

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

**Petition No. 216/TT/2020
(On Remand)**

Coram:

**Shri Jishnu Barua, Chairperson
Shri Ramesh Babu V., Member
Shri Harish Dudani, Member**

Date of Order: 23.07.2025

In the Matter of:

Approval under Regulation 86 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and truing up of transmission tariff of the 2014-19 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 and determination of transmission tariff of the 2019-24 period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for Transmission System constructed, maintained and operated by Adani Transmission (India) Limited *vide* Licence No. 20/Transmission/2013/CERC.

And in the matter of:

Adani Transmission (India) Limited (ATIL),
(earlier in the name of Adani Power Limited),
Shikhar, Near Adani House,
Mithakhali Six Roads, Navrangpura,
Ahmedabad-389009.

....Petitioner

Vs

- 1. Power Grid Corporation of India Limited,**
Saudamini, Plot-2, Sector-29,
Near IFFCO Chowk,
Gurgaon-122001, Haryana.
- 2. National Load Dispatch Centre,**
B-9, Qutab Industrial Area, Katwaria Sarai,
New Delhi-110016.
- 3. Northern Regional Load Despatch Centre,**
18-A, Shaheed Jeet Singh Sansanwal Marg,
Katwaria Sarai,
New Delhi-110016.



4. **Western Regional Power Committee,**
F-3, MIDC Area, Marol, Opposite SEEPZ,
Central Road, Andheri (East),
Mumbai-400093.
5. **Central Electricity Authority,**
Sewa Bhawan,
Sector-1, R.K. Puram,
New Delhi-110066.
6. **Gujarat Energy Transmission Company Limited,**
Sardar Patel Vidyut Bhawan, Race Course,
Vadodra-390007.
7. **Haryana Vidyut Prasaran Nigam Limited,**
1st Floor, Shakti Bhawan, Sector-6,
PanchKula-134109, Haryana.
8. **Gujarat Urja Vikas Nigam Limited,**
Sardar Patel Vidyut Bhawan, Race Course,
Vadodra-390007.
9. **Maharashtra State Electricity Distribution Company Limited,**
"Prakashgarh", Bandra (East),
Mumbai-400051, Maharashtra.
10. **Madhya Pradesh Power Management Company Limited,**
Shakti Bhawan, Vidyut Nagar, Rampur,
Jabalpur (MP)-482008.
11. **M.P. Audyokik Kendra Vikas Nigam Limited,**
Free Press House, 1st Floor,
3/54-Press Complex, A. B. road,
Indore-452008, Madhya Pradesh.
12. **Chhattisgarh State Power Distribution Company Limited,**
Vidyut Seva Bhawan Parisar, Dangania,
Raipur-492013, Chhattisgarh.
13. **Goa State Electricity Department,**
Vidyut Bhawan, Panaji,
Goa-403001.
14. **Daman and Diu Electricity Department,**
Administration of Daman & Diu,
Near Satya Narayan Temple,
Nani Daman-396210.



- 15. Electricity Department,**
Administration of Dadra Nagar Haveli,
Dadra Nagar Haveli UT, Silvassa-396230.
- 16. Heavy Water Projects,**
Department of Atomic Energy,
Heavy Water Board,
Vikram Sarabhai Bhawan, Anushakti Nagar,
Mumbai-400094.
- 17. Jindal Power Limited,**
Tamnar,
Raigarh, Chattisgarh-496001.
- 18. Torrent Power Limited,**
Torrent House, Opposite Ashram Road,
Ahmedabad-380009.
- 19. PTC India Limited,**
2nd Floor, NBCC Tower,
15, Bhikaji Complex,
New Delhi-110066.
- 20. Haryana Power Purchase Centre,**
Shakti Bhawan, Sector-6,
Panchkula, (Haryana)-134109.
- 21. Rajasthan Power Procurement Centre,**
Room No. 24, Vidyut Bhawan, Janpath, Jyoti Nagar,
Jaipur-302005, Rajasthan.
- 22. Jodhpur Vidyut Vitran Nigam Limited,**
New Power House Industrial Area,
Jodhpur-342003, Rajasthan.
- 23. Jaipur Vidyut Vitran Nigam Limited,**
Vidyut Bhawan, Janpath, Jyoti Nagar, Jyoti Marg,
Jaipur-302005, Rajasthan.
- 24. Ajmer Vidyut Vitran Nigam Limited,**
Old Power House, Hathi Bhatta, Jaipur Road,
Ajmer-305001, Rajasthan.
- 25. BSES Yamuna Power Limited,**
Shakti Kiran Building, Karkardooma,
Delhi-110092.
- 26. BSES Rajdhani Power Limited,**
BSES Bhawan, Nehru Place,
New Delhi-110019.



- 27. Tata Power Delhi Distribution Limited,**
Cennet Building, 33 kV Substation Building,
Hudson Lines, Kingsway Camp,
Delhi-110009.
- 28. New Delhi Municipal Council,**
Palika Kendra Building, Opposite Jantar Mantra,
Parliament Street,
New Delhi-110001.
- 29. Uttarakhand Power Corporation Limited,**
Urja Bhawan, Kanwali Road,
Dehradun-248001.
- 30. Uttar Pradesh Power Corporation Limited,**
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226001, UP.
- 31. North Central Railway,**
Allahabad, Uttar Pradesh.
- 32. Punjab State Power Corporation Limited,**
The Mall, Ablowal,
Patiala-147001.
- 33. Power Development Department,**
Jammu and Kashmir,
Civil Secretariat,
Jammu-180001.
- 34. Himachal Pradesh State Electricity Board,**
Vidyut Bhawan,
Shimla-171004.
- 35. Electricity Department, UT Chandigarh,**
Sector-9,
Chandigarh.
- 36. Northern Regional Power Committee,**
18-A, Qutab Institutional Area,
Shaheed Jeet Singh Marg, Katwaria Sarai,
New Delhi-110016.
- 37. Western Regional Power Committee,**
F-3, M.I.D.C. Area, Marol,
Andheri (East), Mumbai-400093.
- 38. Kanpur Electricity Supply Company Limited,**
14/71, Civil Lines,
Kanpur-208001.



39. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
Vidyut Bhawan, Vidyut Marg,
Jaipur- 302005.

40. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi-110002.

...Respondent(s)

Parties present : Shri Sourav Roy, Advocate, ATIL
Shri Pranav Bafna, Advocate, ATIL

ORDER

The Petitioner, Adani Transmission (India) Limited (hereinafter referred to as the “ATIL”), a transmission licensee, has filed the instant Petition for truing up of the transmission tariff for the period from 1.4.2014 to 31.3.2019 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as “the 2014 Tariff Regulations”) and for the determination of transmission tariff for the period from 1.4.2019 to 31.3.2024 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as “the 2019 Tariff Regulations”) in respect of the following assets (hereinafter referred to as “the transmission assets”) under evacuation of power from Mundra Power Project to Northern Region and Western Region (hereinafter referred to as “the transmission project”):

Asset-I: ±500 kV bipole Mundra-Mohindergarh HVDC Transmission Line including associated 400 kV lines, terminal substations & bays; and

Asset-II: 400 kV Double Circuit (“D/C”) Mundra-Dehgam Transmission Line, including associated system.

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

“1) Approve the trued-up Transmission Tariff for the Period of FY 2014-15 to FY 2018-19 for the assets covered under this petition.

2) Approve the Additional Capitalisation actually incurred during the tariff block FY 2014-15 to FY 2018-19 as claimed in the petition.



3) Approve the transmission tariff for the tariff block FY 2019-20 to FY 2023-24 for the assets covered under this petition, claimed in this petition.

4) Approve the Additional capitalisation projected to be incurred during the tariff block of FY 2019-20 to FY 2023-24 as claimed in the petition.

5) Approve the reimbursement of expenditure by the beneficiaries towards Petition filing fee, and expenditure on publishing of notices in newspapers in terms of Tariff Regulations and other expenditure (if any) in relation to the filing of petition.

6) Allow the Petitioner to bill and recover the Licence fee and RLDC fees, and charges, separately from the respondents in terms of Tariff Regulations: and

7) Pass such other relief as the 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:

(i) The Petitioner had filed Petition No. 44/TL/2012 for the grant of transmission licence for the transmission assets as they were being used as part of ISTS. The Commission, vide its order dated 29.7.2013, in Petition No. 44/TL/2012, granted the transmission licence and held that the transmission assets would be considered part of ISTS from the date of grant of the transmission licence, i.e., with effect from 29.7.2013.

(ii) The scope of the work as per the order dated 29.7.2013 in Petition No. 44/TL/2012 is as follows:

Particulars of Assets
AC system
Transmission line
(i) 400 kV D/C Mohindergarh-Dhanonda
(ii) 400 kV D/C Mohindergarh-Bhiwani
(iii) 400 kV D/C Mundra-Sami-Dehgam
Sub-stations
(i) Sub-stations at Mundra & Mohindergarh
(ii) Bays at Bhiwani (PG) Sub-station
(iii) Sub-stations at Mundra & Sami
(iv) Bays at Dehgam (PG) Sub-station
HVDC System
Transmission line
(i) $\pm$ 500 kV Bipole Mundra-Mohindergarh HVDC line
(ii) 33 kV D/C Electrode lines for HVDC Mundra and Mohindergarh Terminal Stations



Sub-station
(i) HVDC Terminal Stations at Mundra & Mohindergarh

(iii) The entire scope of work under the transmission project has been completed and is included in the present Petition. The details of the assets covered under this scope of work are as follows:

AC system	Assets
Transmission line	
(i) 400 kV D/C Mohindergarh Dhanonda	Asset-I
(ii) 400 kV D/C Mohindergarh-Bhiwani	Asset-I
(iii) 400 kV D/C Mundra -Sami-Dehgam	Asset-II
Sub-stations	
(i) Sub-stations at Mundra & Mohindergarh	Asset-I
(ii) Bays at Bhiwani (PG) Substation	Asset-I
(iii) Sub-stations at Mundra & Sami	Asset-II
(iv) Bays at Dehgam (PG) Sub-station	Asset-II
HVDC System	
Transmission line	
± 500 kV Bipole Mundra - Mohindergarh HVDC line	Asset-I
33 kV D/C Electrode lines for HVDC Mundra and Mohindergarh Terminal Stations	Asset-I
Sub-station	
HVDC Terminal Stations at Mundra & Mohindergarh	Asset-I

(iv) The transmission project was executed in two phases to evacuate power from the Mundra Power Project, namely, Asset-I (for evacuation of power to NR) and Asset-II (for evacuation of power to WR), as detailed below:

Asset Name	Particulars	COD date
Asset-1	HVDC Pole-I along with HVDC line	12.7.2012
	HVDC Pole-II along with HVDC line	9.10.2012
	400 kV D/C Mohindergarh-Dhanonda AC line	12.7.2012
	400 kV D/C Mohindergarh-Bhiwani AC Line	9.8.2012



Asset-2	400 kV D/C Mundra-Sami-Dehgam	13.7.2009
	400 kV D/C Sami-Dehgam along with the Switching Station	13.7.2009

(v) The tariff for the transmission assets was allowed for the period from 1.10.2013 to 31.3.2014, vide order dated 18.3.2016, in Petition No.184/TT/2013, considering the deemed COD as 1.10.2013.

(vi) The Petitioner filed Petition No. 146/TT/2016 for the truing up of the tariff for the 2013-14 period and for the determination of the transmission tariff for the 2014-19 period. The trued-up tariff as determined vide order dated 3.11.2017 in Petition No. 146/TT/2016 was based on the admitted capital costs of ₹364539.06 lakh and ₹54089.69 lakh as on 1.10.2013, and ₹370083.06 lakh and ₹54089.69 lakh as on 31.3.2014, for Asset-I and Asset-II, respectively. The trued-up Additional Capital Expenditure (ACE) considered for Asset-I and Asset-II during the 2013-14 period was ₹5544 lakh and 'Nil', respectively. The Commission, vide order dated 21.1.2022 in Petition No. 216/TT/2020, along with Petition No. 146/TT/2016, trued up the transmission tariff for the 2014-19 tariff period and determined the tariff for the 2019-24 period.

(vii) Aggrieved by the disallowance of the ACE for FY 2016-17 to FY 2018-19; 2019-20 to FY 2023-24; actual rate of interest on long-term loans; depreciation for FY 2021-22 to FY 2023-24 for Asset-II; O&M Expenses for the communication system for FY 2019-20 to FY 2023-24; and O&M Expenses for the Fixed Series Compensator ("FSC") for FY 2019-20 to FY 2023-24, the Petitioner (ATIL) filed an Appeal No. 9 of 2023 before the Appellate Tribunal for Electricity (the APTEL). The APTEL vide its judgment



dated 18.11.2024 in Appeal No. 9 of 2023 allowed the appeal and remanded the matter for a prudent check and reconsideration, as the case may be, of the above issues. The gist of the APTEL's judgment dated 18.11.2024 is as follows:

Sl. No.	Issue No. / Issue	Sub-issues	Decision of APTEL
1	Issue Nos. 1 and 2: Disallowance of Additional Capital Expenditure for the FY 2016-17 to FY 2018-19 and FY 2019-20 to FY 2023- 24.	Asset-I: Truck-mounted hot-line washing machine for insulators	The claim of the appellant is allowed subject to the prudence check as to the admissibility as per the documents submitted / to be submitted by the appellant. This exercise shall be completed by the Commission within one month from the date of this judgment.
		Silicon Paint Coating on High Voltage Insulators	
		Installation of Security System	
		Emergency restoration system	
		Replacement of porcelain insulators	
		Expenditure towards installation of Automatic Power Factor Correction (APCF) Panel	The findings of the Commission on this issue are affirmed.
		Asset-II: Expenses for Installation of Security System	The claim of the appellant is allowed subject to the prudence check as to the admissibility as per the documents submitted / to be submitted by the appellant. This exercise shall be completed by the Commission within one month from the date of this judgment
		Replacement of Battery Bank	The findings of the Commission on this issue are affirmed
		Upgradation of Power Line Carrier Communication (PLCC)	The claim of the appellant is allowed subject to the prudence check as to the admissibility as per the documents submitted / to be submitted by the appellant. This exercise shall be completed by the Commission within one month from the date of this judgment



		Liabilities to meet the award of arbitration for Land at Sami.	We remand the claim of the appellant to be decided afresh within two months from the date of this judgment, after directing the appellant to submit requisite documents in support of the claim
		Expenditure towards change of possession of Land.	We grant one more opportunity to the appellant to submit documents in support of this claim to the Commission within two weeks from the date of this judgment, after which the Commission shall decide such claim afresh within four weeks.
		Expenditure towards emergency restoration system.	We allow the claim of the appellant under this head, subject to a prudence check as to the admissibility as per the documents submitted / to be submitted by the appellant. This exercise shall be completed by the Commission within one month from the date of this judgment
2	Issue No. 3: Disallowance of actual rate of interest on long-term loan for 2014-2019 & 2019-2024 control period.	---	We set aside the findings of the Commission and allow the claim of the appellant by holding that the Weighted Average Rate of Interest (WAROI) shall be calculated on the basis of actual loan portfolio of the appellant which also includes the loan availed through ICD.
3	Issue No. 4: Disallowance of Depreciation for FY 2021-22 to FY 2023- 24 for Asset-II	---	We do not record any findings on this issue since the same is pending adjudication before this Tribunal in review proceeding and Hon'ble Supreme Court in a Civil Appeal. The decision therein shall be binding upon the parties.

4	Issue No. 5: Disallowance of Operations and Maintenance ("O&M") Expenses for the communication system for FY 2019-20 to FY 2023-24	---	We set aside the findings of the Commission with the direction that the O&M expenses for communication system be calculated separately in terms of Regulation 35(4) of 2019 Tariff Regulations within one month from the date of this judgment.
5	Issue No. 6: Disallowance of Operations and Maintenance ("O&M") Expenses for Fixed Series Compensator (FSC) for FY 2019-20 to FY 2023-24	---	The issue is remanded back to the Commission for fresh consideration. The appellant shall furnish the requisite details of the capital cost of the project as on commercial operation date to the Commission within two weeks from the date of this judgment, and the Commission shall decide the issue within two weeks thereafter

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

5. The matter was heard on 9.12.2024 and 30.12.2024, and notices were issued to the parties to file their respective replies and rejoinders. Madhya Pradesh Power Management Company Limited (MPPMCL), Respondent No. 10, has filed its reply vide affidavit dated 19.12.2024, and the Petitioner has filed its rejoinder to the reply filed by MPPMCL vide affidavit dated 23.12.2024. The issues raised by MPPMCL and the response thereto by the Petitioner have been dealt with in this order.

6. This order is issued considering the Petitioner's affidavits dated 2.12.2024 and 19.12.2024, including written submissions dated 22.1.2025; MPPMCL's reply affidavit dated 19.12.2024, and Petitioner's rejoinder to the reply of MPPMCL filed vide affidavit dated 23.12.2024



7. The final hearing in the matter was held on 30.12.2024, and the order in the matter was reserved.
8. Having heard the learned counsel of the Petitioner and having carefully perused the materials on record, we proceed to dispose of the Petition.

Reply submissions by MPPMCL

9. MPPMCL in its reply, dated 19.12.2024, has mainly made the following submissions:

a) Pursuant to a competitive bid for procurement of power for the consumers in the State of Haryana, Adani Power Limited, now known as Adani Power (Mundra) Limited ('APML') was selected as the successful bidder based on the tariff quoted for delivery of power at the nearest STU sub-station in Haryana. UHBVN and DHBVN (Haryana Discoms) entered into the Power Purchase Agreements (PPAs) both dated 7.8.2008 with APML where APML agreed to undertake generation and supply of electricity of the contracted capacity aggregating to the 1424 MW from Unit 7, Unit 8 and Unit 9 of the Mundra Power Project located at Kutch District in the State of Gujarat and for delivery of electricity at the delivery point at the State periphery of Haryana through a dedicated transmission system to be established by APML entirely at its own cost, expense, and risk. For wheeling electricity from the generating facility of APML at Mundra to the Haryana periphery, i.e. the STU sub-station at Dhanoda, the HVDC Line was constructed by APML in lieu of its offer/bid. The HVDC Line has a total capacity of carrying 2500 MW of electricity if both poles of the HVDC line are under regular operation and are fully available, i.e. each pole of the HVDC Line is capable of evacuating and carrying 1250 MW. Accordingly, on the



basis of the optimum capacity requirement for evacuation of 1424 MW from the Mundra Power Station to Mohindergarh in Haryana, both the poles of the HVDC Line are required to be available in a dedicated manner at all times and for the above quantum, there is no extra or redundant capacity available for carrying any other power on a long term committed basis.

b) For evacuation of power under the aforesaid PPAs, Adani Power Limited (AP) conceptualised, planned, constructed, and implemented the dedicated transmission system of ± 500 kV Mundra-Mohindergarh HVDC bi-pole transmission line, including associated 400 kV transmission lines (Mundra–Mohindergarh line).

c) Each Pole of the HVDC line is capable of evacuating and carrying 1250 MW of power. Thus, the HVDC line has a total capacity of carrying 2500 MW of electricity if both poles of the HVDC line are under regular operation and are fully available. So APML implemented a HVDC transmission system of 2500 MW against the requirement of 1500 MW.

d) Since this was a dedicated transmission system, no DIC might have been involved in its planning or implementation, and the dedicated transmission system might have escaped the technical and economic scrutiny for its necessity to be constructed for 2500 MW and also that it was the most economical solution to the requirement of transfer of power from Mundra to Haryana.

e) The First pole of the ± 500 kV bipole Mundra-Mohindergarh HVDC Transmission Line was commissioned on 12.7.2012 and the second pole of the ± 500 kV bipole Mundra-Mohindergarh HVDC Transmission Line were commissioned on 9.10.2012.



f) Since the above line could cater to a total of 2500 MW quantum, there was a certain surplus capacity left after catering to 1495 MW quantum (including losses for drawl of 1424 MW power at Haryana periphery) under the PPAs. Accordingly, APL filed a Petition under Sections 14 and 15 of the Electricity Act, 2003 (for short hereinafter referred to as 'the Act'), being Petition No. 44/TL/2012, seeking the grant of an inter-State Transmission License so that the entire line can be a part of the inter-State Transmission System. Subsequently, a transmission licence was granted to APL vide order dated 29.7.2013, in Petition No. 44/TL/2012.

g) The ± 500 kV Mundra-Mohindergarh HVDC bi-pole transmission line, which evacuates power from the Mundra Generating Station of APL to the Haryana periphery, was a Dedicated Transmission System until the grant of the transmission licence.

h) Haryana utilities, namely, UHBVNL and DHBVNL, had a total contracted capacity of 1424 MW at the delivery point at the State periphery of Haryana through a dedicated transmission system to be established by APML entirely at its own cost, expense, and risk from the Mundra Power Station, which was established as a ± 500 kV bipolar HVDC line with a transfer capacity of 1250 MW on each pole. Accordingly, both poles of the HVDC line needed to be available at all times in a dedicated manner for the transfer of 1424 MW of power to Haryana.

i) In light of the above, when transferring power to Haryana, any actions taken by the transmission licensee regarding the HVDC line must be done for both poles of the HVDC line. It cannot be the case that actions for 1495 MW and 1005 MW capacities on the HVDC line are handled separately.



Therefore, all actions regarding the HVDC line, which was implemented as a dedicated line, should be entirely borne by the power supplier, i.e., APML, and any load on another DIC is strongly opposed.

10. In response, the Petitioner in its affidavit dated 23.12.2024, has made the following submissions:

a) MPPMCL is seeking to raise issues that have been long settled since 29.7.2013, when it was decided that the transmission licensee would be entitled to receive transmission charges calculated using the PoC method, with the only condition that Adani Power Limited (APL) would bear the transmission charges related to the 1424 MW under the Haryana PPAs.

b) MPPMCL had made the same arguments regarding APL in the matter before the APTEL, in Appeal No. 9 of 2023. Although the MPPMCL's arguments did not find favour with the APTEL in the judgment dated 18.11.2024, the MPPMCL is again re-arguing them, repeating the same grounds in these proceedings which it had already presented before the APTEL, and this is at the post-remand stage. In doing so, MPPMCL has concealed that this issue is no longer res integra under Regulation 5(3)(c) of the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 (2020 Sharing Regulations), which explicitly provides for the treatment of the Mundra-Mohindergarh 2500 MW HVDC transmission system.

c) The inclusion of the 1005 MW as part of the national transmission capacity pool is not disputed but is clearly mandated by the applicable regulation. Therefore, claiming that APL alone should bear the transmission charges for the entire 2500 MW is completely incorrect and mistaken.



d) This is a case of limited remand. The submissions of MPPMCL should be rejected on the following grounds:

i. It is settled law that when a matter is remanded to a subordinate court by a superior court, its scope of enquiry is confined to the scope of the remand. Therefore, as in the present case, where the remand is limited, this Commission cannot consider arguments that fall outside the scope of the remand.

ii. Where an issue has been adjudicated by an appellate forum, the lower forum cannot hear an appeal of such determination.

iii. Reiterating the same arguments which have been considered and dealt with by the appellate court constitutes an abuse of process.

e) The Commission's mandate under the present Petition is linked to the order of remand issued by the APTEL, and the Commission is bound by the judgment dated 18.11.2024 passed by the APTEL in Appeal No. 9 of 2023. Therefore, the averments made in the reply of Respondent No. 10/MPPMCL, which rehash issues that have already been settled, should be rejected.

11. We have considered the submissions of the MPPMCL and the Petitioner. The issues raised by the MPPMCL concern the sharing of transmission charges and the treatment of capital costs for the 1495 MW capacity utilised by Adani Power (Mundra) Limited (APML). The Petitioner filed Petition No.44/TL/2012 under Regulation 6(c) of the Central Electricity Regulatory Commission (Terms and Conditions for the grant of transmission licence and other related matters)



Regulations, 2009 (Transmission Licence Regulations) for the grant of a transmission licence for the dedicated transmission lines and associated bays. After a thorough examination of the power flows on these dedicated lines, the Commission concluded that these lines, constructed by the Petitioner, are inter-regional in nature and cannot remain unregulated. The Commission deemed it necessary to intervene and regulate these lines to ensure compliance with the regulatory framework, serving the overall interest of the grid. Accordingly, the Commission vide order dated 29.7.2013 in Petition No.44/TL/2012 granted a transmission licence to the Petitioner for the dedicated transmission lines and associated bays, following due process.. Subsequently, the Commission approved the capital cost in the order dated 18.3.2016 in Petition No. 184/TT/2013 from COD, i.e., 1.10.2013 to 31.3.2014, for both the HVDC and AC sections of the transmission system. The current Petition has been remanded to the Commission regarding the ACE allowed and not allowed for the 2014-19 and 2019-24 tariff periods. Thus, we find no merit in the issues raised by MPPMCL, and as such, they are hereby rejected.

Truing up of Annual Fixed Charges for the 2014-19 Tariff Period

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

Particulars	Asset-I				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	19274.00	19720.00	19744.00	19750.00	19758.00
Interest on Loan	28780.00	25951.00	27403.00	22959.00	20354.00
Return on Equity	22253.00	22874.00	22905.00	22913.00	22981.00
Interest on working capital	1818.00	1788.00	1834.00	1745.00	1699.00
O & M Expenses	3618.00	3811.00	4018.00	4239.00	4473.00
Total	75744.00	74144.00	75905.00	71605.00	69265.00

(₹ in lakh)



(₹ in lakh)

Particulars	Asset-II				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	2801.00	2801.00	2801.00	2803.00	2806.00
Interest on Loan	3245.00	2769.00	2822.00	2266.00	1898.00
Return on Equity	3182.00	3198.00	3199.00	3202.00	3213.00
Interest on working capital	277.00	269.00	272.00	262.00	256.00
O & M Expenses	1175.00	1214.00	1255.00	1296.00	1339.00
Total	10681.00	10251.00	10351.00	9832.00	9513.00

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

(₹ in lakh)

Particulars	Asset-I				
	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	543.00	572.00	603.00	636.00	671.00
O&M Expenses	301.00	318.00	335.00	353.00	373.00
Receivables	12624.00	12357.00	12651.00	11934.00	11544.00
Total	13468.00	13247.00	13588.00	12923.00	12588.00
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	1818.00	1788.00	1834.00	1745.00	1699.00

(₹ in lakh)

Particulars	Asset-II				
	2014-15	2015-16	2016-17	2017-18	2018-19
Maintenance Spares	176.27	182.16	188.19	194.44	200.89
O&M Expenses	97.93	101.20	104.55	108.02	111.60
Receivables	1780.14	1708.43	1725.18	1638.70	1585.44
Total	2054.34	1991.79	2017.92	1941.16	1897.93
Rate of Interest (in %)	13.50	13.50	13.50	13.50	13.50
Interest on Working Capital	277.34	268.89	272.42	262.06	256.22

Additional Capital Expenditure (ACE)

14. The APTEL vide its judgment dated 18.11.2024 in Appeal No. 9 of 2023 allowed the appeal. The gist of APTEL's judgment dated 18.11.2024 is as follows:

Sl. No.	Issue No. / Issue	Sub-issues	Decision of APTEL
1	Issue Nos. 1 and 2: Disallowance of Additional Capital Expenditure for the FY 2016-17 to FY 2018-19 and FY 2019-20 to FY 2023- 24.	Asset-I: Truck-mounted hot-line washing machine for insulators Silicon Paint Coating on High Voltage Insulators Installation of Security System	The claim of the appellant is allowed subject to the prudence check as to the admissibility as per the documents submitted / to be submitted by the appellant. This exercise shall be completed by the Commission within one



		Emergency restoration system	month from the date of this judgment.
		Replacement of porcelain insulators	
		Expenditure towards installation of Automatic Power Factor Correction (APCF) Panel	The findings of the Commission on this issue are affirmed.
		Asset-II: Expenses for Installation of Security System	The claim of the appellant is allowed subject to the prudence check as to the admissibility as per the documents submitted / to be submitted by the appellant. This exercise shall be completed by the Commission within one month from the date of this judgment
		Replacement of Battery Bank	The findings of the Commission on this issue are affirmed
		Upgradation of Power Line Carrier Communication (PLCC)	The claim of the appellant is allowed subject to the prudence check as to the admissibility as per the documents submitted / to be submitted by the appellant. This exercise shall be completed by the Commission within one month from the date of this judgment
		Liabilities to meet the award of arbitration for Land at Sami.	We remand the claim of the appellant to be decided afresh within two months from the date of this judgment, after directing the appellant to submit requisite documents in support of the claim
		Expenditure towards change of possession of Land.	We grant one more opportunity to the appellant to submit documents in support of this claim to the Commission within two weeks from the date of this judgment, after which the Commission shall decide such claim afresh within four weeks.

		Expenditure towards emergency restoration system.	We allow the claim of the appellant under this head, subject to a prudence check as to the admissibility as per the documents submitted / to be submitted by the appellant. This exercise shall be completed by the Commission within one month from the date of this judgment
2	Issue No. 3: Disallowance of actual rate of interest on long- term loan for 2014-2019 & 2019-2024 control period.	---	We set aside the findings of the Commission and allow the claim of the appellant by holding that the Weighted Average Rate of Interest (WAROI) shall be calculated on the basis of the actual loan portfolio of the appellant, which also includes the loan availed through ICD.
3	Issue No. 4: Disallowance of Depreciation for FY 2021-22 to FY 2023- 24 for Asset-II	---	We do not record any findings on this issue since the same is pending adjudication before this Tribunal in review proceeding and the Hon'ble Supreme Court in a Civil Appeal. The decision therein shall be binding upon the parties.
4	Issue No. 5: Disallowance of Operations and Maintenance ("O&M") Expenses for the communication system for FY 2019-20 to FY 2023-24	---	We set aside the findings of the Commission with the direction that the O&M expenses for communication system be calculated separately in terms of Regulation 35(4) of 2019 Tariff Regulations within one month from the date of this judgment.
5	Issue No. 6: Disallowance of Operations and Maintenance ("O&M") Expenses for Fixed Series Compensator (FSC) for FY 2019-20 to FY 2023-24	---	The issue is remanded back to the Commission for fresh consideration. The appellant shall furnish the requisite details of the capital cost of the project as on commercial operation date to the Commission within two weeks from the date of this judgment, and the Commission shall

			decide the issue within two weeks thereafter
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15. The details of the ACE claimed by the Petitioner are as follows:

Additional Capital Expenditure (ACE)						
(₹ in lakh)						
	2016-17	2017-18	2018-19	Justification submitted by the Petitioner	Regulation under which ACE claimed	Documentary proof submitted by the Petitioner
Asset-I						
(i) Truck-mounted hot line washing machine for insulators	25.00	-	-	Truck-mounted hot line washing machine for insulators, as the contaminated insulators are susceptible to flashover during humid atmosphere, dew or foggy weather, etc. Hence, there is a need to clean it periodically	14(3)(ix) of the 2014 Tariff Regulations	Auditor certificate dated 14.10.2019
(ii) Silicon Paint Coating on High voltage Insulators	25.00	23.00	-	Silicon Paint Coating on High Voltage Insulators as the Petitioner's HVDC lines are in a coastal area, there are issues of corrosion and subsequent failures of insulators. and hence, the Petitioner has carried out the silicon painting in HVDC substation equipment to avoid tripping due to dust and corrosion	14(3)(ix) of the 2014 Tariff Regulations	Auditor certificate dated 14.10.2019



(iii) Replacement of porcelain insulator	-	133.00	14.00	Replacement of porcelain insulator. Due to humid weather conditions near the creek area in Gujarat section, dust film is forming on insulators, which creates a conducting path between conductors and the tower this leads to frequent disturbances in power equipment. Hence, to overcome this, the Petitioner replaced porcelain Insulators with Silicon Rubber Insulators in such humid areas, to avoid frequent disturbance in power evacuation through HVDC line	14(3)(ix) of the 2014 Tariff Regulations	Auditor certificate dated 14.10.2019
(iv) Expenses for installation of security system for efficient operation of transmission system	-	20.00	-	Expenses for installation of security system for efficient operation of transmission system as Mundra-Mohindergarh transmission system had been facing regular incidents of conductor theft in electrode line. In order to minimise theft, Petitioner had decided to install electronics online monitoring system.	14(3)(ix) of the 2014 Tariff Regulations	Auditor certificate dated 14.10.2019
Total	50.00	176.00	14.00			
Asset-II						



(i) Upgradation of power line carrier communication	50.00	8.00	-	Upgradation of power line carrier communication, as Petitioner had installed BPL make PLCC panels at Mundra-Sami-Dehgam. However, BPL has stopped their operations and is not providing the services. Therefore, the Petitioner decided to replace the PLCC panels with the ABB made panels for efficient operation of the transmission system.	14(3)(ix) of the 2014 Tariff Regulations	Auditor certificate dated 14.10.2019
(ii) Change of possession of Land	-	22.00		Change of possession of Land, as some portion of land was not in possession of ATIL. However, it was decided to change the ownership to ATIL.	14(3)(vii) of the 2014 Tariff Regulations	Auditor certificate dated 14.10.2019
(iii) Expenses for installation of security system for efficient operation of transmission system	-	19.00	-	Expenses for installation of security system for efficient operation of transmission system, as Mudra-Sami-Dehgam transmission system had been facing regular incidents of conductor theft in electrode line. In order to minimise theft, Petitioner had decided to install electronics online monitoring system.	14(3)(ix) of the 2014 Tariff Regulations	Auditor certificate dated 14.10.2019
(iv) Emergency restoration system	-	-	15.00		14(3)(ix) of the 2014 Tariff Regulations	Auditor certificate dated 18.11.2020.



(v) Liabilities to meet award of arbitration for Land at Sami	-	-	27.00	Liabilities to meet award of arbitration for Land at Sami - The Petitioner paid as part of settlement charges of land to purchase the land of 1580 Sq. Meters at 400 kV Switching Station, Sami.	14(3)(i) of the 2014 Tariff Regulations	Auditor certificate dated 14.10.2019
Total	50.00	49.00	42.00			

16. The Petitioner, vide Record of Proceedings (RoP) dated 9.12.2024, was directed to file certain additional information. In response, the Petitioner, vide affidavit dated 19.12.2024, has submitted the information sought, and a brief of the same is as follows:

Information sought from the Petitioner	Submission of the Petitioner
a. As per APTEL's judgement dated 18.11.2024, submit the documentary proof for the prudence check of ACE. Further, submit the purchase order copy and proof of receipt of the material received at the site in respect of the following work/heads against which the ACE has been claimed for the 2014-19 tariff period: • Truck-mounted hot line washing machine for the insulators. • Silicon Paint Coating on the High Voltage insulators. • Replacement of porcelain insulator. • Expenses for installation of the security system for efficient operation of the transmission system.	The requisite purchase order and the material receipt certificates.
b. The abstract cost estimate of the new PLCC panels, details of the LoA, and the awarded value against the actual ACE claimed against the upgradation of power line carrier communication. Further, the information regarding the date of installation and commissioning of the old BPL make PLCC panels at Mundra-Sami-Dehgam, which were replaced with ABB PLCC panels by the Petitioner.	The required Purchase Order for the upgrade of ABB PLCC panels for power line carrier communication has been submitted by the Petitioner. The Petitioner has further stated that the old BPL-made PLCC panels were installed and commissioned in July 2009. These BPL panels were very old, and many malfunctions were observed. The BPL panels stopped functioning and no longer provided services. Consequently, the Petitioner decided to replace the BPL-made PLCC with an ABB-made PLCC, as Mundra Substation already had an ABB-made PLCC for better compatibility. The Petitioner has issued a PO to ABB for retrofitting the old PLCC, and therefore, no separate LoA was issued to ABB. Regarding the new PLCC panels, the Petitioner has supplied the purchase orders for their upgradation.
c. A copy of the judgment of the court with respect to the payment for the land at Sami in compliance with	The certain land in their possession of the Petitioner was disputed by Bharvad Deviben



the order of the court. Provide reasons for preferring arbitration, the date when the arbitration process started, and the date when it was completed/concluded.	Gugabhai, who had obtained a decree dated 05.02.2014 in her favour. In response to this order and the subsequent execution proceedings, the Petitioner filed a Special Civil Application No. 2225 of 2016 before the Hon'ble High Court of Gujarat, challenging the proceedings. However, later on, the parties to the dispute reached a settlement outside of the court and the disputed land was purchased by the Petitioner, with payments made to the legal heirs of Bharvad Deviben Gugabhai amounting to Rs. 27 Lakhs (Rupees Twenty-Seven Lakhs). For reference regarding the settlement deed, please see Annexure No. A-1 of the Affidavit dated 02.12.2024 filed by the Petitioner. Additionally, a copy of the decree dated 05.02.2014 and the Special Civil Application No. 2225 of 2016, excluding annexures, as filed by the Petitioner before the Hon'ble High Court of Gujarat, has also been submitted.									
d. As per the documents submitted by the Petitioner, Rs. 27 lakh was paid against the total 2280 sq. meters of land, whereas the Petitioner has claimed Rs. 27 lakh for 1580 sq. meters of land under the instant Petition. Clarify the mismatch of the quantum of land mentioned along with the supporting documents.	The dispute raised by Bharvad Deviben Gugabhai concerns land measuring 1580 sq. metres. However, the final agreement reached between the parties was for a total land parcel of 2280 sq. metres, which included the approach road to the land. Therefore, while all court records refer to the disputed land as measuring 1580 sq. metres, the sale deed states the land area as 2280 sq. metres.									
e. With respect to the change of possession of land, submit the details of the requirement to change the transfer of ownership of the land, the date when the Petitioner applied for change of possession of land, the date when the Petitioner obtained the ownership change approval from the land authorities and the date when the Petitioner finally acquired the land along with the supporting documents. Also, furnish the details about the exact quantum of land and type of land against which the Petitioner has applied for change of ownership along with the supporting documents.	The land was purchased by them, and it was thus required that the transfer of ownership be recorded in their name. The Petitioner applied to register the change of possession of the land on 07.10.2017, and the process is still ongoing to have the transfer recorded in the revenue records. However, the Petitioner has possessed the land from the date of the sale deed. The exact area of the land is 2 Hectares, 21 Acres, and 57 square metres, and the land is of an agricultural nature.									
f. With respect to ERS, clarify when the Petitioner was awarded the LoA and what was the awarded price of the ERS system? Provide the details of the transmission lines wherein the ERS may be used.	The current ERS was only adequate for emergency restoration of a single tower. However, it has been observed that multiple towers could fail simultaneously due to ageing transmission lines. Therefore, the capacity of the existing ERS has been expanded to cater to 3-4 towers for emergency restoration. The transmission lines where ERS might be utilised are as follows: <table><tr><th>Element Name</th></tr><tr><td>400 kV Mohindergarh (ATIL)- Dhanonda (HV) Ckt-1</td></tr><tr><td>400 kV Mohindergarh (ATIL)- Dhanonda (HV) Ckt-2</td></tr><tr><td>400 kV Mohindergarh (ATIL)- Bhiwani (PG) Ckt-1</td></tr><tr><td>400 kV Mohindergarh (ATIL)- Bhiwani (PG) Ckt-2</td></tr><tr><td>500 kV Mundra -Mohindergarh HVDC Pole-1</td></tr><tr><td>500 kV Mundra -Mohindergarh HVDC Pole-2</td></tr><tr><td>400 kV Mundra-Sami Ckt-1</td></tr><tr><td>400 kV Sami – Dehgam Ckt-1</td></tr></table>	Element Name	400 kV Mohindergarh (ATIL)- Dhanonda (HV) Ckt-1	400 kV Mohindergarh (ATIL)- Dhanonda (HV) Ckt-2	400 kV Mohindergarh (ATIL)- Bhiwani (PG) Ckt-1	400 kV Mohindergarh (ATIL)- Bhiwani (PG) Ckt-2	500 kV Mundra -Mohindergarh HVDC Pole-1	500 kV Mundra -Mohindergarh HVDC Pole-2	400 kV Mundra-Sami Ckt-1	400 kV Sami – Dehgam Ckt-1
Element Name										
400 kV Mohindergarh (ATIL)- Dhanonda (HV) Ckt-1										
400 kV Mohindergarh (ATIL)- Dhanonda (HV) Ckt-2										
400 kV Mohindergarh (ATIL)- Bhiwani (PG) Ckt-1										
400 kV Mohindergarh (ATIL)- Bhiwani (PG) Ckt-2										
500 kV Mundra -Mohindergarh HVDC Pole-1										
500 kV Mundra -Mohindergarh HVDC Pole-2										
400 kV Mundra-Sami Ckt-1										
400 kV Sami – Dehgam Ckt-1										



		400 kV Mundra-Sami – Dehgam -2	
		400 kV Mundra-Sami Ckt-2	
g. Submit Form-5 for both the assets.		The Form-5 for both assets I and II has been submitted by the Petitioner.	

17. The Petitioner, in its written submissions dated 22.1.2025, has made the following submissions:

- a) The point of consideration titled “Liabilities to meet award of arbitration for land at Sami” is a misnomer, as there was no arbitration; instead, the Petitioner was engaged in a Civil Court proceeding. Regulation 14(3)(i) of the 2014 Tariff Regulation also includes within its ambit liabilities arising from a Court decree, and since the present liability originated from proceedings before a Civil Court, the claim for the Additional Capital Expenditure under this head is fully covered by the provisions of Regulation 14(3)(i) of the 2014 Tariff Regulations.
- b) According to the Petitioner, “Computation of the actual rate of interest on loan basis, the WAROI of the actual loan portfolio of the Petitioner, which includes the loan availed through ICD loan,” does not require a fresh consideration of the Commission. The APTEL, in its judgement dated 18.11.2024, has conclusively decided this matter, and it has attained finality. The APTEL has allowed the computation of interest on the loan component using the actual loan portfolio of the Petitioner, including the ICD loan. Therefore, the previous finding of the Commission in its order dated 21.1.2022, which stated that interest on loan should be calculated based on the lowest WAROI among the five years of the 2014-2019 and 2019-2024 control periods, and that the ICD loan should not be included in the actual loan portfolio, has been set aside. It is submitted that, while issuing the consequential order for the truing-up of transmission tariffs



for the period from FY 2014-15 to FY 2018-19 and in determining transmission tariffs for FY 2019-20 to FY 2023-24 under this Petition, the Commission may issue consequential orders regarding the interest on loan component based on the Petitioner's actual loan portfolio, including the ICD loan, the details of which were provided with the original Petition being Petition No. 216/TT/2020.

- c) The claim for FSC clearly falls within the scope of Regulation 35(3) proviso (v) of the 2019 Tariff Regulations. The Petitioner has provided the details of the capital cost of the project as on COD, the O&M Expense for FSC at 1.5% of the project cost, and the resultant escalation at 3.51% during the tariff period. In accordance with the requirements of Regulation 35(3) proviso (v) of the 2019 Tariff Regulations, these should be included within the claimed O&M expenses.

18. We have considered the Petitioner's submissions. Regulation 14(3) of the 2014 Tariff Regulations provides as under:

"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;

(ii) Change in law or compliance of any existing law;

(iii) Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies of statutory authorities responsible for national security/internal security;

(iv) Deferred works relating to ash pond or ash handling system in the original scope of work;

(v) Any liability for works executed prior to the cut-off date, after prudence check of the details of such undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.;

(vi) Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;



(vii) Any additional capital expenditure which has become necessary for efficient operation of generating station other than coal/lignite-based stations or transmission system as the case may be. The claim shall be substantiated with the technical justification duly supported by the documentary evidence like test results carried out by an independent agency in case of deterioration of assets, report of an independent agency in case of damage caused by natural calamities, obsolescence of technology, up-gradation of capacity for the technical reason such as increase in fault level;

(viii) In case of hydro generating stations, any expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company) and due to geological reasons after adjusting the proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation;

(ix) In case of transmission system, any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, DC batteries, replacement due to obsolescence of technology, replacement of switchyard equipment due to increase of fault level, tower strengthening, communication equipment, emergency restoration system, insulators cleaning infrastructure, replacement of porcelain insulator with polymer insulators, replacement of damaged equipment not covered by insurance and any other expenditure which has become necessary for successful and efficient operation of transmission system;”

19. The asset-wise and item-wise ACE allowed/not allowed for the 2014-19 tariff period has been examined as under:

Asset-1

(i) Truck-mounted hotline washing machine for insulators

20. The Petitioner has claimed an amount of ₹25 lakh for FY 2016-17 towards a truck-mounted hot-line washing machine for insulators under Regulation 14(3)(ix) of the 2014 Tariff Regulations. The Petitioner has submitted that the insulators on lines and equipment become contaminated by dust, bird droppings, chemical pollution, saline weather, and other factors. These contaminated insulators are prone to flashover in humid conditions, as well as dewy or foggy weather, and similar circumstances. Consequently, they require regular cleaning. The Petitioner experienced frequent failures and disruptions in the HVDC line. To address these issues, they decided to develop insulator cleaning infrastructure and purchased a truck-mounted hot-line washing machine for insulators.



21. We have examined the Petitioner's submissions and pursued the documents on record for a prudence check. The Petitioner has submitted that a truck-mounted hotline washing machine for insulators helps to restrict the frequent failures and disturbances of the transmission line by maintaining clean insulators. Further, as per the documents submitted by the Petitioner in compliance with RoP dated 9.12.2024, the purchase order for the supply of a "Truck Mounted Hotline Washing Machine" was issued by the Petitioner on 9.2.2016, and the material was received at the site on 2.5.2016. Therefore, considering the justification provided by the Petitioner and in accordance with the APTEL judgment dated 18.11.2024 in Appeal No. 9 of 2023, the ACE of ₹25 lakh claimed by the Petitioner for the "Truck Mounted Washing Machine for Insulators" for FY 2016-17 is hereby allowed on prudence check under Regulation 14 (3)(ix) of the 2014 Tariff Regulations.

(ii) Silicon Paint Coating on High Voltage Insulators

22. The Petitioner has claimed an amount of ₹25 lakh for FY 2016-17 and ₹23 lakh for FY 2017-18 towards Silicon Paint Coating on High Voltage Insulators under 14(3)(ix) of the 2014 Tariff Regulations. The Petitioner has submitted that corrosion and pollution of outdoor high-voltage insulators are common issues for utilities, significantly impacting the reliability of the power system. A potential outage in a high-voltage system typically results in severe impacts on the power system. To prevent flashovers caused by corrosion and pollution, high-voltage insulation coating is applied to enhance insulation performance by either suppressing the formation of surface conductivity or increasing the insulation level. Since the Petitioner's HVDC lines are located in a coastal area, issues related to corrosion and insulator failures arise, prompting the Petitioner to carry out silicon painting on HVDC sub-station equipment to prevent tripping caused by dust and corrosion.



23. We have considered the Petitioner's submission and carefully examined the documents on record. The Petitioner has stated that to prevent potential flashovers caused by corrosion and pollution, a high voltage insulation coating is applied to improve insulation performance, either by suppressing surface conductivity or by increasing the insulation level. Further, upon perusal of documents submitted by the Petitioner in compliance with the RoP dated 9.12.2024, it is noted that different work and purchase orders for the said material were issued by the Petitioner on 11.11.2016, 15.11.2016, 14.2.2017, and 17.2.2017. Therefore, considering the justification provided by the Petitioner and in accordance with the decision of the APTEL dated 18.11.2024 in Appeal No. 9 of 2023, the ACE amounting to ₹25 lakh and ₹23 lakh claimed by the Petitioner for "Silicon Paint Coating on High Voltage Insulators" for FY 2016-17 and 2017-18 is allowed on prudence check under Regulation 14 (3)(ix) of the 2014 Tariff Regulations. In this regard, the relevant extract from the APTEL's judgment dated 18.11.2024 in Appeal No. 9 of 2023 is as follows:

"27. A bare reading of Regulation 14(3)(ix) of 2014 Tariff Regulations reveals that any expenditure incurred by a transmission licensee after the cutoff date which had become necessary for successful and efficient operation of transmission system may be allowed by the Commission subject to prudence check. In the instant case, it is the contention of the appellant that silicon quoting of high voltage insulators had become essential for maintaining the operational reliability and efficiency of the transmission system particularly in the corrosive coastal environment where the appellant's HVDC lines are located. Therefore, it was incumbent upon the Commission to conduct a prudence check to ascertain whether such expenditure had become actually essential for the appellant for efficient operation of the transmission system. Ironically, no such exercise appears to have been conducted by the Commission. We are unable to countenance the view of the Commission that such an expenditure is squarely within the ambit of O&M expenses. We have already extracted hereinabove Regulation 3(42) of 2014 Tariff Regulations which define O&M expenses. The expenditure on silicon paint coating on high voltage insulators cannot be taken to be expenditure towards normal / regular operation and maintenance of the transmission line or any part thereof. It is manifest that the appellant was constrained to carryout silicon painting in its



HVDC sub-station equipment as it has been facing issues of corrosion and consequent failures of insulators which was impeding the efficient operation of the transmission system. Therefore, we set aside the findings of the Commission on this issue and allow the claim of the appellant in this regard. However, it would be subject to the prudence check as to the admissibility as per the documents submitted / to be submitted by the appellant. This exercise shall be completed by the Commission within one month from the date of this judgment.”

(iii) Installation of Security System

24. The Petitioner has claimed an amount of ₹20 lakh for FY 2017-18 under Regulation 14(3)(ix) of the 2014 Tariff Regulations for Security System. The Petitioner has submitted that the Mundra-Mohindergarh transmission system frequently experiences incidents of conductor theft along the electrode line, causing regular tripping of the Mundra-Mohindergarh HVDC pole. Despite deploying numerous security guards to prevent theft, these efforts have proven ineffective. Several incidents have resulted in sudden outages, restricting power flow and ultimately hampering the system's security and stability. To address this issue permanently, the Petitioner has installed an electronic online monitoring system.

25. We have considered the Petitioner's submissions. With regard to the installation of the Security System, APTEL in its judgment dated 18.11.2024 in Appeal No. 9 of 2023 held as under:

“29. We may also note that an argument was raised on behalf of the respondents to the effect that the appellant had not taken prior approval of the Commission / Regional power Committee (RPC) and the consent of the beneficiaries before incurring the expenditure under these heads and therefore, same have been rightly disallowed by the Commission. The argument has been noted only to be rejected. It is for the reason that there is nothing in the entire regulation 14 or in any other regulation / sub-regulation of 2014 Tariff Regulations to show that the appellant was required to obtain such prior approval of Commission / RPC or consent of beneficiaries before implementing these works. What Regulation 14 envisages is that the Commission is authorized to approve any capital expenditure incurred by a generating station or a transmission system after cutoff date under the heads enumerated therein, subject to prudence check. Therefore, there are only two conditions upon fulfilment of which any capital expenditure incurred after the cutoff date can be allowed by the Commission and these are: -



- (i) The expenditure shall be on any count as enumerated in sub-regulation 3 of Regulation 14; and
(ii) It should pass the prudence check to be conducted by the Commission.

30. Therefore, once any capital expenditure incurred by a transmission system after the cutoff date falls within the heads enumerated in sub-regulation 3 of Regulation 14 and passes the prudence check conducted by the Commission, same has to be allowed. There is no requirement for any prior approval of the Commission / RPC or prior consent from the beneficiaries for approval of such additional capital expenditure.”

The Petitioner has stated that, to prevent frequent theft activities at site locations and to ensure an effective security system, an electronic security system was installed. Further, it is observed that different work and purchase orders related to the installation of the security system were issued by the Petitioner on 20.1.2017, 18.1.2017, and 20.4.2017. Therefore, considering the justification submitted by the Petitioner and in accordance with the direction of the APTEL’s judgment dated 18.11.2024 in Appeal No. 9 of 2023, the ACE of ₹20 lakh claimed by the Petitioner for “Installation of Security System” for FY 2017-18 is allowed on prudence check under Regulation 14 (3)(ix) of the 2014 Tariff Regulation.

Replacement of Porcelain Insulators

26. The Petitioner has claimed an amount of ₹133 lakh for FY 2017-18 and ₹14 lakh for FY 2018-19 towards the replacement of porcelain insulators in terms of Regulation 14(3)(ix) of the 2014 Tariff Regulations. The Petitioner has submitted that its transmission lines are located in the humid area of Gujarat. Due to the humid weather conditions near the creek area in the Gujarat section, a dust film forms on insulators, creating a conducting path between conductors and the tower, which leads to frequent disturbances in power equipment. Additionally, the higher pollution levels cause frequent tripping of lines, especially those passing through creeks and polluted areas. Despite implementing regular maintenance measures, including annual cleaning of insulators in critical stretches, tripping remains a



concern in some sections. To address this, the Petitioner has replaced porcelain insulators with silicon rubber insulators in humid areas to prevent frequent disturbances in power evacuation through the HVDC line.

27. MPPMCL has submitted that the expenditure for replacing insulators was not included in the original scope of work. It is classified as Repairs and Maintenance and does not qualify as capital expenditure. The Petitioner did not obtain prior approval from the Commission nor the consent of the beneficiaries before incurring such costs. Moreover, after incurring these expenses, the Petitioner would likely be compensated through savings on O&M Expenses and repairs. This expenditure is not covered under Regulation 14 of the 2014 Tariff Regulations. Therefore, it is not allowable.

28. We have considered the submissions of the Petitioner and MPPMCL. In this regard, the relevant extract of the APTEL's judgment dated 18.11.2024 in Appeal No. 9 of 2023 is as follows:

"31. The claim of the appellant under this head also has been rejected by the Commission on the ground that the appellant had not sought approval of RPC and consent of the beneficiaries for replacement of existing insulators. We have already noted hereinabove that Regulation 14 of 2014 Tariff Regulation nowhere stipulates that the consent of beneficiaries or the approval of RPC is required prior to carrying out any additional expenditure after the cut-off date. Therefore, we set aside the findings of the Commission on this count and allow the claim of the appellant under this head subject to the prudence check as to the admissibility as per the documents submitted / to be submitted by the appellant. This exercise shall be completed by the Commission within one month from the date of this judgment."

29. The Petitioner has submitted that to prevent frequent tripping caused by dusty and humid weather conditions, porcelain insulators are being replaced with silicone rubber insulators on site. Also, after perusal of documents submitted by the Petitioner in compliance with the RoP dated 9.12.2024, it is observed that various



purchase orders dated 19.6.2017, 13.10.2017, 10.11.2017, 6.11.2017, 23.2.2018, and 23.3.2018 were issued by the Petitioner. Therefore, considering the justification submitted by the Petitioner and in accordance with the direction of the APTEL judgment dated 18.11.2024 in Appeal No. 9 of 2023, the ACE claimed by the Petitioner for “Replacement of Porcelain Insulators” for FY 2017-18 and 2018-19 is beyond the cut-off date and is allowed under Regulation 14(3)(ix) of the 2014 Tariff Regulations. However, it is observed that the Petitioner has not provided the value of de-capitalisation for the old porcelain insulators against which the replacement has been claimed. Therefore, as per the consistent methodology adopted by the Commission, ‘Assumed Deletion’ is being applied for the determination of the de-capitalisation value for the old porcelain insulators as follows:

Assumed Deletion

30. In line with the consistent methodology adopted by the Commission, expenditure on asset replacement, if deemed justified, is allowed for tariff purposes provided that the capitalisation of the asset is followed by the de-capitalisation of the old asset's gross value. However, in certain cases where de-capitalisation is proposed to occur during the future year of the new asset's capitalisation, the de-capitalisation of the old asset for tariff purposes is shifted to the same year in which the new asset's capitalisation is approved. Such de-capitalisation, which is not a book entry in the year of capitalisation, is termed ‘Assumed Deletion’. To determine the gross value of the old asset under consideration, an escalation rate of 5% per annum from the COD has been applied until the year in which additional capital expenditure is claimed against replacing the asset. The claimed amount for additional capital expenditure is multiplied by the ratio derived from the above

values, i.e., the value in the year of COD divided by the value in the year of replacement being claimed. Furthermore, in the absence of the gross value of the de-capitalised asset, it is calculated by de-escalating the gross value of the new asset @ 5% per annum until the year of capitalisation of the old asset, consistent with the methodology adopted by the Commission. Accordingly, based on the above methodology, the assumed deletions considered for these assets/works and the resulting net additional capital expenditure approved for FY 2017-18 and FY 2018-19 are as follows:

(₹ in lakh)				
Details	Additions claimed for new asset on replacement	De-capitalization value of Old asset claimed	Assumed Deletions for old asset Allowed	Net Additional Capital Expenditure allowed
Porcelain	133.00	0.00	104.21	28.79
Insulators	14.00	0.00	10.45	3.55

Asset-II

(i) Expenses for installation of security system:

31. The Petitioner has submitted that since the Mundra-Sami-Dehgam transmission system has been experiencing frequent incidents of conductor theft along the electrode line, there have been numerous trippings of the transmission line. To reduce theft, the Petitioner had deployed many security guards, but this measure proved ineffective. There were a few incidents where sudden system outages resulted in restrictions on power flow, and ultimately hampered the system's security and stability. Therefore, to resolve the situation permanently, it was decided to install an electronic online monitoring system.

32. We have considered the Petitioner's submission. It is observed that the Petitioner mentioned theft of a conductor in the electrode line, whereas Asset-II is an AC transmission line, and no electrode line under the AC transmission system



was included in the original scope of works. Therefore, the ACE amount of ₹19 lakh claimed by the Petitioner for the “Installation of Security System” for FY 2017-18 is beyond the cut-off date and is, accordingly, not allowed.

(ii) Upgradation of Power Line Carrier Communication (PLCC)

33. The Petitioner has submitted that it had installed BPL-made PLCC panels at Mundra-Sami-Dehgam, and the old BPL-made PLCC panels were installed and commissioned in July 2009. Since the BPL-made panels were very old and many maloperations were observed, they had stopped their operations and were no longer providing services. Accordingly, the Petitioner decided to replace the BPL-made PLCC with the ABB-made PLCC, as the Mundra Sub-station already used the ABB-made PLCC for better compatibility. The Petitioner has submitted that no separate LoA was issued to ABB; only a purchase order for retrofitting the old PLCC was issued to ABB.

34. We have considered the Petitioner's submission. The Petitioner has stated that the old BPL-made PLCC panels were replaced with new ABB-made PLCC panels because BPL ceased its services, and the 2009 model of the old BPL-made PLCC panels was malfunctioning. Additionally, as per the documents submitted by the Petitioner in compliance with the RoP dated 9.12.2024, it is observed that two different purchase orders dated 18.10.2016 and 23.6.2016, were issued by the Petitioner concerning the aforementioned work. Therefore, considering the justification submitted by the Petitioner and in light of the decision of the APTEL dated 18.11.2024 in Appeal No. 9 of 2023, the ACE claimed by the Petitioner for “upgradation of Power Line Carrier Communication (PLCC)” for FY 2016-17 and FY 2017-18 is beyond the cut-off date and the same is allowed on prudence check



under Regulation 14 (3)(ix) of the 2014 Tariff Regulation. However, it is observed that the Petitioner has not provided the value of de-capitalisation for the old PLCC equipment against which the upgradation has been claimed. Therefore, as per the consistent methodology adopted by the Commission, assumed deletion is being applied for determining the de-capitalisation value of the old PLCC equipment, and the same is as follows:

Assumed Deletion

35. In line with the consistent methodology adopted by the Commission, expenditure on asset replacements, if justified, is allowed for tariff purposes, provided that the capitalisation of the asset is followed by the de-capitalisation of the old asset's gross value. However, in certain cases where de-capitalisation is proposed to occur in a future year after the new asset's capitalisation, the de-capitalisation of the old asset for tariff purposes is shifted to the same year in which the new asset's capitalisation is approved. This type of de-capitalisation, which is not merely a book entry, in the year of capitalisation, is termed 'Assumed Deletion'. Therefore, to determine the gross value of the old asset, an escalation rate of 5% per annum from the COD has been applied until the year in which additional capital expenditure is claimed against the replacement. The amount claimed for the additional capital expenditure is multiplied by a ratio derived from the above values- that is, the value in the year of COD divided by the value in the year of replacement being claimed. Accordingly, based on this methodology, the assumed deletions considered for these assets/works and consequently net additional capital expenditure allowed for FY 2016-17 and FY 2017-18 are as follows:



(₹ in lakh)				
Details	Additions claimed for new asset on replacement	De-capitalization value of Old asset claimed	Assumed Deletions for old asset Allowed	Net Additional Capital Expenditure allowed
PLCC	50.00	0.00	41.14	8.86
	8.00	0.00	6.27	1.73

(iii) Liability to meet the award of arbitration for the land at Sami

36. The Petitioner has submitted that certain land in its possession was disputed by Bharwad Deviben Gugabhai, who obtained a decree dated 5.2.2014 in her favour. In response to this order and the subsequent execution proceedings, the Petitioner filed a Special Civil Application No. 2225 of 2016 before the Hon'ble High Court of Gujarat, challenging the proceedings. However, later on, the parties to the dispute reached a settlement outside of court, and the disputed land was purchased by the Petitioner, who made a payment to the legal heirs of Bharwad Deviben Gugabhai amounting to `27 lakh. The Petitioner, through an affidavit dated 2.1.2025, has submitted that the item titled "Liabilities to meet award of arbitration for LAND at Sami" is a misnomer, as there was no arbitration; instead, the Petitioner was involved in proceedings before a Civil Court. Regulation 14(3)(i) of the 2014 Tariff Regulations also includes within its scope liabilities arising from a court decree, and since this liability originated from civil court proceedings, the claim for Additional Capital Expenditure under this head is fully covered by the provisions of Regulation 14(3)(i) of the 2014 Tariff Regulations.

37. We have considered the Petitioner's submission. On perusal of documents on record, it is observed that according to the judgment dated 5.2.2014 in Civil Suit No. 15/2011, the Petitioner neither appeared nor filed any response to the Petition filed by Bharwad Deviben Gugabhai in the Court of the Principal Senior Civil Judge at Patan. Further, as per the judgment, the Petitioner was found to have committed



an illegal encroachment of 1580 sq mtr. on the northern side of the plaintiff's agricultural land. Consequently, through the said judgment, the Petitioner was ordered to vacate the encroached land within two months from the date of the judgment.

38. Aggrieved by the judgment dated 5.2.2014 in Civil Suit No. 15/2011, the Petitioner filed the Special Civil Application No. 2225 of 2016 in the Hon`ble High Court of Gujarat at Ahmedabad. However, as submitted by the Petitioner in an affidavit dated 19.12.2024, the parties reached a settlement outside of the court, and the Petitioner purchased the disputed land. Payment of ₹ 27lakh was made to the legal heirs of Bharwad Deviben Gugabhai. Therefore, as evident from the above, the payment of ₹27 lakh made by the Petitioner was neither due to any liability to meet the award of arbitration, nor as per any judgment by the Civil Court of Gujarat or the Hon`ble High Court of Gujarat. Moreover, the said payment was made by the Petitioner in accordance with the out-of-court settlement agreed upon between the Petitioner and the plaintiff.

39. Further, Regulation 14(3)(i) of the 2014 Tariff Regulations 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.

.....”

40. As per Regulation 14(3)(i) of the 2014 Tariff Regulations, expenditure related to liabilities incurred to meet arbitration awards or to comply with court orders or decrees falls within the scope of Additional Capital Expenditure. Therefore, as the



payment of ₹27 lakh made by the Petitioner for the purchase of disputed land at Sami was part of an out of court settlement between the Petitioner and the Plaintiff, and not in accordance with any liability to meet an arbitration award or compliance with a court order by the Petitioner, the said claim does not fall under the purview of Regulation 14(3)(i) of the 2014 Tariff Regulations. Consequently, the claim amounting to ₹27.00 lakh for FY 2018-19 is not allowed under ACE.

(iv) Expenditure towards the change of possession of land

41. The Petitioner has submitted that it purchased the land and accordingly required the transfer of ownership to be recorded in its name. The Petitioner applied to register the change of possession on 7.10.2017, and the process is still ongoing to have the transfer reflected in the revenue records. However, the Petitioner had obtained the possession of land from the date of the sale deed. The exact quantum of land is 2 hectares, 21 acres, and 57 square metres, and it is classified as agricultural land.

42. We have considered the Petitioner's submissions. After perusal of the documents submitted by the Petitioner, it is observed that the Sale Deed for the agricultural land measuring 2-21-57 hectares Ar. Sqm at Sami was applied for by the Petitioner on 7.10.2017, and a payment of ₹22 lakh was made by the Petitioner for the transfer of ownership of the land. However, it is observed that if the Petitioner purchased the said land for the instant transmission project, the Petitioner had not considered any kind of liability for the payment against possession of said land at the time of COD. Therefore, considering the facts that the submitted documents do not substantiate the utilisation of the aforementioned land for the instant transmission project and also the fact that the Petitioner had not considered any kind of payment liability for possession of land; we are not inclined



to consider the claim of ACE of ₹22 lakh against “change of Possession of Land” for FY 2017-18.

(v) Expenditure towards Emergency Restoration System

43. The Petitioner has submitted that, to mitigate the effects of any natural calamities or unforeseen events such as sabotage and to restore the system within a minimum timeframe, an Emergency Restoration System (ERS) was procured. This will enhance the reliability and stability of the transmission system. The Petitioner has further submitted that the existing ERS was only sufficient for the emergency restoration of a single tower. However, it was observed that simultaneous failures of multiple towers could occur due to the ageing of the transmission lines. Thus, the capacity of the existing ERS was expanded to cover 3-4 towers for emergency restoration.

44. We have considered the Petitioner’s submission. The Petitioner has stated that the ERS was installed to restore the system within the minimum time period under any natural calamities or unforeseen events, such as sabotage. Further, as per the documents submitted by the Petitioner in compliance with RoP dated 9.12.2024, it is observed that a purchase order dated 28.12.2017 was issued by the Petitioner for the aforementioned work. Therefore, considering the justification submitted by the Petitioner and in accordance with the decision of the APTEL judgment dated 18.11.2024 in Appeal No. 9 of 2023, the ACE amounting to ₹15 lakh claimed by the Petitioner for “Installation of Emergency Restoration system” for FY 2018-19 is beyond the cut-off date, and the claim is allowed on prudence check in terms of Regulation 14(3)(ix) of the 2014 Tariff Regulations.



Capital Cost as on 31.3.2019

45. The Commission, vide order dated 21.1.2022 in Petition No. 216/TT/2020 along with Petition No. 184/TT/2013 and Petition No. 146/TT/2016, considered the capital costs ₹370083.06 lakh and ₹54089.69 lakh for Asset-I and Asset-II, respectively, as the opening capital costs as on 1.4.2014 for the true-up of transmission tariff for the 2014-19 tariff period. Consequently, the capital costs of ₹370083.06 lakh and ₹54089.69 lakh for Asset-I and Asset-II, respectively, are being considered as the opening capital costs as on 1.4.2014 in this order.

Additional Capital Expenditure (ACE)

46. The Petitioner in the true-up Petition earlier claimed the following ACE in respect of the transmission assets for the 2014-19 tariff period:

(₹ in lakh)					
Asset	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	16345.00	1009.00	50.00	176.00	66.00
Asset-II	0.00	0.00	57.00	49.00	42.00

47. The Commission, vide order dated 21.1.2022 in Petition No. 216/TT/2020, allowed the following ACE in respect of the transmission assets:

(₹ in lakh)					
Asset	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	16345.00	1009.00	0.00	0.00	0.00
Asset-II	0.00	0.00	0.00	0.00	0.00

48. Therefore, in view of the reconsideration of ACE in compliance with the APTEL judgment dated 18.11.2024 in Appeal No. 9 of 2023, the details of the revised ACE allowed for the 2014-19 tariff period are as follows:



(₹ in lakh)

Description	ACE during FY	Amount claimed by the Petitioner In truing up Petition No. 216/TT/2020	Whether allowed by the APTEL vide judgement dated 18.11.2024 in Appeal No. 9 of 2023 or not	ACE allowed in instant order after prudent check	Net revised ACE allowed in instant order
Asset-1					
Truck mounted hot line washing machine for insulators	2016-17	25.00	Yes	25.00	50.00
Silicon Paint Coating on High voltage Insulators		25.00	Yes	25.00	
Silicon Paint Coating on High voltage Insulators	2017-18	23.00	Yes	23.00	71.79
Replacement of porcelain insulator		133.00	Yes	28.79	
installation of security system		20.00	Yes	20.00	
Replacement of porcelain insulator	2018-19	14.00	Yes	3.55	3.55
APFC panel for successful and efficient operation of transmission system		52.00	No	0.00	
Asset-II					
Replacement of Battery Bank	2016-17	7.00	No	0.00	8.86
Upgradation of power line carrier communication		50.00	Yes	8.86	
Upgradation of power line carrier communication	2017-18	8.00	Yes	1.73	1.73
installation of security system for efficient operation of transmission system		19.00	Yes	0.00	
Change of possession of Land		22.00	Yes	0.00	
Emergency restoration system	2018-19	15.00	Yes	15.00	15.00
Liabilities to meet award of arbitration for Land at Sami		27.00	Yes	0.00	



49. The summary of the revised ACE allowed in respect of Assets-I and II is as under:

(₹ in lakh)					
Asset	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	16345.00	1009.00	50.00	71.79	3.55
Asset-II	0.00	0.00	8.86	1.73	15.00

Capital Cost for the 2014-19 Tariff Period

50. In view of the above, the capital cost allowed in respect of the transmission assets as on 31.3.2019 for the 2014-19 tariff period in the instant order are as follows:

(₹ in lakh)							
Asset	Capital Cost allowed as on 1.4.2014	ACE Allowed					Total capital cost as on 31.3.2019
		2014-15	2015-16	2016-17	2017-18	2018-19	
Asset-I	370083.06	16345.00	1009.00	50.00	71.79	3.55	387562.40
Asset-II	54089.69	0.00	0.00	8.86	1.73	15.00	54115.28

Debt-Equity Ratio

51. The debt-equity ratio of 70:30 as on 31.3.2014 was admitted vide order dated 3.11.2017 in Petition No. 146/TT/2016. The Petitioner has claimed the debt-equity ratio of 70:30 as on 1.4.2014. Further, for the purpose of ACE, the debt-equity ratio has been considered in accordance with Regulation 19(3) of the 2014 Tariff Regulations. The details of the debt-equity ratio in respect of the transmission assets as on 1.4.2014 and 31.3.2019 are as follows:

Funding Asset-I	Capital Cost as on 1.4.2014		Capital Cost as on 31.3.2019	
	Amount (₹ in lakh)	(in %)	Amount (₹ in lakh)	(in %)
Debt	259058.14	70.00	271293.68	70.00
Equity	111024.92	30.00	116268.72	30.00
Total	370083.06	100.00	387562.40	100.00

Funding Asset-II	Capital Cost as on 1.4.2014		Capital Cost as on 31.3.2019	
	Amount (₹ in lakh)	(in %)	Amount (₹ in lakh)	(in %)
Debt	37862.78	70.00	37880.69	70.00



Funding Asset-II	Capital Cost as on 1.4.2014		Capital Cost as on 31.3.2019	
	Amount (₹ in lakh)	(in %)	Amount (₹ in lakh)	(in %)
Equity	16226.91	30.00	16234.59	30.00
Total	54089.69	100.00	54115.28	100.00

Depreciation

52. The depreciation has been allowed as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations. Depreciation has been allowed considering capital expenditure as on 1.4.2014 and approved ACE during the 2014-19 tariff period. The value of freehold land in respect of Asset-I and Asset-II, as considered in the order dated 3.11.2017 in Petition No. 146/TT/2016, has been considered in the instant order. The gross block during the 2014-19 tariff period has been depreciated at the Weighted Average Rate of Depreciation (WAROD), and the workings of WAROD is placed at Annexure-I to this order. The depreciation for the 2014-19 period is trued-up for the transmission assets as per the methodology provided in Regulation 27 of the 2014 Tariff Regulations, and the same is as follows:

(₹ in lakh)					
Asset-I					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	370083.06	386428.06	387437.06	387487.06	387558.85
Additional Capitalisation	16345.00	1009.00	50.00	71.79	3.55
Closing Gross Block	386428.06	387437.06	387487.06	387558.85	387562.40
Average Gross Block	378255.56	386932.56	387462.06	387522.96	387560.63
Freehold Land	6070.00	6070.00	6070.00	6070.00	6070.00
Weighted Average Rate of Depreciation (WAROD) (in %)	5.09	5.09	5.09	5.09	5.09
Balance useful life of the asset at the beginning of the year (Year)	28	27	26	25	24
Lapsed life of the asset at the beginning of the year (Year)	1	2	3	4	5
Aggregated Depreciable Value	334967.00	342776.30	343252.85	343307.66	343341.56
Depreciation during the year	19258.75	19704.10	19728.33	19731.54	19733.53



Cumulative Depreciation at the end of the year	48678.74	68382.84	88111.17	107842.71	127576.24
Remaining Aggregated Depreciable Value at the end of the Year	286288.26	274393.46	255141.69	235464.95	215765.32

(₹ in lakh)

Asset-II					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	54089.69	54089.69	54089.69	54098.55	54100.28
Additional Capitalisation	0.00	0.00	8.86	1.73	15.00
Closing Gross Block	54089.69	54089.69	54098.55	54100.28	54115.28
Average Gross Block	54089.69	54089.69	54094.12	54099.42	54107.78
Freehold land	742.00	742.00	742.00	742.00	742.00
Weighted Average Rate of Depreciation (WAROD) (in %)	5.16	5.16	5.16	5.16	5.16
Balance useful life of the asset at the beginning of the year (Year)	28	27	26	25	24
Lapsed life of the asset at the beginning of the year (Year)	5	6	7	8	9
Aggregated Depreciable Value	48012.92	48012.92	48016.91	48021.67	48029.20
Depreciation during the year	2793.33	2793.33	2793.61	2793.94	2794.39
Cumulative Depreciation at the end of the year	13804.30	16597.62	19391.23	22185.17	24979.56
Remaining Aggregated Depreciable Value at the end of the Year	34208.62	31415.30	28625.68	25836.51	23049.64

Interest on Loan (IoL)

53. The Petitioner has claimed the Weighted Average Rate of IoL based on its actual loan portfolio and interest rate, which also includes the loan obtained through ICD (as per the order of the APTEL). Hon'ble APTEL has decided that *"We set aside the findings of the Commission and allow the claim of the appellant by holding that the Weighted Average Rate of Interest (WAROI) shall be calculated on the basis of actual loan portfolio of the appellant which also includes the loan availed through ICD."*

54. We have considered the Petitioner's submissions. IoL has been calculated based on the actual interest rate submitted by the Petitioner in accordance with



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

(₹ in lakh)

Asset-I					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	259058.14	270499.64	271205.94	271240.94	271291.19
Cumulative Repayments upto Previous Year	29419.99	48678.74	68382.84	88111.17	107842.71
Net Loan-Opening	229638.15	221820.90	202823.10	183129.77	163448.48
Addition due to Additional Capitalization	11441.50	706.30	35.00	50.25	2.49
Repayment during the year	19258.75	19704.10	19728.33	19731.54	19733.53
Net Loan-Closing	221820.90	202823.10	183129.77	163448.48	143717.44
Average Loan	225729.52	212322.00	192976.43	173289.13	153582.96
Weighted Average Rate of Interest on Loan (in %)	12.75	12.22	14.20	13.25	13.25
Interest on Loan	28781.38	25950.47	27407.25	22961.02	20349.95

(₹ in lakh)

Asset-II					
Particular	2014-15	2015-16	2016-17	2017-18	2018-19
Gross Normative Loan	37862.78	37862.78	37862.78	37868.98	37870.19
Cumulative Repayments upto Previous Year	11010.97	13804.30	16597.62	19391.23	22185.17
Net Loan-Opening	26851.81	24058.49	21265.16	18477.76	15685.03
Addition due to Additional Capitalization	0.00	0.00	6.20	1.21	10.50
Repayment during the year	2793.33	2793.33	2793.61	2793.94	2794.39
Net Loan-Closing	24058.49	21265.16	18477.76	15685.03	12901.14
Average Loan	25455.15	22661.82	19871.46	17081.39	14293.08
Weighted Average Rate of Interest on Loan (in %)	12.75	12.22	14.20	13.25	13.25
Interest on Loan	3245.63	2769.78	2822.22	2263.31	1893.85

Return on Equity (RoE)

55. The Petitioner has submitted that it is liable to pay the income tax at the MAT rate, and as such, the RoE has been calculated after grossing up the RoE to the extent of the MAT rate for the control period. As per Regulation 25 of the 2014 Tariff Regulations, applicable for FY 2014-15 to FY 2018-19, the RoE is considered @ 15.5% per annum. The same is grossed up with the applicable tax rate to arrive at pre-tax RoE.



56. The Petitioner has submitted that the applicable MAT rate was 20.961% considering a 10% surcharge and 3 3% education cess on the MAT rate of 18.5% for FY 2014-15. The same has been further increased to 21.342% considering a 12% surcharge and 3% education cess on the MAT rate of 18.5% for FY 2015-16. For FY 2016-17 and FY 2017-18, the MAT rate remained unchanged at 21.342% in line with the MAT rate of FY 2015-16. For FY 2018-19 with a MAT rate of 18.5% and surcharge of 12%, the education cess has further increased from 3% to 4% resulting in an applicable MAT rate of 21.549%. Accordingly, the Petitioner has considered the applicable tax rate for FY 2013-14 to FY 2018-19. The applicable tax rate and resultant RoE are as follows:

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
MAT rate (in %)	20.961	21.342	21.342	21.342	21.549
RoE (in %)	19.61	19.71	19.71	19.71	19.76

57. We are conscious that the entities covered under the MAT regime are paying income tax as per the MAT rates notified for respective financial years under the IT Act, 1961, which is levied on the book profit of the entity computed as per Section 115JB of the IT Act, 1961. Since the Petitioner has been paying income tax on income computed as per the MAT rates of the respective financial year, the notified MAT rates are considered for the purpose of grossing up of the rate of RoE for truing up of the tariff of the 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

58. The MAT rates as above are considered for the purpose of grossing up the



rate of RoE for true- up the tariff for the 2014-19 tariff period in terms of the provisions of the 2014 Tariff Regulations, which are as follows:

Year	MAT Rate (in %)	Grossed up RoE [(Base Rate)/(1-t)] (in %)
2014-15	20.961	19.610
2015-16	21.342	19.705
2016-17	21.342	19.705
2017-18	21.342	19.705
2018-19	21.549	19.758

59. Accordingly, the RoE allowed for the transmission assets is as follows:

(₹ in lakh)

Asset-I					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	111024.92	115928.42	116231.12	116246.12	116267.66
Addition due to Additional Capitalization	4903.50	302.70	15.00	21.54	1.07
Closing Equity	115928.42	116231.12	116246.12	116267.66	116268.72
Average Equity	113476.67	116079.77	116238.62	116256.89	116268.19
Return on Equity (Base Rate) (in %)	15.50	15.50	15.50	15.50	15.50
Tax Rate applicable (in %)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (in %)	19.610	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax)	22252.77	22873.52	22904.82	22908.42	22972.27

(₹ in lakh)

Asset-II					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Equity	16226.91	16226.91	16226.91	16229.57	16230.09
Addition due to Additional Capitalization	0.00	0.00	2.66	0.52	4.50
Closing Equity	16226.91	16226.91	16229.57	16230.09	16234.59
Average Equity	16226.91	16226.91	16228.24	16229.83	16232.34
Return on Equity (Base Rate) (in %)	15.50	15.50	15.50	15.50	15.50
Tax Rate applicable (in %)	20.961	21.342	21.342	21.342	21.549
Rate of Return on Equity (Pre-tax) (in %)	19.610	19.705	19.705	19.705	19.758
Return on Equity (Pre-tax)	3182.10	3197.51	3197.77	3198.09	3207.19

Operation & Maintenance Expenses (O&M Expenses)

60. The Petitioner in the true-up Petition earlier claimed the following O&M expenses in respect of the transmission assets for the 2014-19 tariff period:

(₹ in lakh)					
Asset	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	3617.62	3811.40	4018.48	4238.87	4472.66
Asset-II	1175.16	1214.37	1254.60	1296.25	1339.23

61. The Commission, vide order dated 21.1.2022 in Petition No. 216/TT/2020, allowed the following O&M expenses in respect of the transmission assets:

(₹ in lakh)					
Asset	2014-15	2015-16	2016-17	2017-18	2018-19
Asset-I	3617.62	3811.40	4018.48	4238.87	4472.66
Asset-II	1175.16	1214.37	1254.60	1296.25	1339.23

62. The current Petition has been remanded back to the Commission regarding the ACE allowed and not allowed for the 2014-19 and 2019-24 tariff periods only. Therefore, the O&M Expenses allowed vide order dated 21.1.2022 in Petition No. 216/TT/2020 remain unchanged.

Interest on Working Capital (IWC)

63. The Petitioner is entitled to claim IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations as under:

i. Maintenance spares:

Working capital for maintenance spares has been worked out based on 15% of O&M Expenses specified in Regulation 28 of the 2014 Tariff Regulations.

ii. O & M Expenses:

Working capital for O&M Expenses has been considered for one month of the allowed O&M Expenses.



iii. Receivables:

Working capital for receivables has been worked out on the basis of 2 months of annual transmission charges as determined.

iv. Rate of interest on working capital:

The rate of IWC is considered on a normative basis in accordance with Clause (3) of Regulation 28 of the 2014 Tariff Regulations.

64. The true-up IWC allowed for the transmission assets is as follows:

(₹ in lakh)					
Asset-I					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Working capital for Maintenance Spares (15% of O&M Expenses)	542.64	571.71	602.77	635.83	670.90
Working Capital for O&M Expenses (O&M Expenses for 1 month)	301.47	317.62	334.87	353.24	372.72
Working Capital for Receivables (Equivalent to 2 months of annual fixed cost/ annual transmission charges)	12621.39	12354.57	12648.84	11930.67	11537.82
Total Working Capital	13465.51	13243.90	13586.49	12919.74	12581.44
Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
Interest of Working Capital	1817.84	1787.93	1834.18	1744.16	1698.49

(₹ in lakh)					
Asset-II					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Working Capital for Maintenance Spares (15% of O&M expenses)	176.27	182.16	188.19	194.44	200.88
Working Capital for O&M Expenses (O&M Expenses for 1 month)	97.93	101.20	104.55	108.02	111.60
Working Capital for Receivables (Equivalent to 2 months of annual fixed cost/ annual transmission charges)	1778.90	1707.29	1723.40	1635.54	1581.73
Total Working Capital	2053.10	1990.64	2016.14	1937.99	1894.22
Rate of Interest on Working Capital (in %)	13.50	13.50	13.50	13.50	13.50
Interest of Working Capital	277.17	268.74	272.18	261.63	255.72

Approved Annual Fixed Charges for the 2014-19 Tariff Period

65. Accordingly, the annual fixed charges approved for the transmission assets after true-up for the 2014-19 period are as follows:



(₹ in lakh)

Asset-I					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	19258.75	19704.10	19728.33	19731.54	19733.53
Interest on Loan	28781.38	25950.47	27407.25	22961.02	20349.95
Return on Equity	22252.77	22873.52	22904.82	22908.42	22972.27
O&M Expenses	3617.62	3811.40	4018.48	4238.87	4472.66
Interest on Working Capital	1817.84	1787.93	1834.18	1744.16	1698.49
Total	75728.37	74127.41	75893.05	71584.02	69226.90

(₹ in lakh)

Asset-II					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	2793.33	2793.33	2793.61	2793.94	2794.39
Interest on Loan	3245.63	2769.78	2822.22	2263.31	1893.85
Return on Equity	3182.10	3197.51	3197.77	3198.09	3207.19
O&M Expenses	1175.16	1214.37	1254.60	1296.25	1339.23
Interest on Working Capital	277.17	268.74	272.18	261.63	255.72
Total	10673.38	10243.72	10340.38	9813.21	9490.38

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

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

(₹ in lakh)

Asset-I					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	19763.00	19898.00	20030.00	20030.00	20030.00
Interest on Loan	17745.00	15355.00	12942.00	10288.00	7634.00
Return on Equity	22987.00	23139.00	23287.00	23287.00	23287.00
Interest on Working Capital	1177.00	1119.00	1082.00	1051.00	1020.00
O&M Expenses	6067.00	5459.00	5356.00	5565.00	5780.00
Total	67740.00	64970.00	62697.00	60221.00	57752.00

(₹ in lakh)

Asset-II					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	2806.00	2806.00	2806.00	2806.00	2806.00
Interest on Loan	1527.00	1155.00	783.00	412.00	113.00
Return on Equity	3214.00	3214.00	3214.00	3214.00	3214.00
Interest on Working Capital	157.00	153.00	149.00	145.00	142.00
O&M Expenses	987.00	1018.00	1055.00	1093.00	1132.00
Total	8691.00	8346.00	8007.00	7670.00	7407.00

67. The Petitioner has claimed the following IWC for the transmission assets for the 2019-24 tariff period:



(₹ in lakh)

Asset-I					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Maintenance Spares	910.00	819.00	803.00	835.00	867.00
O&M Expenses	506.00	455.00	446.00	464.00	482.00
Receivables	8351.00	8010.00	7730.00	7425.00	7120.00
Total	9767.00	9284.00	8980.00	8723.00	8469.00
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	1177.00	1119.00	1082.00	1051.00	1020.00

(₹ in lakh)

Asset-II					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Maintenance Spares	148.00	153.00	158.00	164.00	170.00
O&M Expenses	82.00	85.00	88.00	91.00	94.00
Receivables	1072.00	1029.00	987.00	946.00	913.00
Total	1302.00	1267.00	1233.00	1201.00	1177.00
Rate of Interest (in %)	12.05	12.05	12.05	12.05	12.05
Interest on Working Capital	157.00	153.00	149.00	145.00	142.00

Capital Cost

68. 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 upto the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;
- (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;
- (l) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;
- (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
- (n) Expenditure on account of change in law and force majeure events; and
- (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.

(3) The Capital cost of an existing project shall include the following:

- (a) Capital cost admitted by the Commission prior to 1.4.2019 duly tried 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.”

69. The admitted capital cost as on 31.3.2019 for Asset-I and Asset-II, amounting to ₹387562.40 lakh and ₹54115.28 lakh respectively, has been considered as the opening capital cost as on 1.4.2019 for working out the tariff for the 2019-24 period in accordance with Regulation 19 of the 2019 Tariff Regulations.

Additional Capital Expenditure (ACE)

70. Regulation 24 of the 2019 Tariff Regulations provides as follows:

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

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

(a) Undischarged liabilities recognized to be payable at a future date;

(b) Works deferred for execution;

(c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23 of these regulations;

(d) Liabilities to meet award of arbitration or for compliance of the directions or order of any statutory authority or order or decree of any court of law;

(e) Change in law or compliance of any existing law; and

(f) Force Majeure events:

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

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



71. The Petitioner has projected the ACE for Asset-I in 2019-20 and 2020-21. The Petitioner has not claimed the ACE for Asset-II during the 2019-24 tariff period. The Petitioner's claim for Asset-I is as follows:

(₹ in lakh)					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Asset-I	120.00	5000.00	0.00	0.00	0.00

72. The Petitioner in the true-up Petition No. 216/TT/2020 has claimed the ACE towards replacement of porcelain insulators with silicon rubber insulators during the 2019-24 tariff period in respect of Asset-I, and the same is as follows:

Additional Capital Expenditure proposed					Total estimated amount of insulator replacement
2019-20	2020-21	2021-22	2022-23	2023-24	
375.00	331.00	210.00	214.00	208.00	1338.00

73. The Commission, vide order dated 21.1.2022 in Petition No. 216/TT/2020, has held as under:

"94. We have considered the submissions made by the Petitioner. The Petitioner has submitted that existing insulators are required to be replaced with SRI for efficient operation of Asset-I. We are of the view that the consent of the beneficiaries for replacing the existing insulators with SRI should be obtained for incurring such huge ACE towards replacement of existing insulators with SRI. The Petitioner has not submitted any approval of RPC for replacement of the existing insulators. The Petitioner is directed to discuss the issue of replacement of insulators at RPC level. Further, the Petitioner has not submitted what would be done with the replaced insulators and the details of decapitalisation of the insulators. Therefore, projected ACE of ₹1338 lakh during 2019-24 period on account of insulator replacement is disallowed at this stage. However, the Petitioner is given liberty to approach the Commission through a separate petition along with minutes of the RPC meeting and other details mentioned above so that proposal of replacement of insulators could be considered by the Commission."

74. APTEL, vide judgment dated 18.11.2014 in Appeal No. 9 of 2023, has held as under:

"(v) Replacement of porcelain insulators:

31. The claim of the appellant under this head also has been rejected by the Commission on the ground that the appellant had not sought approval of RPC and consent of the beneficiaries for replacement of existing insulators. We have already noted hereinabove that Regulation 14 of 2014 Tariff Regulation nowhere stipulates that the consent of beneficiaries or the approval of RPC is required prior to carrying



out any additional expenditure after the cutoff date. Therefore, we set aside the findings of the Commission on this count and allow the claim of the appellant under this head subject to the prudence check as to the admissibility as per the documents submitted. This exercise shall be completed by the Commission within one month from the date of this judgment.”

75. The Petitioner, vide RoP for the hearing dated 9.12.2024, was directed to submit the details of Regulation under which the ACE towards the porcelain insulators for the 2019-24 tariff period has been claimed; the de-capitalisation details of the existing porcelain insulators, and the actual ACE incurred towards the replacement of porcelain insulators”.

76. In response, the Petitioner has submitted that it had filed a true-up Petition for FY 2019-20 to FY 2023-24, vide Diary No. 1041/2024, wherein it has not claimed any additional capitalisation towards the porcelain insulators.

77. We have considered the Petitioner’s submission. The Petitioner has submitted that it has not claimed any ACE towards the replacement of porcelain insulators. Accordingly, no ACE is considered towards the replacement of porcelain insulators.

Capital cost allowed as on 31.3.2019 and as on 31.3.2024

78. As discussed above, the ACE allowed for 2014-19 has been revised, due to which the capital cost allowed as on 31.3.2019 is also revised. The Commission, vide order dated 21.1.2022 in Petition No. 216/TT/2020, has allowed the ACE of ₹120 lakh towards the up-gradation of SCADA work. However, in respect of ACE of ₹5000 lakh for FY 2020-21 claimed by the Petitioner against “Installation of 12-ohm Series Reactor in 400 kV D/C Mohindergarh Dhanonda line Circuit -I and Circuit-II at Mohindergarh end”; the Petitioner was directed to submit a fresh Petition for approval of tariff for the same as a separate asset as per provisions of

the 2019 Tariff Regulations. Accordingly, Petition No. 13/TT/2023 has been filed by the Petitioner and, subsequently, the Commission, vide order dated 29.3.2024, has approved the AFC for FY 2021-22 to FY 2023-24 for said 12-ohm Series Reactor in 400 kV D/C Mohindergarh Dhanonda line Circuit -I and Circuit-II at Mohindergarh end. Therefore, the details of ACE claimed by the Petitioner in the true-up Petition No. 216/TT/2020 and net revised ACE allowed in respect of Asset-I for the 2019-24 tariff period in this instant order are as follows:

(₹ in lakh)

Description	ACE during FY	ACE claimed by the Petitioner in Petition No. 216/TT/2020	Revised ACE allowed/ considered in instant order	Remarks
Replacement of Porcelain Insulators	2019-20	375.00	0.00	The Petitioner had filed a true-up petition for the control period of FY 2019-20 to FY 2023-24 vide Diary No. 1041 /2024, wherein the Petitioner has not claimed any additional capitalisation towards the porcelain insulators
up-gradation of SCADA work		120.00	120.00	Allowed vide order dated 21.1.2022 in Petition No. 216/TT/2020
Installation of 12-ohm Series Reactor in 400 kV D/C Mohindergarh Dhanonda line Circuit -I and Circuit-II at Mohindergarh end	2020-21	5000.00	0.00	It has been allowed in a separate petition vide order dated 29.3.2024 in Petition No. 13/TT/2023
Replacement of Porcelain Insulators		331.00	0.00	The Petitioner had filed a true-up petition for the control period of FY 2019-20 to FY 2023-24 vide Diary No. 1041 /2024, wherein the Petitioner has not claimed any additional capitalisation towards the porcelain insulators
Replacement of Porcelain Insulators	2021-22	210.00	0.00	
	2022-23	214.00	0.00	
	2023-24	208.00	0.00	



79. As per the above, the capital cost of the transmission assets considered for the 2019-24 tariff period, subject to true-up, is as follows:

(₹ in lakh)			
Asset	Capital cost allowed as on 1.4.2019	ACE allowed for the year 2019-24	Total estimated completion capital cost allowed as on 31.3.2024
	A	B	C=A+B
Asset-I	387562.40	120.00	387682.40
Asset-II	54115.28	0.00	54115.28

80. The Petitioner is directed to provide the value of the de-capitalisation of the SCADA work, which has been upgraded.

Debt-Equity Ratio

81. 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.”

82. The details of the debt-equity considered for the purpose of computation of tariff for the 2019-24 tariff period for the transmission assets are as follows:

Funding Asset-I	Capital Cost as on 1.4.2019 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	271293.68	70.00	271377.68	70.00
Equity	116268.72	30.00	116304.72	30.00
Total	387562.40	100.00	387682.40	100.00

Funding Asset-II	Capital Cost as on 1.4.2019 (₹ in lakh)	(in %)	Capital Cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	37880.70	70.00	37880.70	70.00
Equity	16234.58	30.00	16234.58	30.00
Total	54115.28	100.00	54115.28	100.00

Depreciation

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

“33. Depreciation:

(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof



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

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

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

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

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

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

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

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

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

(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the 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 upto 31.3.2019 from the gross depreciable value of the assets.



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

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

84. The Petitioner has submitted that it has calculated the depreciation charges for FY 2019-20 to FY 2023-24 as prescribed under Regulation 33 of the 2019 Tariff Regulations.

85. We have considered the Petitioner’s submissions. The Commission, vide order dated 18.3.2016 in Petition No. 184/TT/2013 with regard to actual COD of the transmission assets, had held as follows:

“22. The transmission assets covered under the scope of licence were commissioned as a part of generating station of the petitioner Company in the form of dedicated transmission lines along with the associated sub-stations as per the following timeline:

Particulars	Elements	Actual COD
Asset II	400 kV D/C Mundra-Sami	13.7.2009
	400 kv D/C Sami-Dehgam along with Switching Station	13.7.2009



Asset I	HVDC Pole-I along with HVDC line	12.7.2012
	HVDC Pole-II along with HVDC line	9.10.2012
	400 kV D/C Mohindergarh-Bhiwani	12.7.2012
	400 kV D/C Mohindergarh-Dhanonda	9.8.2012

Thus, the transmission assets of the petitioner were commissioned prior to the grant of transmission licence. The petitioner has considered the date of transmission licence as the deemed date of commercial operation for the purpose of tariff determination under Tariff Regulations, 2009 and has claimed the annual fixed charges on the basis of the capital cost as on the date of issue of transmission licence. The petitioner has argued that the date of commercial operation of the transmission assets should be reckoned from the date the assets were treated as ISTS i.e. from the date of grant of transmission licence.

.....

26. The transmission assets of the petitioner have been commissioned with effect from the dates mentioned against each asset in para 22 above. These assets have been put to commercial use from these dates, though as dedicated transmission lines. The licence was granted on 29.7.2013 i.e. almost one year and in some cases, more than one year after the assets were commissioned. After the grant of licence, the dedicated assets acquired the status of ISTS. Therefore, there is a need to decide a reference date for determination of tariff of the transmission assets on their conversion to ISTS.....Finally, taking 1.10.2013 as the date for determination of tariff will balance the interests of the petitioner and beneficiaries. In view of the above discussion, we decide that the deemed CoD for the purpose of determination of tariff shall be considered as 1.10.2013”

86. Further, the Commission, vide order dated 3.11.2017 in Petition No. 146/TT/2016 has already taken into account the cumulative depreciation as on 1.10.2013 while calculating the remaining depreciation value for the purpose of tariff. The relevant portions of the order dated 3.11.2017 in Petition No. 146/TT/2016 are as follows:

“49. The petitioner has claimed depreciation considering weighted average rate of depreciation (WAROD) of 5.10% and 5.18% for Asset-I and Asset-II, respectively for 2009-14. The said depreciation rates have been considered for the purpose of tariff. The petitioner has further submitted that the cumulative.....

Thus, cumulative depreciation as on 1.10.2013 amounting to ₹20078.57 lakh for Asset-I and ₹9614.27 lakh for Asset-II has been considered while calculating the remaining depreciation value for the purpose of tariff.”

87. The depreciation has been worked out considering the admitted capital expenditure as on 31.3.2019 and the accumulated depreciation up to 31.3.2019. Based on the actual COD of the transmission assets as mentioned above, Asset-I



will complete 12 years of useful life beyond the 2019-24 tariff period. Accordingly, the depreciation in respect of Asset-I has been worked out based on the WAROD. WAROD at Annexure-II has been worked out after taking into account the depreciation rates specified in the 2019 Tariff Regulations. Asset-II has completed 12 years of its useful life on 31.3.2021. Therefore, depreciation in respect of Asset-II from 2021-22 onwards has been calculated based on the remaining depreciable value in accordance with Regulation 33(5) of the 2019 Tariff Regulations. The depreciation allowed for the transmission assets is as follows:

(₹ in lakh)

Asset-I					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	387562.40	387682.40	387682.40	387682.40	387682.40
Additional Capitalisation	120.00	0.00	0.00	0.00	0.00
Closing Gross Block	387682.40	387682.40	387682.40	387682.40	387682.40
Average Gross Block	387622.40	387682.40	387682.40	387682.40	387682.40
Freehold land	6070.00	6070.00	6070.00	6070.00	6070.00
Weighted Average Rate of Depreciation (WAROD) (in %)	5.09	5.09	5.09	5.09	5.09
Balance useful life of the asset at the beginning of the year (Year)	23.00	22.00	21.00	20.00	19.00
Lapsed life of the asset at the beginning of the year (Year)	6.00	7.00	8.00	9.00	10.00
Aggregated Depreciable Value	343397.16	343451.16	343451.16	343451.16	343451.16
Depreciation during the year	19736.79	19739.96	19739.96	19739.96	19739.96
Cumulative Depreciation at the end of the year	147313.03	167052.99	186792.95	206532.91	226272.87
Remaining Aggregated Depreciable Value at the end of the Year	196084.13	176398.17	156658.21	136918.25	117178.29

(₹ in lakh)

Asset-II					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Gross Block	54115.28	54115.28	54115.28	54115.28	54115.28
Additional Capitalisation	0.00	0.00	0.00	0.00	0.00
Closing Gross Block	54115.28	54115.28	54115.28	54115.28	54115.28
Average Gross Block	54115.28	54115.28	54115.28	54115.28	54115.28
Freehold land	742.00	742.00	742.00	742.00	742.00
Weighted Average Rate of Depreciation (WAROD) (in %)	5.16	5.16	1.54	1.54	1.54
Balance useful life of the asset at the beginning of the year (Year)	23.00	22.00	21.00	20.00	19.00



Asset-II					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Lapsed life of the asset at the beginning of the year (Year)	10.00	11.00	12.00	13.00	14.00
Aggregated Depreciable Value	48035.95	48035.95	48035.95	48035.95	48035.95
Depreciation during the year	2794.79	2794.79	831.75	831.75	831.75
Cumulative Depreciation at the end of the year	27774.34	30569.13	31400.89	32232.64	33064.39
Remaining Aggregated Depreciable Value at the end of the Year	20261.61	17466.82	16635.07	15803.31	14971.56

Interest on Loan (IoL)

88. 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 upto the date of de-capitalisation of such asset.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be, the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.

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

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

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

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



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

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

89. The Petitioner has submitted that the IoL is calculated for FY 2019-20 to FY 2023-24 in terms of Regulation 32 of the 2019 Tariff Regulations and has considered the weighted average interest rate of FY 2018-19 for the purpose of interest rates during FYs 2019-20 to 2023-24. The repayment has been considered equal to the depreciation for the year.

90. We have considered the Petitioner's submission. Interest on Loan (IOL) has been calculated based on the actual interest rate submitted by the Petitioner in accordance with Regulation 32 of the 2019 Tariff Regulations. The IOL allowed with respect to the transmission assets is as follows:

(₹ in lakh)

Asset-I					
Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	271293.68	271377.68	271377.68	271377.68	271377.68
Cumulative Repayments upto Previous Year	127576.24	147313.03	167052.99	186792.95	206532.91
Net Loan-Opening	143717.44	124064.65	104324.69	84584.73	64844.77
ACE	84.00	0.00	0.00	0.00	0.00
Repayment during the year	19736.79	19739.96	19739.96	19739.96	19739.96
Net Loan-Closing	124064.65	104324.69	84584.73	64844.77	45104.81
Average Loan	133891.05	114194.67	94454.71	74714.75	54974.79
Weighted Average Rate of Interest on Loan (in %)	13.250	13.250	13.250	13.250	13.250
Interest on Loan	17740.56	15130.79	12515.25	9899.70	7284.16

(₹ in lakh)

Asset-II					
Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Gross Normative Loan	37880.70	37880.70	37880.70	37880.70	37880.70
Cumulative Repayments upto Previous Year	24979.56	27774.34	30569.13	31400.89	32232.64
Net Loan-Opening	12901.14	10106.35	7311.56	6479.81	5648.06
ACE	0.00	0.00	0.00	0.00	0.00



Asset-II					
Particular	2019-20	2020-21	2021-22	2022-23	2023-24
Repayment during the year	2794.79	2794.79	831.75	831.75	831.75
Net Loan-Closing	10106.35	7311.56	6479.81	5648.06	4816.30
Average Loan	11503.74	8708.96	6895.69	6063.93	5232.18
Weighted Average Rate of Interest on Loan (in %)	13.250	13.250	13.250	13.250	13.250
Interest on Loan	1524.25	1153.94	913.68	803.47	693.26

Return on Equity (RoE)

91. Regulations 30 and 31 of the 2019 Tariff Regulations provide as follows:

“30. Return on Equity: (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with Regulation 18 of these regulations.

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of-river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of-river generating station with pondage:

Provided that return on equity in respect of additional capitalization after cutoff date beyond the original scope, excluding additional capitalization on 7 account of emission control system, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system or in the absence of actual loan portfolio of the generating station or the transmission system, the weighted average rate of interest of the generating company or the transmission licensee, as the case may be, as a whole shall be considered, subject to ceiling of 14%.

Provided further that:

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

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

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

- a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;*
- b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:*



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

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

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

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

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

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

Illustration-

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

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

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

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

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

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

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

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax



authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after true up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis.”

92. The Petitioner has submitted that it paid 21.549% for FY 2018-19. Therefore, the Petitioner has considered the current MAT rate of 21.549%, which results in a RoE of 19.758% for the entire control period from FYs 2019-20 to 2023-24, in accordance with Regulations 30 and 31 of the 2019 Tariff Regulations.

93. We have considered the submissions of the Petitioner. The MAT rate applicable in FY 2019-20 has been considered for the purpose of RoE, which shall be true up with the actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations. The RoE allowed for the transmission assets under Regulation 30 of the 2019 Tariff Regulations to be as follows:

(₹ in lakh)					
Asset-I					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	116268.72	116304.72	116304.72	116304.72	116304.72
ACE	36.00	0.00	0.00	0.00	0.00
Closing Equity	116304.72	116304.72	116304.72	116304.72	116304.72
Average Equity	116286.72	116304.72	116304.72	116304.72	116304.72
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (Pre-tax) (in %)	18.782	18.782	18.782	18.782	18.782
Return on Equity (Pre-tax)	21840.97	21844.35	21844.35	21844.35	21844.35

(₹ in lakh)					
Asset-II					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Equity	16234.58	16234.58	16234.58	16234.58	16234.58
ACE	0.00	0.00	0.00	0.00	0.00
Closing Equity	16234.58	16234.58	16234.58	16234.58	16234.58
Average Equity	16234.58	16234.58	16234.58	16234.58	16234.58
Return on Equity (Base Rate) (in %)	15.500	15.500	15.500	15.500	15.500
Tax Rate applicable (in %)	17.472	17.472	17.472	17.472	17.472
Rate of Return on Equity (Pre-tax) (in %)	18.782	18.782	18.782	18.782	18.782
Return on Equity (Pre-tax)	3049.18	3049.18	3049.18	3049.18	3049.18



Operation & Maintenance Expenses (O&M Expenses)

94. Regulation 35(3)(a) of the 2019 Tariff Regulations provides as under:

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

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Norms for sub-station Bays (₹ Lakh per bay)					
765 kV	45.01	46.60	48.23	49.93	51.68
400 kV	32.15	33.28	34.45	35.66	36.91
220 kV	22.51	23.30	24.12	24.96	25.84
132 kV and below	16.08	16.64	17.23	17.83	18.46
Norms for Transformers (₹ Lakh per MVA)					
765 kV	0.491	0.508	0.526	0.545	0.564
400 kV	0.358	0.371	0.384	0.398	0.411
220 kV	0.245	0.254	0.263	0.272	0.282
132 kV and below	0.245	0.254	0.263	0.272	0.282
Norms for AC and HVDC lines (₹ Lakh per km)					
Single Circuit (Bundled Conductor with six or more sub-conductors)	0.881	0.912	0.944	0.977	1.011
Single Circuit (Bundled conductor with four sub-conductors)	0.755	0.781	0.809	0.837	0.867
Single Circuit (Twin & Triple Conductor)	0.503	0.521	0.539	0.558	0.578
Single Circuit (Single Conductor)	0.252	0.260	0.270	0.279	0.289
Double Circuit (Bundled conductor with four or more sub-conductors)	1.322	1.368	1.416	1.466	1.517
Double Circuit (Twin & Triple Conductor)	0.881	0.912	0.944	0.977	1.011
Double Circuit (Single Conductor)	0.377	0.391	0.404	0.419	0.433
Multi Circuit (Bundled Conductor with four or more sub-conductor)	2.319	2.401	2.485	2.572	2.662
Multi Circuit (Twin & Triple Conductor)	1.544	1.598	1.654	1.713	1.773
Norms for HVDC stations					
HVDC Back-to-Back stations (Rs Lakh per 500 MW) (Except Gazuwaka BTB)	834	864	894	925	958
Gazuwaka HVDC Back-to-Back station (₹ Lakh per 500 MW)	1,666	1,725	1,785	1,848	1,913
500 kV Rihand-Dadri HVDC bipole scheme (Rs Lakh) (1500 MW)	2,252	2,331	2,413	2,498	2,586
±500 kV Talcher- Kolar HVDC bipole scheme (Rs Lakh) (2000 MW)	2,468	2,555	2,645	2,738	2,834



Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
±500 kV Bhiwadi-Balia HVDC bipole scheme (Rs Lakh) (2500 MW)	1,696	1,756	1,817	1,881	1,947
±800 kV, Bishwanath-Agra HVDC bipole scheme (Rs Lakh) (3000 MW)	2,563	2,653	2,746	2,842	2,942

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

Provided further that:

- i. the operation and maintenance expenses for new HVDC bi-pole schemes commissioned after 1.4.2019 for a particular year shall be allowed pro-rata on the basis of normative rate of operation and maintenance expenses of similar HVDC bi-pole scheme for the corresponding year of the tariff period;*
 - ii. the O&M expenses norms for HVDC bi-pole line shall be considered as Double Circuit quad AC line;*
 - iii. the O&M expenses of ±500 kV Mundra-Mohindergarh HVDC bipole scheme (2000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±500 kV Talchar-Kolar HVDC bi-pole scheme (2000 MW);*
 - iv. the O&M expenses of ±800 kV Champa-Kurukshetra HVDC bi-pole scheme (3000 MW) shall be on the basis of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme;*
 - v. the O&M expenses of ±800 kV, Alipurduar-Agra HVDC bi-pole scheme (3000 MW) shall be allowed as worked out by multiplying 0.80 of the normative O&M expenses for ±800 kV, Bishwanath-Agra HVDC bi-pole scheme; and*
 - vi. the O&M expenses of Static Synchronous Compensator and Static Var Compensator shall be worked at 1.5% of original project cost as on commercial operation which shall be escalated at the rate of 3.51% to work out the O&M expenses during the tariff period. The O&M expenses of Static Synchronous Compensator and Static Var Compensator, if required, may be reviewed after three years.*
- (b) The total allowable operation and maintenance expenses for the transmission system shall be calculated by multiplying the number of sub-station bays, transformer capacity of the transformer (in MVA) and km of line length with the applicable norms for the operation and maintenance expenses per bay, per MVA and per km respectively.*
- (c) The Security Expenses and Capital Spares for transmission system shall be allowed separately after prudence check:*

Provided that the transmission licensee shall submit the assessment of the security requirement and estimated security expenses, the details of year-wise



actual capital spares consumed at the time of truing up with appropriate justification.

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

Disallowance of O&M Expenses for the Communication System for FY 2019-20 to FY 2023-24

95. The Commission, vide order dated 21.1.2022 in Petition No. 216/TT/2020, held that PLCC is part of the sub-station and, accordingly, no separate O&M Expenses are admissible for PLCC equipment during the 2019-24 tariff period under Regulation 35(4) of the 2019 Tariff Regulations. The relevant extracts of the said order are as follows:

“116. It is observed that the Petitioner had considered PLCC equipment as part of the sub-station during the 2014-19 tariff period and it was granted O&M Expenses accordingly as part of the sub-station and no separate O&M Expenses was granted for PLCC equipment. However, the Petitioner in the instant petition for the tariff period 2019-24, has segregated a part of the capital cost of the assets towards PLCC equipment, i.e. ₹2447.00 lakh and ₹79.00 lakh for Asset-I and Asset-II and has claimed O&M Expenses of ₹48.93 lakh and ₹1.57 lakh, respectively @2% of the capital cost under Regulation 35(4) of the 2019 Tariff Regulations. The Commission has dealt similar issue in order dated 24.1.2021 in Petition No. 126/TT/2020, wherein it has been held as follows:

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

98. A combined reading of Regulation 3(12) of the 2019 Tariff Regulations and Regulation 2(i)(h) of the 2017 Communication Regulations shows that PLCC equipment is a communication system. However, it continues to be considered as part of the sub-station (as in the case of 2014-19 tariff period), even though a specific provision has been made in the 2019 Tariff Regulations allowing O&M Expenses @2% for the communication system. The same is clear from the various Forms that are required to be submitted by a transmission licensee in terms of the 2019 Tariff Regulations. Form 5 under Part-III of the 2019 Tariff Regulations (similar table is there in the 2014 Tariff Regulations) requires the transmission licensee to provide “Element wise Break-up of Project/Asset/Element Cost for Transmission System or Communication System”. Details are required to be furnished as regards a) transmission line (preliminary works, transmission lines material, taxes and duties); b) sub-



stations (preliminary works & land, civil works, sub-station equipment, spares, taxes and duties); and c) communication system (preliminary works, communication system equipment, taxes and duties). We observe that PLCC forms a part (at Sl. No. 6.5) of sub-station equipment under the head 'sub-station equipment' and that there is no mention of PLCC under communication system.

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

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

101. It is observed that a fixed amount is allowed as O&M Expenses for a substation (in the form of "Rs. In lakh/ bay") in the 2014 Tariff Regulations for the 2014-19 tariff period on the basis of the type and voltage level of sub-station whereas for the 2019-24 tariff period, the 2019 Tariff Regulations provides for O&M Expenses for communication system @2% of the project cost. Thus, it appears that the Petitioner in the instant petition is attempting to take advantage of Regulation 35(4) of the 2019 Tariff Regulations which provides for O&M Expenses for communication system @2% by segregating the project cost towards PLCC equipment during the 2019-24 tariff period.

102. As PLCC was considered as part of the sub-station, the cost of PLCC was also included in the capital cost of sub-station. Accordingly, as per Tariff Regulations, spares were approved as a percentage (%) of capital cost, considering this capital cost. Therefore, if now PLCC is not considered as part of the sub-station, then it would require revision of the approved capital cost.

103. Thus, although PLCC equipment is a communication system, it has been considered as a part of sub-station, as it is used both for protection and communication. Therefore, we are of the considered view that rightly, it was not considered for separate O&M Expenses while framing norms of O&M for 2019-24 tariff period. While specifying norms for bays and transformers, O&M Expenses for PLCC have been included within norms for O&M Expenses for sub-station. Norms of O&M Expenses @2% of the capital cost in terms of Regulation 35(4) of the 2019 Tariff Regulations have been specified for



communication system such as PMU, RMU, OPGW etc. and not for PLCC equipment.

104. In the present petition, it is observed that the Petitioner in Form-5 for Asset1 for the 2014-19 tariff period has included the PLCC under the head Sub-station Equipment and has claimed actual expenditure incurred towards PLCC for an amount of ₹55.49 lakh. The Petitioner did not claim any capital expenditure towards Communication system in the 2014-19 tariff period. However, on perusal of the Auditor certificate dated 27.11.2019, it is observed that an amount of ₹62.61 lakh for Asset-1 and ₹57.83 lakh for Asset-2 have been shown against PLCC/ communication system, which adds up to ₹120.44 lakh. Thus, there is a discrepancy in the amount claimed by the Petitioner towards PLCC and the amount mentioned in the Auditor certificate.

105. In our view, granting of O&M Expenses for PLCC equipment @2% of its capital cost under Regulation 35(4) of the 2014 Tariff Regulations under the communication system head would tantamount to granting O&M Expenses twice for PLCC equipment as PLCC equipment has already been considered as part of the sub-station. Therefore, the Petitioner's prayer for grant of O&M Expenses for the PLCC equipment @2% of its capital cost under Regulation 35(4) of the 2014 Tariff Regulations is rejected.

106. The principle adopted in this petition that PLCC is part of sub-station and accordingly no separate O&M Expenses is admissible for PLCC equipment in the 2019-24 tariff period under Regulation 35(4) of the 2019 Tariff Regulations shall be applicable in case of all petitions where similar claim is made by the Petitioner. As already mentioned, the Commission, however, on the basis of the claim made by the Petitioner has inadvertently allowed O&M Expenses for PLCC equipment @2% of its original project cost, which is applicable for other "communication system", for 2019-24 period in 31 petitions given in Annexure-3 of this order. Therefore, the decision in this order shall also be applicable to all the petitions given in Annexure3. Therefore, PGCIL is directed to bring this decision to the notice of all the stakeholders in the 31 petitions given in Annexure-3 and also make revised claim of O&M Expenses for PLCC as part of the sub-station at the time of truing up of the tariff allowed for 2019-24 period in respective petitions."

117. Therefore, the Petitioner's claim for separate O&M Expenses for PLCC @2% is not allowed."

96. The APTEL vide judgement dated 18.11.2024 in Appeal No. 9 of 2023, has held as under:

"64. The claim of the appellant under this head has been disallowed by the Commission vide impugned order on the ground that Power Line Carrier Communication (PLCC) equipment is a part of sub-station and since O&M for the sub-station has already been provided, separate O&M expenses cannot be granted for PLCC equipment.

65. Regulation 35(4) of 2019 Regulations is material on this aspect and is extracted hereinbelow: -

"(4) Communication system: The operation and maintenance expenses for the communication system shall be worked out at 2.0% of the original project cost



related to such communication system. The transmission licensee shall submit the actual operation and maintenance expenses for truing up.”

66. This regulation clearly provides for separate O&M expenses for communication to be calculated at 2% of the original projected cost related to such communication system. However, the transmission licensee is required to submit the actual O&M expenses for truing up. The observation of the Commission that PLCC equipment has been considered as part of sub-station for which O&M expenses have already been granted, runs in the teeth of these regulations and thus, cannot be accepted. Therefore, we set aside the findings of the Commission with the direction that the O&M expenses for communication system be calculated separately in terms of the above noted Regulation 35(4) of 2019 Tariff Regulations. This exercise shall be completed by the Commission within one month from the date of this judgment.”

97. The Petitioner has claimed the O&M Expenses against the communication System for the 2019-24 tariff period as per Regulation 35(4) of the 2019 Tariff Regulations.

98. The Petitioner was directed to submit the details of the Communication System, which is part of the scope of the work. The Petitioner has submitted the details of the Communication System for Asset-I and Asset-II, and the same is as follows:

Asset-I

Sl. No.	Name of Communication System	Type of Communication	Technical Particulars	Number/Length
1	Mundra Mohindergarh OPGW	OPGW	SDH network	997 km
2	Mundra Mohindergarh Back Up Link Lease line	BSNL Lease Line	PDH network	NA
3	Mohindergarh NRLDC BSNL Lease line	Lease Line	Point to Point Communication	120 km
4	Mohindergarh NRLDC TATA Lease line	Lease Line	Wire less	120 km
5	HVDC Station Communication	Inter Station Communication	UPD and TCP protocol for fast ethernet interface	Within the station
6	AC system communication	Siemens SCADA	SCADA system SICAM WINCC	System-1, System-2 within the station



7	DC System Communication	Siemens SCADA	Symatic WINCC DC system	Pole control, station control
8	SPS communication	OPGW for Mohindergarh Bhiwani	SDH network	45 km
9	Dhanoda OPGW communication	OPGW	Point to Point communication FRM	5.6 km

Sl. No.	Name of the Communication System	Type of Communication	Technical Particulars	Number/Length
1	OPGW	OPGW	SDH network	997 km
2	BSNL leased line	BSNL leased line	PDH network	997 km
3	AC System Communication	Siemens SCADA	SCADA System SICAM WINCC	System-1, System-2 within the station
4	DC System Communication	Siemens SCADA	Symatic WINCC DC system	Pole control, station control

Asset-II

Sr. No.	Name of the Communication System	Type of Communication	Technical Particulars	Number/Length
1	PLCC SAMI-MUNDRA-1	PLCC	Frequency	282 km
2	PLCC SAMI-MUNDRA-2	PLCC	Frequency	282 km
3	PLCC SAMI-DEHGAM-1	PLCC	Frequency	152 km
4	PLCC SAMI-DEHGAM-2	PLCC	Frequency	152 km
5	MUNDRA Speech	PABX	Frequency	282 km
6	DEHGAM Speech	PABX	Frequency	152 km
7	BSNL leased line	RTU	PAS-1 & PAS-2	1 No.

99. Regulation 35 (4) of the 2019 Tariff Regulations provides as follows:

“35 (3) Transmission system:

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

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



100. It is observed that the Petitioner has sought O&M Expenses for OPGW, leased line, SCADA, PLCC, PABX and RTU under Communication System and claimed the O&M Expenses @2% of ₹2447 lakh and ₹137 lakh as on 31.3.2019, including ACE for the 2014-19 tariff period, towards Communication System in respect of Asset-I and Asset-II, respectively, for the 2019-24 tariff period.

101. The details of capital costs ₹370083.06 lakh and ₹54089.69 lakh as on 31.3.2014 in respect of Asset-I and Asset-II, as provided by the Petitioner, are as follows:

(₹ in lakh)		
Particulars	Asset-I	Asset-II
Freehold Land	5769.56	593.89
Leasehold Land	1031.50	328.93
Building and other Civil works	20158.35	925.28
Furniture & Fixtures	101.35	-
Office equipment's	38.84	-
Transmission line	142879.08	40233.96
Sub-station Equipment's	197657.86	11929.08
PLCC	2446.60	78.75
Total	370083.13	54089.90

102. The Petitioner has not claimed any ACE against PLCC for the 2014-19 tariff period in respect of Asset-I. However, the ACE of ₹50 lakh and ₹8 lakh has been claimed by the Petitioner for PLCC for FY 2016-17 and FY 2017-18 in respect of Asset-II, against which the ACE of ₹8.86 lakh and ₹1.73 lakh for FY 2016-17 and FY 2017-18 has been approved in instant order.

103. It is observed that the Petitioner has considered the cost of the PLCC system separately. However, it has not been clarified whether the cost of other Communication System components mentioned is also included in the cost mentioned under the head PLCC or not. Accordingly, the Petitioner is directed to provide a segregated breakdown of the communication expenditure for each item at the time of truing-up. This will be reviewed during the true-up process.



104. We have provisionally considered the expenses estimated for the PLCC under the Communication System, purely based on the judgment of the APTEL. The Petitioner is further directed to submit the actual O&M Expenses related to the Communication System at the time of truing-up.

105. Therefore, based on the above, the PLCC values of ₹2447 lakh and ₹89.34 lakh (comprising ₹78.75 lakh + ₹8.86 lakh + ₹1.73 lakh) are being considered for determining the O&M Expenses related to the PLCC for Asset-I and Asset-II, respectively. The O&M Expenses against the PLCC of the transmission assets are as follows:

Asset-I

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Capital Cost considered against PLCC	2447.00	2447.00	2447.00	2447.00	2447.00
Norms as per 2019 Tariff Regulation (in %)	2	2	2	2	2
O&M Expenses	48.94	48.94	48.94	48.94	48.94

Asset-II

	(₹ in lakh)				
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Capital Cost considered against PLCC	89.34	89.34	89.34	89.34	89.34
Norms as per the 2019 Tariff Regulation (in %)	2	2	2	2	2
O&M Expenses	1.79	1.79	1.79	1.79	1.79

Issue No. 6: - Disallowance of O&M Expenses for Fixed Series Compensator (FSC) for FY 2019-20 to FY 2023-24.

106. The Commission, vide order dated 21.1.2022 in Petition No. 216/TT/2020, has held that the Petitioner has not submitted the capital cost as on COD for FSC and also the tariff for FSC is not allowed separately. Therefore, the O&M Expenses towards FSC were not allowed. The relevant extract of the said order is as follows:

“119. The Petitioner has claimed O&M Expenses for FSC separately but has not submitted capital cost as on COD and also the tariff for FSC is not allowed separately. Therefore, we are not inclined to allow any O&M Expenses towards FSC.”



107. APTEL, vide judgment dated 18.11.2024 in Appeal No. 9 of 2023, has held as under:

“71. We feel that demand of justice would be met in case one opportunity is granted to the appellant to furnish the requisite details to the Commission for calculating O&M expenses for Fixed Series Compensator. Therefore, the issue is remanded back to the Commission for fresh consideration. The appellant shall furnish the requisite details of the capital cost of the project as on commercial operation date to the Commission within two weeks from the date of this judgment, and the Commission shall decide the issue within two weeks thereafter.”

108. Accordingly, the Petitioner, vide affidavit dated 2.12.2024, has submitted the Auditor's Certificate dated 25.11.2024, certifying the project cost at ₹3924.00 lakh for the Fixed Series Reactor Compensator (FSC) of Asset-1. The Petitioner has also submitted that the static compensator/FSC was part of their original scope of work, as can be verified from the order dated 18.3.2016 passed by the Commission in Petition No. 184/TT/2013.

109. We have considered the Petitioner's submissions. As per the Auditor's Certificate dated 25.11.2024, out of the total project cost amounting to ₹57340 lakh of Asset-II, the cost against FSC is ₹3924 lakh.

110. Regulation 35(3)(a)(vi) of the 2019 Tariff Regulations provides as follows:

“35 (3) Transmission system:

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

*-----
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.”*

111. As per the above Regulation, the O&M Expenses shall be worked out @ 1.5% of the original project cost as on COD, which shall be further escalated @3.51% to work out the O&M Expenses during the 2019-24 tariff period. Therefore, in accordance with APTEL's judgment dated 18.11.2024 in Appeal No. 9 of 2023 and



as per Regulation 35(3)(a)(vi) of the 2019 Tariff Regulations, the O&M Expenses for FSC in respect of Asset-II for the 2019-24 tariff period are allowed as under:

(₹ in lakh)						
Sr. No.	Asset Name	2019-20	2020-21	2021-22	2022-23	2023-24
1	Fixed Series Compensator (FSC) for Asset-II					
i	COD of Asset-II	1.10.2013				
ii	Capital cost against FSC as per Auditor's Certificate dated 25.11.2024	3924				
iii	O&M Expenses	58.86	60.93	63.06	65.28	67.57

112. The Commission, vide order dated 21.1.2022 in Petition No. 216/TT/2020, has allowed the following O&M Expenses for Asset-I and Asset-II:

(₹ in lakh)					
Asset-I					
Element	2019-20	2020-21	2021-22	2022-23	2023-24
(A)					
Transmission Line					
Mundra-Mohindergarh Line (990 Kms) & Mohindergarh-Dhanonda Line (5 km)	1552.37	1606.48	1662.85	1721.48	1781.37
Sub-station					
400 kV bays at Mohindergarh/ Mundra/ Bhiwani Sub-station – 15 Numbers	482.25	499.20	516.75	534.90	553.65
HVDC Sub-station in Mundra & Mohindergarh	1974.40	2044.00	2116.00	2190.40	2267.20
Transformer for 400 kV bay (Capacity - 630 MVA)	225.54	233.73	241.92	250.74	258.93
Total (A)	4234.57	4383.42	4537.53	4697.52	4861.15

Asset-II					
Element	2019-20	2020-21	2021-22	2022-23	2023-24
(A)					
Transmission Line					
400 kV D/C Mundra-Sami & Dehgam-Sami (Twin Moose) Lines- (434 km)	382.35	395.80	409.69	424.01	438.77
Sub-station					
400 kV bays at Mundra Switch-yard/ Sami Sub-station/ Dehgam (PG) Sub-station -13 Numbers	417.95	432.64	447.85	463.58	479.83

Asset-II					
Element	2019-20	2020-21	2021-22	2022-23	2023-24
220 kV ICT bays at Mundra Switchyard – 2 Numbers	45.02	46.60	48.24	49.92	51.68
Total (A)	845.32	875.04	905.79	937.51	970.28

113. Based on the above, the total O&M Expenses allowed for Asset-I and Asset-II after considering O&M Expenses towards the communication system and SFC are as follows:

Asset-I					
Element	2019-20	2020-21	2021-22	2022-23	2023-24
(A)					
Transmission Line					
Mundra-Mohindergarh Line (990 Kms) & Mohindergarh-Dhanonda Line (5 km)	1552.37	1606.48	1662.85	1721.48	1781.37
Sub-station					
400 kV bays at Mohindergarh/ Mundra/ Bhiwani Sub-station – 15 Numbers	482.25	499.20	516.75	534.90	553.65
HVDC Sub-station in Mundra & Mohindergarh	1974.40	2044.00	2116.00	2190.40	2267.20
Transformer for 400 kV bay (Capacity - 630 MVA)	225.54	233.73	241.92	250.74	258.93
Communication System	48.94	48.94	48.94	48.94	48.94
Total (A)	4283.51	4432.48	4586.07	4746.46	4910.09

Asset-II					
Element	2019-20	2020-21	2021-22	2022-23	2023-24
(A)					
Transmission Line					
400 kV D/C Mundra-Sami & Dehgam-Sami (Twin Moose) Lines- (434 km)	382.35	395.80	409.69	424.01	438.77
Sub-station					
400 kV bays at Mundra Switch-yard/ Sami Sub-station/ Dehgam (PG) Sub-station -13 Numbers	417.95	432.64	447.85	463.58	479.83
220 kV ICT bays at Mundra Switchyard – 2 Numbers	45.02	46.60	48.24	49.92	51.68
Communication System	2.74	2.74	2.74	2.74	2.74
Fixed Series Compensator	58.86	60.93	63.06	65.28	67.57
Total (A)	845.32	875.04	905.79	937.51	970.28



Interest on Working Capital (IWC)

114. Regulations 34(1)(c), (3) and (4) and 3(7) of the 2019 Tariff Regulations provide as follows:

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

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

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

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

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

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

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

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

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

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

115. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The Rate of Interest (ROI) considered is 12.05% (SBI 1-year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for FY 2019-20, 11.25% (SBI 1-year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for FY 2020-21, 10.50% (SBI 1-year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points) for FYs 2021-22 and FY 2022-23 and 12.00% (SBI 1 year MCLR applicable as on 1.4.2023 of 8.50% plus 350 basis points) for FY 2023-24. The



components of the working capital and interest allowed thereon for the transmission assets are as follows:

(₹ in lakh)

Asset-I					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for Maintenance Spares (15% of O&M Expenses)	642.53	664.85	687.97	711.97	736.51
Working Capital for O&M Expenses (O&M Expenses for 1 month)	356.96	369.36	382.21	395.54	409.17
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost/ annual transmission charges)	7952.53	7659.31	7344.19	7037.97	6728.29
Total Working Capital	8952.01	8693.52	8414.36	8145.48	7873.98
Rate of Interest (in %)	12.05	11.25	10.50	10.50	12.00
Interest on working capital	1078.72	978.02	883.51	855.28	944.88

(₹ in lakh)

Asset-II					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for Maintenance Spares (15% of O&M Expenses)	135.90	140.66	145.59	150.69	155.95
Working Capital for O&M Expenses (O&M Expenses for 1 month)	75.50	78.15	80.89	83.72	86.64
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost/ annual transmission charges)	1035.80	995.21	723.08	713.65	704.19
Total Working Capital	1247.19	1214.02	949.56	948.06	946.78
Rate of Interest (in %)	12.05	11.25	10.50	10.50	12.00
Interest of working capital	150.29	136.58	99.70	99.55	13.61

Annual Fixed Charges for the 2019-24 Tariff Period

116. The transmission charges allowed for the transmission assets for the 2019-24 tariff period are as follows:

(₹ in lakh)

Asset-I					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	19736.79	19739.96	19739.96	19739.96	19739.96
Interest on Loan	17740.56	15130.79	12515.25	9899.70	7284.16
Return on Equity	21840.97	21844.35	21844.35	21844.35	21844.35
Interest on Working Capital	1078.72	978.02	883.51	855.28	944.88
O&M Expenses	4283.50	4432.35	4586.46	4746.46	4910.09
Total	64680.54	62125.48	59569.53	57085.75	54723.44



(₹ in lakh)

Asset-II					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	2794.79	2794.79	831.75	831.75	831.75
Interest on Loan	1524.25	1153.94	913.68	803.47	693.26
Return on Equity	3049.18	3049.18	3049.18	3049.18	3049.18
Interest on Working Capital	150.29	136.58	99.70	99.55	113.61
O&M Expenses	905.97	937.76	970.63	1004.58	1039.64
Total	8424.47	8072.24	5864.94	5788.53	5727.45

117. The Annexure(s) to this order forms part of the order.

118. This order disposes of Petition No. 216/TT/2020 in terms of APTEL's judgment dated 18.11.2024 in Appeal No. 9 of 2023 based on the above discussions and findings.

sd/-
(Harish Dudani)
Member

sd/-
(Ramesh Babu V.)
Member

sd/-
(Jishnu Barua)
Chairperson



Annexure- I

Asset-I

2014-19	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations				
Capital Expenditure		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Freehold Land	6070.00	-	-	-	-	-	6,070.00	-	-	-	-	-	-
Leasehold Land	1030.15	-	-	-	-	-	1030.15	3.34	34.41	34.41	34.41	34.41	34.41
Building & Other Civil Works	20141.40	934.00	385.00	-	-	-	21460.40	3.34	688.32	710.35	716.78	716.78	716.78
Transmission Line	142761.37	6669.00	140.00	50.00	71.79	3.55	149695.71	5.28	7713.86	7893.62	7898.64	7901.85	7903.84
Sub-Station Equipments	197495.27	8742.00	484.00	-	-	-	206721.27	5.28	10658.54	10902.11	10914.88	10914.88	10914.88
PLCC	2584.87	-	-	-	-	-	2584.87	6.33	163.62	163.62	163.62	163.62	163.62
IT and Software	-	-	-	-	-	-	-	15.00	-	-	-	-	-
TOTAL	370083.06	16345.00	1009.00	50.00	71.79	3.55	387562.40		19258.75	19704.10	19728.33	19731.54	19733.53
Average Gross Block (₹ in lakh)									378255.56	386932.56	387462.06	387522.96	387560.63
Weighted Average Rate of Depreciation (WAROD) (in %)									5.09	5.09	5.09	5.09	5.09



Asset-II

2014-19	Admitted Capital Cost as on 1.4.2014 (₹ in lakh)	ACE					Admitted Capital Cost as on 31.3.2019 (₹ in lakh)	Rate of Depreciation (in %)	Annual Depreciation as per Regulations				
Capital Expenditure		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Freehold Land	742.00	-	-	-	-	-	742.00	-	-	-	-	-	-
Leasehold Land	328.09	-	-	-	-	-	328.09	3.34	10.96	10.96	10.96	10.96	10.96
Building & Other Civil Works	922.44	-	-	-	-	-	922.44	3.34	30.81	30.81	30.81	30.81	30.81
Transmission Line	40122.46	-	-	-	-	15.00	40137.46	5.28	2118.47	2118.47	2118.47	2118.47	2118.86
Sub-Station Equipments	11895.93	-	-	-	-	-	11895.93	5.28	628.11	628.11	628.11	628.11	628.11
PLCC	78.78	-	-	8.86	1.73	-	89.37	6.33	4.99	4.99	5.27	5.60	5.66
IT and Software	-	-	-	-	-	-	-	15.00	-	-	-	-	-
TOTAL	54089.69	-	-	8.86	1.73	15.00	54115.28		2793.33	2793.33	2793.61	2793.94	2794.39
Average Gross Block (₹ in lakh)									54089.69	54089.69	54094.12	54099.42	54107.78
Weighted Average Rate of Depreciation (WAROD) (in %)									5.16	5.16	5.16	5.16	5.16



Annexure- II

Asset-I

2019-24	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				
Capital Expenditure		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Freehold Land	6070.00	-	-	-	-	-	6070.00	-	-	-	-	-	-
Leasehold Land	1030.15	-	-	-	-	-	1030.15	3.34	34.41	34.41	34.41	34.41	34.41
Building & Other Civil Works	21460.40	-	-	-	-	-	21460.40	3.34	716.78	716.78	716.78	716.78	716.78
Transmission Line	149695.71	-	-	-	-	-	149695.71	5.28	7903.93	7903.93	7903.93	7903.93	7903.93
Sub-Station Equipments	206721.27	120.00	-	-	-	-	206841.27	5.28	10918.05	10921.22	10921.22	10921.22	10921.22
PLCC	2584.87	-	-	-	-	-	2584.87	6.33	163.62	163.62	163.62	163.62	163.62
IT and Software	-	-	-	-	-	-	-	15.00	-	-	-	-	-
TOTAL	387562.40	120.00	-	-	-	-	387682.40		19736.79	19739.96	19739.96	19739.96	19739.96
Average Gross Block (₹ in lakh)									387622.40	387682.40	387682.40	387682.40	387682.40
Weighted Average Rate of Depreciation (WAROD) (in %)									5.09	5.09	5.09	5.09	5.09



Asset-II

2019-24	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				
Capital Expenditure		2014-15	2015-16	2016-17	2017-18	2018-19			2014-15	2015-16	2016-17	2017-18	2018-19
Freehold Land	742.00	-	-	-	-	-	742.00	-	-	-	-	-	-
Leasehold Land	328.09	-	-	-	-	-	328.09	3.34	10.96	10.96	10.96	10.96	10.96
Building & Other Civil Works	922.44	-	-	-	-	-	922.44	3.34	30.81	30.81	30.81	30.81	30.81
Transmission Line	40137.46	-	-	-	-	-	40137.46	5.28	2119.26	2119.26	2119.26	2119.26	2119.26
Sub-Station Equipments	11895.93	-	-	-	-	-	11895.93	5.28	628.11	628.11	628.11	628.11	628.11
PLCC	89.37	-	-	-	-	-	89.37	6.33	5.66	5.66	5.66	5.66	5.66
IT and Software	-	-	-	-	-	-	-	15.00	-	-	-	-	-
TOTAL	54115.28	-	-	-	-	-	54115.28		2794.79	2794.79	2794.79	2794.79	2794.79
Average Gross Block (₹ in lakh)									54115.28	54115.28	54115.28	54115.28	54115.28
Weighted Average Rate of Depreciation (WAROD) (in %)									5.16	5.16	5.16	5.16	5.16

