCO. Therefore, the contention's of TANGEDCO may be rejected.

79. We have considered the submissions of the Petitioner as well as TANGEDCO. TANGEDCO has already approached APTEL by way of Appeal No. 201 of 2011 against the order dated 4.5.2011 in Petition No. 307 of 2010 and the said appeal was dismissed by the APTEL. TANGEDCO has further approached the Hon'ble Supreme Court in Civil Appeal No. 2647 of 2013 against the said order of the APTEL dated 3.10.2012, which is pending adjudication before the Hon'ble Supreme Court and no stay has been granted on the operation of the impugned order. Therefore, in light of the order and judgment of the APTEL dated 3.10.2012 in Appeal No. 201 of 2011, the order dated 4.5.2011 in Petition No. 307 of 2010 stands and we do not see any reason to revisit the said order. Therefore, the contentions of TANGEDCO in this regard are rejected.

80. With effect from 1.7.2011, sharing of transmission charges for inter-State transmission systems was governed by the provisions of the 2010 Sharing Regulations and with effect from 1.11.2020, the 2010 Sharing Regulations has been repealed and sharing is governed by the provisions of the 2020 Sharing Regulations. Accordingly, the billing, collection and disbursement of the transmission charges for the 2014-19 tariff period and 2019-24 tariff period shall be governed by 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, subject to the Appeal filed by TANGEDCO before the Hon'ble Supreme Court in Civil Appeal No. 2647 of 2013.



81. To summarise:

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

(₹ in lakh)				
2014-15	2015-16	2016-17	2017-18	2018-19
25179.66	24927.07	24814.38	24582.59	24570.26

- b) AFC allowed in respect of the Combined Asset for 2019-24 tariff period in this order are as follows:

(₹ in lakh)				
2019-20	2020-21	2021-22	2022-23	2023-24
22569.83	22281.67	16547.16	16912.44	17749.22

82. The Annexure-I and Annexure-II given hereinafter form part of this order.

83. This order disposes of Petition No. 91/TT/2022 in terms of the above discussions and findings.

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

**sd/
(Arun Goyal)
Member**

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



2014-19 Capital Expenditure as on 1.4.2014	Admitted Capital Cost as on COD (₹ in lakh)	ACE (₹ in lakh)					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	(in %)	Annual Depreciation as per Regulations				
					2017-18	2018-19			2014-15 (₹ in lakh)	2015-16 (₹ in lakh)	2016-17 (₹ in lakh)	2017-18 (₹ in lakh)	2018-19 (₹ in lakh)
Land	2867.52	0.00	0.00	0.00	0.00	0.00	2867.52	0.00	0.00	0.00	0.00	0.00	0.00
Building	3038.59	0.00	0.00	0.00	0.00	0.00	3038.59	3.34	101.49	101.49	101.49	101.49	101.49
Transmission Line	114295.60	88.27	5.38	16.71	199.20	1329.04	115934.20	5.28	6037.14	6039.61	6040.19	6045.89	6086.24
Sub Station	35052.58	0.00	37.64	0.88	34.38	13.51	35138.99	5.28	1850.78	1851.77	1852.79	1853.72	1854.98
PLCC	697.98	0.00	0.00	0.00	0.00	0.00	697.98	6.33	44.18	44.18	44.18	44.18	44.18
TOTAL	155952.27	88.27	43.02	17.59	233.58	1342.55	157677.28		8033.59	8037.05	8038.65	8045.28	8086.89
								Average Gross Block (₹ in lakh)	155996.41	156062.05	156092.36	156217.94	157006.01
								Weighted Average Rate of Depreciation (in %)	5.15	5.15	5.15	5.15	5.15



Annexure – 2

2019-24 Capital Expenditure as on 1.4.2019	Admitted Capital Cost as on 1.4.2019 (₹ in lakh)	ACE	Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations				
		2019-24			2019-20 (₹ in lakh)	2020-21 (₹ in lakh)	2021-22 (₹ in lakh)	2022-23 (₹ in lakh)	2023-24 (₹ in lakh)
Land	2867.52	0.00	2867.52	0.00	0.00	0.00	Spreading		
Building	3038.59	0.00	3038.59	3.34	101.49	101.49			
Transmission Line	115934.20	15346.82	131281.02	5.28	6143.80	6210.32			
Sub Station	35138.99	8.42	35147.41	5.28	1855.41	1855.63			
PLCC	697.98	0.00	697.98	6.33	44.18	44.18			
TOTAL	157677.28	15355.24	173032.52		8144.88	8211.63	2679.98	2822.22	3101.54
Average Gross Block (₹ in lakh)					158104.32	159368.38	161032.40	164035.14	169621.71
Weighted Average Rate of Depreciation (in %)					5.15	5.15	1.66	1.72	1.83

