CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 13/TT/2023

Coram:

Shri Jishnu Barua, Chairperson Shri Arun Goyal, Member Shri P. K. Singh, Member

Date of Order: 29.03.2024

In the matter of:

Approval under Section 79 of Electricity Act, 2003 and Regulation 86 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for determination of capital cost and transmission tariff pertaining to FY 2021-22 to FY 2023-24 for 12 Ohm series line reactors in Mohindergarh-Dhanonda 400 kV D/C line Circuit-I & Circuit-II at Mohindergarh end Transmission system constructed, maintained and operated by Adani Transmission (India) Limited vide Licence No. 20/Transmission/2013/CERC and Licence amendment order in Petition No. 118/TL/2019.

And in the matter of:

Adani Transmission (India) Limited, (earlier in the name of Adani Power Limited), Adani Corporate House, Shantigram, S. G. Highway, Khodiyar, Ahmedabad-382421.

.....Petitioner

Versus

- Power Grid Corporation of India Limited, Saudamini, Plot-2, Sector-29, Near IFFCO Chowk, Gurugram-122001, Haryana.
- Central Transmission Utility of India Limited, Saudamini, Plot-2, Sector-29, Near IFFCO Chowk, Gurugram-122001, Haryana.
- National Load Dispatch Centre, B-9, Qutab Industrial Area, Katwaria Sarai, New Delhi-110016.



- Northern Regional Load Despatch Centre, 18-A, Shaheed Jeet Singh Sansanwal Marg, Katwaria Sarai, New Delhi-110016.
- Western Regional Power Committee, F-3, MIDC Area, Marol, Opp. SEEPZ, Central Road, Andheri (East), Mumbai-400093.
- Central Electricity Authority, Sewa Bhawan, Sector-1, R.K. Puram, New Delhi-110066.
- Gujarat Energy Transmission Company Limited, Sardar Patel Vidyut Bhavan, Race Course, Vadodra-390007.
- Haryana Vidyut Prasaran Nigam Limited, 1st Floor, Shakti Bhawan, Sector-6, PanchKula-134109, Haryana.
- Gujarat Urja Vikas Nigam Limited, Sardar Patel Vidyut Bhawan, Race Course, Vadodra-390007.
- 10. Maharashtra State Electricity Distribution Company Limited, "Prakashgarh", Bandra (East), Mumbai-400051, Maharashtra.
- 11. Madhya Pradesh Power Management Company Limited, Shakti Bhawan, Vidyut Nagar, Rampur, Jabalpur (MP)-482008.
- 12. M.P. Audyokik Kendra Vikas Nigam Limited, Free Press House, 1st Floor, 3/54-Press Complex, A. B. Road, Indore-452008, Madhya Pradesh.
- 13. Chhattisgarh State Power Distribution Company Limited, Vidyut Seva Bhawan Parisar, Dangania, Raipur-492013, Chhattisgarh.
- 14. Goa State Electricity Department, Vidyut Bhawan, Panaji, Goa-403001.
- 15. Daman and Diu Electricity Department, Administration of Daman & Diu, Near Satya Narayan Temple, Nani Daman-396210.



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



- Tata Power Delhi Distribution Limited, Cennet Building, 33 kV Substation Building, Hudson Lines, Kingsway Camp, Delhi-110009.
- 29. New Delhi Municipal Council, Palika Kendra Building, Opposite Jantar Mantra, Parliament Street, New Delhi-110001.
- 30. Uttarakhand Power Corporation Limited, Urja Bhawan, Kanwali Road, Dehradun-248001.
- 31. Uttar Pradesh Power Corporation Limited, Shakti Bhawan, 14, Ashok Marg, Lucknow-226001, UP.
- 32. North Central Railway, Allahabad, Uttar Pradesh.
- 33. Punjab State Power Corporation Limited, The Mall, Ablowal, Patiala-147001.
- 34. Power Development Department, Jammu and Kashmir, Civil Secretariat, Jammu-180001.
- 35. Himachal Pradesh State Electricity Board, Vidyut Bhawan, Shimla-171004.
- 36. Electricity Department UT Chandigarh, Sector-9, Chandigarh.
- 37.Northern Regional Power Committee, 18-A, Qutab Institutional Area, Shaheed Jeet Singh Marg, Katwaria Sarai, New Delhi-110016.
- Western Regional Power Committee, F-3, M.I.D.C. Area, Marol, Andheri 9East), Mumbai-400093.
- 39. Kanpur Electricity Supply Company Limited (NR), 14/71, Civil Lines, Kanpur-208001.
- 40. Rajasthan Rajya Vidyut Prasaran Nigam Limited, Vidyut Bhawan, Vidyut Marg, Jaipur- 302005.



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

...Respondent(s)

For Petitioner	:	Shri Naresh Desai, ATIL Shri Prashant Kumar, ATIL
For Respondents	:	Shri Varun K. Chopra, Advocate, MPPMCL Shri Mehul Sharma, Advocate, MPPMCL Shri Abhishek Kandwal, Advocate, MPPMCL

<u>ORDER</u>

The instant petition has been filed by Adani Transmission (India) Limited for the determination of capital cost and transmission tariff for 12 Ohm series line reactors in Mohindergarh-Dhanonda 400 kV D/C line Circuit-I and Circuit-II at Mohindergarh end transmission system (hereinafter referred to as the "transmission asset") constructed, maintained and operated by Adani Transmission (India) Limited vide Licence No. 20/Transmission/2013/CERC and Licence amendment order in Petition No. 118/TL/2019 under Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") for 2021-22 to 2023-24 period.

- 2. The Petitioner has made the following prayers in the instant petition:
 - *"a)* Approve the Capital Cost and Transmission Tariff for the tariff block FY 2021-22 to FY 2023-24 for the Asset III covered under this Petition, claimed in this petition.
 - b) Approve the Additional capitalisation projected to be incurred during the tariff block of FY 2022-23 to FY 2023-24 as claimed in the Petition.
 - c) Allow interim tariff in accordance with Regulation 10 (3) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for recovery of Transmission Tariff under CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020.
 - d) Allow Final tariff in accordance with Regulation 10 (5) of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for recovery of Transmission Tariff under CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020.
 - e) Approve the reimbursement of expenditure by the beneficiaries towards Petition filing fee, and expenditure on publishing of notices in newspapers in terms of Tariff

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Regulations and other expenditure (if any) in relation to the filing of Petition;

- f) Allow the Petitioner to consider availability of the installed reactors along with the transmission line.
- g) 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
- h) Pass such other and further order or orders as this Hon'ble Commission may deem fit and proper under the facts and circumstances of the present case and in the interest of justice."

Background

- 3. The brief facts of the case are as follows:
 - (a) The Commission, vide 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 license, i.e.

with effect from 29.7.2013.

(b) The Commission, vide order dated 7.10.2019 in Petition No. 118/TL/2019,

amended the transmission license of the Petitioner and included the 12 ohm

series line reactor in Mohindergarh-Dhanonda 400 kV D/C line Circuit-I and

Circuit-II at Mohindergarh end. The relevant portion of the order dated 7.10.2019

in Petition No. 118/TL/2019 held as follows:

submitted that NLRDC has no objection to the amendment of license proposed in the Petition. Central Transmission Utility vide its letter dated 10.5.2019 has submitted that in order to control the fault level at 400 kV Mohindergarh substation developed by ATIL through TBCB route, installation of 12 ohm Series Line Reactor in each circuit of Mohindergarh-Dhanonda 400 kV D/C line at Mohindergarh end was agreed in the 39th meeting of the Standing Committee on Power System Planning of Northern Region held at 29/30-5.2017. CTU has further submitted that the scheme was also discussed in the 2nd Meeting of National Committee on Transmission (NCT) held on 4.12.2018 and NCT recommended implementation of above work. Considering all the materials on record, we are of view that it is in the public interest to approve amendment to the transmission license granted to the Petitioner, Adani Transmission (India) Ltd. to include 12 ohm Series Line Reactor in Mohindergarh-Dhanonda 400 kV D/c line ckt I & II at Mohindergarh end. Accordingly, we direct to include the above scope of work in the transmission license granted to the Petitioner vide Transmission License No. 20/Transmission/2013/CERC dated 29.7.2013. The licensee shall remain bound by the terms and conditions contained in the order dated 29.7.2013."



(c) The Petitioner has commissioned the 12 Ohm series line reactors and claimed its capital cost as additional capital expenditure in 2021-22, along with the tariff of the other assets of the transmission project in Petition No. 216/TT/2020. However, the Commission, vide order dated 21.1.2022 in Petition No. 216/TT/2020, held that the 12 Ohm series reactors, which have been incorporated in the revised scope of the transmission project by way of amendment to the transmission licence of the Petitioner is to be reckoned as a new and distinct 'element' of the transmission project and it has to be treated distinctly and separate tariff has to be allowed for it. The relevant portion of the order dated 21.1.2022 in Petition No. 216/TT/2020 is extracted as follows:

"84. Therefore, the 12 ohm series reactor, which has been incorporated in the revised scope of the transmission project by way of amendment to the transmission license of the Petitioner is to be reckoned as a new and distinct 'element' of the transmission project. Therefore, the Petitioner is required to submit tariff application in accordance with 2019 Tariff Regulation with respect to the new and distinct 'element' ("12 ohm Series Line Reactor in 400 kV D/C Mohindergarh-Dhanonda 400kV line (Circuit-I & Circuit-II) at Mohindergarh end") of the transmission project.

85. Hence, we are not inclined to consider the "12 ohm Series Line Reactor in 400 kV D/C Mohindergarh-Dhanonda 400 kV line (Circuit-I & II) at Mohindergarh end" under the additional capitalisation provisions of the 2019 Tariff Regulations, since the said reactor is a distinct 'element' as defined under the 2014 Tariff Regulations. Moreover, the treatment of depreciation for the new 12 ohm series reactor, put into commercial operation in 2019-24 tariff period will be different from the depreciation allowed for the existing transmission assets put into commercial operation in the 2009-14 tariff regulations. Therefore, we are of the considered view that 12 ohm series reactor has to be treated distinctly and separate tariff has to be allowed for it."

(d) As per the Commission's above direction, the Petitioner has filed the instant

petition. The Petitioner has claimed the COD of the transmission asset as

30.3.2022. In support of the COD claim in respect of the transmission asset, the

Petitioner has submitted an RLDC charging certificate dated 8.4.2022.

(e) The Petitioner has submitted the in-principle approval of the company's Board of Directors (BoD) dated 12.11.2019. As per the said approval, the estimated cost is ₹50 crore.

(f) The Petitioner has submitted the details of the transmission assets under the licence issued to it and they are as follows:

Particulars	Asset I	Asset II	Asset III
AC system			
Transmission Line	 400 kV D/C Mohindergarh- Dhanonda 400 kV D/C Mohindergarh- Bhiwani 	• 400 kV D/C Mundra-Sami- Dehgam	
Sub-stations	 Sub-stations at Mundra & Mohindergarh Bays at Bhiwani (PG) Substation 	 Sub-stations at Mundra & Sami Bays at Dehgam (PG) Sub-station 	 12 Ohm series line reactors in Mohindergarh- Dhanonda 400 kV D/C line Circuit-I & Circuit-II at Mohindergarh end
HVDC System			
Transmission Line	 ± 500 kV Bipole Mundra- Mohindergarh HVDC line 33 kV D/C Electrode lines for HVDC Mundra and Mohindergarh Terminal Stations HVDC Terminal Stations at 		
	Mundra & Mohindergarh		

(g) The Commission, vide order dated 21.1.2022 in Petition No. 216/TT/2020, has trued-up the tariff for the 2014-19 tariff period and approved the tariff for the 2019-24 tariff period.

4. The Respondents are distribution licensees and the power departments in the Northern Region that are procuring transmission service from the Petitioner are the main beneficiaries .

5. The Petitioner has served the petition on the Respondents, and notice regarding the filing of this petition has also been published in newspapers in accordance with Section 64 of the Electricity Act, 2003. No comments or suggestions have been received from the general public in response to the aforesaid notice published in the newspapers by the Petitioner. M.P. Power Management Company Limited (MPPMCL), Respondent No. 11, vide affidavit dated 11.5.2023, has filed its reply. The Petitioner has filed a rejoinder vide affidavit dated 25.5.2023 in response to the reply filed by MPPMCL. The issues raised by MPPMCL and the clarifications given by the Petitioner are considered in the relevant portions of this order.

6. The hearing in this matter was held on 27.9.2023, and the order was reserved.

7. This order is issued considering the submissions made by the Petitioner in the petition, the Petitioner's affidavits dated 28.4.2023, 29.6.2023 and 16.10.2023, the reply filed by MPPMCL vide affidavit dated 11.5.2023, and the Petitioner's rejoinder vide affidavit dated 22.5.2023.

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

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

9. The Petitioner has claimed the following transmission charges in respect of the transmission asset for the 2019-24 tariff period:

			(₹ in lakh)
Particulars	2021-22	2022-23	2023-24
Depreciation	1.29	254.24	270.38
Interest on Loan	2.26	429.59	423.19
Return on Equity	1.38	271.31	288.53
O&M Expenses	0.06	12.53	12.84
Interest on Working Capital	0.00	0.00	0.00
Total	4.99	967.66	994.95



10. The Petitioner has claimed the following Interest on Working Capital (IWC) in respect of the transmission asset for the 2019-24 tariff period:

			(₹ in lakh)
Particulars	2021-22	2022-23	2023-24
O&M Expenses	0.00	0.00	0.00
Maintenance Spares	0.00	0.00	0.00
Receivables	1.00	119.00	122.00
Total Working Capital	1.00	119.00	122.00
Rate of Interest (in %)	10.50	10.50	10.50
Interest on Working Capital	0.00	13.00	13.00

Date of Commercial Operation ("COD")

11. The Petitioner has claimed the commercial operation of 12 Ohm series reactors as on 30.3.2022. In support of the claim of actual COD of the transmission asset, the Petitioner has submitted a CEA Energisation Certificate dated 10.3.2022. The Petitioner has completed the trial operation of 12 Ohm series line reactors installed on Circuit-I and Circuit-II on 29.3.2022 and 15.3.2022, respectively and submitted certification of the same from Power System Operation Corporation Limited on 8.4.2022 and self-declaration COD certificate as required under Grid Code.

12. Taking into consideration the CEA Energization certificate, RLDC charging certificate, and self-declaration COD certificate, the COD of the transmission asset is approved as 30.3.2022.

Capital Cost

13. Regulation 19 of the 2019 Tariff Regulations provides as follows:

"19. Capital Cost: (1) The Capital cost of the generating station or the transmission system, as the case may be, as determined by the Commission after prudence check in accordance with these regulations shall form the basis for determination of tariff for existing and new projects.

(2) The Capital Cost of a new project shall include the following:



- (a) The expenditure incurred or projected to be incurred up to the date of commercial operation of the project;
- (b) Interest during construction and financing charges, on the loans (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed;
- (c) Any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed during the construction period;
- (d) Interest during construction and incidental expenditure during construction as computed in accordance with these regulations;
- (e) Capitalised initial spares subject to the ceiling rates in accordance with these regulations;
- (f) Expenditure on account of additional capitalization and de-capitalisation determined in accordance with these regulations;
- (g) Adjustment of revenue due to sale of infirm power in excess of fuel cost prior to the date of commercial operation as specified under Regulation 7 of these regulations;
- (h) Adjustment of revenue earned by the transmission licensee by using the assets before the date of commercial operation;
- *(i)* Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
- (j) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of the generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;
- (k) Capital expenditure on account of biomass handling equipment and facilities, for co-firing;
- (I) Capital expenditure on account of emission control system necessary to meet the revised emission standards and sewage treatment plant;
- (m) Expenditure on account of fulfilment of any conditions for obtaining environment clearance for the project;
- (n) Expenditure on account of change in law and force majeure events; and
- (o) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (3) The Capital cost of an existing project shall include the following:
 - (a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;
 - (b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;
 - (c) Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;
 - (d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;
 - (e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other



appurtenant cost paid to the railway; and

- (f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.
- (4) The capital cost in case of existing or new hydro generating station shall also include:
 - (a) cost of approved rehabilitation and resettlement (R&R) plan of the project in conformity with National R&R Policy and R&R package as approved; and
 - (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) project in the affected area.
- (5) The following shall be excluded from the capital cost of the existing and new projects:
 - (a) The assets forming part of the project, but not in use, as declared in the tariff petition;
 - (b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

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

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

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

14. The Petitioner has submitted that ₹5106.49 lakh has been incurred towards the

total project cost. Out of the cost of ₹5106.49 lakh, an amount of ₹4509.21 lakh has

been incurred as on COD, and an amount of ₹597.28 lakh has been incurred towards

un-discharged liabilities which were discharged during 2022-23. The details of the

approved cost, cost as on COD, and additional capitalization claimed by the Petitioner are as follows:

(₹ in lakh)

Revised approval	Expondituro	Estim	ated Exper	nditure	Total astimated
of Board of Director	as on COD	2021-22	2022-23	2023-24	completion cost
5106.49	4509.21	0.00	597.28	0.00	5106.49

15. The Petitioner, vide Auditor Certificate dated 9.8.2022, has submitted the

following statement of capital expenditure towards the transmission asset:

Srl. No.	Particulars	As on 3 as pe	1.3.2022 (₹ r audited be accounts	in crore) ooks of	As on 3 as per	0.4.2022 (₹ unaudited I accounts	in crore) books of
		Total Capital Expendi- ture	Capital Expendi- ture on cash basis	Undis- charged Liabilities	Total Capital Expendi- ture	Capital Expendi- ture on cash basis	Undis- charged Liabilities
1	Hard Cost	-	-	-	-	-	-
a.	Land	-	-	-	-	-	-
b.	Building	-	-	-	-	-	-
C.	Transmission Line	-	-	-	-	-	-
d.	Sub-station	44.76	40.51	4.25	44.76	40.51	4.25
e.	Communication System	-	-	-	-	-	-
	Total Hard Cost (a+b+c+d+e)	44.76	40.51	4.25	44.76	40.51	4.25
2	Add: IDC	4.59	4.58	0.01	6.30	6.30	-
	Total Capital Expenditure	49.35	45.09	4.26	51.06	46.81	4.25

16. The Petitioner, vide Auditor certificate dated 29.5.2023, has submitted the

following statement of capital expenditure for the transmission asset:

		As per unaudited books of Account			As per	As per audited books of Account				As per audited books of Account				
SI. No.	Particulars	As on 30 as per	n 30.3.2022 (₹ in crore) per audited books of accounts		Transac- tions on 31.3.2022	As on 31.3.2022 (₹ in crore)			Additio the finar comme 1.4.20 ende 31.3	n during ncial year ncing on 22 and ed on .2023	A	s on 31.3.2	2023	
		Total Capital Expendi- ture	Capital Expendi- ture on cash basis	Undis- charged Liabilities	Total Capital Expendi- ture	Capital Expenditure on cash basis	Total Capital Expendi- ture	Capital Expendi- ture on cash basis	Undis- charged Liabilities	Total Capital Expendi- ture	Capital Expendi- ture on cash basis	Total Capital Expen- diture	Capital Expendi- ture on cash basis	Undis- charged Liabilities
1	Hard Cost	-	-	-	-	-	-	-	-	-	-	-	-	-
a.	Land	-	-	-	-	-	-	-	-	-	-	-	-	-



b.	Building	-	-	-	-	-	-	-	-				-	-
C.	Transmission Line	-	-	-	-	-	-	-	-	-	-	-	-	-
d.	Sub-station	44.36	40.51	3.85	0.4		44.76	40.51	4.25	0.15	4.4	44.91	44.91	-
e.	Communicatio n System	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total Hard Cost (a+b+c+d+e)	44.36	40.51	3.85	0.4	-	44.76	40.51	4.25	0.15	4.4	44.91	44.91	-
2	IEDC	-	-	-		-	-	-	-	-	-	-	-	-
3	Add: IDC	3.54	3.53	0.01	1.05	1.05	4.59	4.58	0.01	1.71	1.71	6.30	6.30	

17. In response to the Commission's directions, vide RoP dated 6.4.2023, the Petitioner vide affidavit dated 28.4.2023 has made the following submissions:

(a) As per the procurement practice of the Petitioner, all its procurement is carried out through a competitive bidding process. Based on the identification of the requirement of procurement, Petitioner invites the bids from prospective bidders. Once the offers are received from the bidders, the Petitioner carries out negotiations in manual mode or reverse e-auction mode. Based on the final offer of bidders, a note is put up for management approval. In line with the approval note, the Petitioner issues a service order/ purchase order to the successful bidder on the SAP platform. The Petitioner is following the due process of competitive bidding for its procurement to get the right material at the right price.

The Petitioner has carried out a competitive bidding process where enquiry was floated on 19.9.2020. Subsequent to that, offers were sought from various bidders. The Petitioner has carried out an evaluation of all bidders on various criteria like confirmation of scope, project execution competencies, safety awareness, quality assurance past experience, etc. Evaluation Report dated 4.1.2020 for 400 kV, 12 Ohm, Series Reactor at Mohindergarh Sub-station. Subsequent to the evaluation report, ATIL carried out a reverse auction on 7.1.2020 where GE T&D emerged as the lowest bidder. Details of number of participants, price quote/ discovered is as follows:

Sr. No.	Bidder Name	Amount (₹)
1	GE T&D	450839200
2	ABB	462790353
3	Siemens Limited	463628727

Accordingly, the Petitioner placed the purchase order to GE T&D for 400 kV, 12 Ohm, Series Reactor at Mohindergarh Sub-station after following a competitive bidding process.

(b) The details of the capital cost claimed in the petition are as follows:

			(₹ in crore)
Sr. No.	Particulars	Estimated Capital Cost	Actual Capital Cost
1	Hard Cost	47.50	44.76
2	IDC & IEDC	2.50	6.30
3	Total Capital Cost	50.00	51.06

There is a nominal increase of 2% in actual capital cost as compared to estimated capital cost and it is due to time over-run on account of *force majeure* conditions (Covid-19 impact and non-availability of shutdown from NRPC). Out of the total capital cost of ₹51.06 crore claimed, ₹44.76 crore is hard cost. The Petitioner has issued the purchase order to GE T&D India Limited after duly following the competitive bid process. Hence, the hard cost of ₹44.76 crore incurred is within range and legitimate. The Petitioner has incurred IDC of ₹6.30 crore as the project was delayed due to various *force majeure* events.

(c) Element-wise break-up of cost as per original estimates in Form-5. The Petitioner has incurred costs in four elements from various elements given in Form 5. The relevant element-wise break-up of capital cost as per the original estimate and actual capital cost as on COD is as follows:

			(₹ in lakh)
Sr. No.	Breakdown	Capital cost as per original	Actual capital cost
		estimate	as on CoD
1	Civil Work - Foundation for Structures	300.00	275.13
2	Substation Equipment - Compensating Equipment (Reactor, SVCs etc)	4350.00	4135.74
3	Construction and pre-commissioning expenses - site supervision & site admn. etc.	100.00	65.34
4	IDC and IEDC	250.00	630.28
5	Total capital cost	5000.00	5106.49

18. MPPMCL has submitted that the Petitioner has not provided any justification for cost over-runs and has not submitted any documents in support of its claim.

19. We have considered the submissions of the Petitioner and MPPMCL. There is an increase in the capital cost of the transmission asset by ₹106.49 lakh. The hard cost claimed by the Petitioner is within the estimated cost. The Petitioner, vide letter dated 12.5.2022, has submitted the approval of BoDs and the total capital cost (including undischarged liabilities) of ₹5106 lakh. Thus, the estimated completion cost of the transmission asset is within the approved cost and we approve the same.

Time over-run

20. The in-principle approval of BoDs submitted by the Petitioner does not specify the scheduled COD of the transmission asset. Therefore, the Commission vide RoP dated 6.4.2023 directed the Petitioner to submit "the SCOD of the transmission asset". In response, the Petitioner, vide affidavit dated 28.4.2023, has made the following submissions:

(a) The office memorandum of the Ministry of Power dated 30.1.2019 states that the ECT, in its 3rd meeting held on 21.12.2018, has approved the implementation of 12 Ohm series line reactors in Mohindergarh-Dhanonda 400 kV D/C line Circuit-I and Circuit-II at Mohindergarh end under compressed time schedule through regulated tariff mechanism (RTM). The relevant part of the office memorandum of the Ministry of Power dated 30.1.2019 is as follows:

"The undersigned is directed to inform that the Empowered Committee on Transmission (ECT), in its 3rd meeting, held on 21.12.2018 has approved the implementation of following transmission schemes along with the broad scope by Adani Power, under compressed time schedule through regulated tariff mechanism (RTM):"

(b) The MoP granted approval to the Petitioner vide OM dated 30.1.2019.
Consequent to the assignment of licence, all rights, and obligations of the Petitioner in respect of the transmission business are vested in the Petitioner.
Hence, APL wrote a letter to the National Committee of Transmission on 13.2.2019 to allow the Petitioner to implement an additional transmission system.
(c) The Petitioner filed Petition No. 118/TL/2019 seeking an amendment of

the licence, and the Commission, vide order dated 7.10.2019, approved the amendment of transmission licence No. 20/Transmission/2013/CERC of the Petitioner.

(d) Proactively, the Petitioner initiated the preliminary activities and enquiry was floated in the month of September 2019 to prospective bidders even before the licence amendment was approved by the Commission. Initial offers were received in the month of November 2019, and revised offers were received in the month of December 2019. Subsequently, the reverse auction was carried out on 7.1.2020 through the procure tiger portal. Acceptance of L1 schedule and supporting documents took place during February 2020. Based on the same, a Letter of Award (LoA) was issued to GE T&D on 9.3.2020, and the same was accepted by the Bidder on 13.3.2020.

(e) Based on various consultations/discussions with prospective bidders during bid time, the Petitioner had envisaged a time-frame of 12 months to complete the process of installation of 12 Ohm series line reactors from the date of award of work. The Petitioner issued LoA to GE T&D on 9.3.2020, and the delivery schedule date was provided as 8.3.2021. Accordingly, SCoD for the installation of 12 Ohm series line reactors at Mohindergarh end was envisaged as March 2021.

21. The Petitioner has submitted that the transmission asset was envisaged to be executed in 12 months. However, it took 24 months for the execution of the transmission asset. The scheduled COD is 8.3.2021, against which the transmission asset was put into commercial operation on 30.3.2022 with a time over-run of 387 days. The Petitioner has attributed the time over-run to (i) the Covid-19 Pandemic (8 months as allowed by MoP) and (ii) Non-grant of shutdown by NRPC. Detailed reasons for time over-run are discussed in subsequent paragraphs.

22. The Petitioner has submitted that immediately after issuing work to GE T&D in March, 2020, COVID-19 impacted the whole world and nationwide lockdowns along with international travel restrictions across countries were imposed. The Petitioner issued a *force majeure* notice for the same. As part of the *force majeure* notice, the Petitioner has also provided a letter dated 11.4.2020 from the EPC contractor as part of the *force majeure* Notice. EPC contractor, vide its letter dated 11.4.2020, issued notice under *force majeure* due to the Covid-19 pandemic and its impact on manufacturing, supply chain, logistics site service, etc. The Petitioner has submitted that MoP, vide its letter dated 27.7.2020, provided an extension of five months to TSP/

Transmission Licensees for completion of under- construction inter-State transmission projects due to the Covid-19 outbreak.

23. The Petitioner has submitted that after receipt of material in January, 2021, all other activities (excluding shutdown related) were carried out and completed by the EPC contractor in the month of April 2021. The Petitioner was not granted shutdown because of the situation at that time. Partial circuit-wise shutdowns were allowed by NRPC from November, 2021 onwards, and the Petitioner completed its shutdown related activities. The Petitioner was able to complete a successful trial run operation of Ckt-II on 15.3.2022 and Ckt-I on 29.3.2022. No shutdown was sought in June, 2021 due to the non-availability of manpower because of the Covid-19 second wave. In January 2022, the Petitioner was verbally communicated not to apply for outage considering the critical requirement of the circuit in the grid. The Petitioner has submitted that it carried out all activities in a timely manner, which were in its control. The Petitioner has submitted that the time over-run was due to force majeure events (either COVID-19 restrictions or non-allowance of shutdown) and has requested to condone the time over-run. The Petitioner has also submitted that it has provided details of the monthly shutdown sought from April 2021 onwards and their approval/ rejection.

24. The Petitioner has submitted the following timeline for various activities, and it is as follows:

SI.	Activity	Timeline	Remarks
No.			
1	Office Memorandum of MoP	30.1.2019	-
2	APL letter to Chairman NCT	13.2.2019	-
3	Minutes of 3 rd meeting of "National	14.3.2019	-
	Committee on Transmission" (NCT) held on		
	1.3.2019		



SI.	Activity	Timeline	Remarks
4	Filing of Amendment Petition with the Commission (Petition No. 118/TL/2019)	8.4.2019	-
5	Issuance of order by the Commission in Petition No. 118/TL/2019	7.10.2019	-
6	Floating of enquiry	September, 2019	-
7	Initial Offer & revised Offers from prospective Bidders	November, 2019	
8	Meeting with prospective bidders	December, 2019	
9	Reverse Bidding Process	January, 2020	
10	Acceptance of T&C, L1 schedule and supporting documents	February, 2020	
11	Issuance of Letter of Award to Successful Bidder	March, 2020	
12	Acceptance of Letter of Award by Successful Bidder	March, 2020	
13	Completion of Activities by ATIL (except shutdown related)	April, 2021	Covid-19 impact in India and International travel restrictions, MoP provided extension of 5 months
14	Commercial Operation of 12 Ohm Series line Reactor	March, 2022	 Due to Covid-19 second wave, MoP provided extension of 3 months. Shutdown was not allowed by NRPC, even when shutdown was given it was given for partial period and for each circuit.

Analysis and decision

25. The IA was approved by the BoD on 21.11.2019. The Petitioner has considered 12 months from the date of issue of LoA, on 9.3.2020, as the scheduled CoD. Accordingly, the scheduled COD is 8.3.2021, against which the transmission asset was put into commercial operation on 30.3.2022 with a time over-run of 387 days.

26. The Petitioner has attributed the time over-run Covid-19 pandemic and nonapproval of shutdown by NRPC. The Petitioner has submitted that the construction activities of the transmission asset were severely affected by the nationwide lockdown measures announced on 25.3.2020 to contain an outbreak of Covid-19 and by the second wave of the Covid-19 pandemic. The Petitioner has sought relief under the MoPs letters dated 27.7.2020 and 12.6.2021 granting an extension of COD by 5 months and 3 months, respectively, for inter-State transmission projects.

27. MPPMCL has submitted that the Petitioner has not provided any justification for time over-run, and the same may not be condoned.

28. We have considered the submissions of the Petitioner and MPPMCL. MoP vide letter dated 27.7.2020 allowed extension of COD of transmission projects which were under construction as on 25.3.2020. A further extension of 3 months in COD was allowed by MoP, vide letter dated 12.6.2021, in the case of the transmission projects which were under construction as on 1.4.2021.

29. The relevant portion of the letter dated 27.7.2020 is as follows:

"Sub: Extension to TSP/Transmission Licensees for completion of under construction inter-State transmission projects

Sir,

I am directed to state that transmission utilities have pointed out that construction activities at various transmission project sites have been severely affected by the nationwide lockdown measures announced since 25th march, 2020 to contain outbreak of COVID-19 and have requested for extension of Scheduled Commercial Operation (SCOD) to mitigate the issues of disruption in supply chains and manpower, caused due to outbreak of COVID-19 pandemic. 2. It has been, therefore, decided that;

i. All inter-state transmission projects, which were under construction as on date of lock-down i.e. 25th March 2020, shall get an extension of five months in respect of SCOD

ii. This order shall not apply to those projects, whose SCOD date was prior to 25th March 2020

iii. Start date of Long Term Access granted to a generator by CTU based on completion of a transmission line, whose SCOD is extended by 5 months due to COVID-19 as mentioned above at point(i), shall also be extended by 5 months."

30. The relevant portion of the MoP's order dated 12.6.2021 is as follows:



"Sub: Extension to TSP/Transmission Licensees for completion of under construction inter-State transmission projects – reg.

Sir,

I am directed to state that transmission utilities have approached this Ministry stating that construction activity at various transmission projects sites have been severely affected by the current second wave of COVID-19 pandemic and various measures taken by State/UT Governments to contain the pandemic; such as night curfew, imposition of section 144, weekend lockdown and complete lockdown. In this regard they have requested for extension of Scheduled Commercial Operation Date (SCOD) for the undergoing Transmission projects to mitigate the issues of disruption in supply chains and manpower, caused due to COVID-19 pandemic.

2. The matter has been examined in the Ministry and it has been noted that unlike last year complete lock-down in the entire country, this time different States/UTs have ordered lock-down in their State/UTs as per their own assessments. Therefore, after due consideration, it has been decided that; i. All inter-state transmission projects, which are under construction with SCOD coming after 01 April 2021 shall get an extension of three (3) months in respect of their SCOD; ii. The commencement date of Long Term Access (LTA) to a generator by CTU based on completion of a transmission line, whose SCOD is extended by three (3) months due to COVID-19 as mentioned above at point(i), shall also be extended by three (3) months.

3. This issue with the approval of Competent Authority."

31. The scheduled COD of the project was 8.3.2021. In terms of the above letters dated 27.7.2020 and 12.6.2021, the COD of the transmission asset has to be extended by 5 months and 3 months, respectively. As per the said letters, the extended COD of the transmission asset was 8.11.2021. However, the transmission asset was put into commercial operation on 30.3.2022. Thus, there is a time over-run of 142 days beyond 8.11.2021.

32. The other reason given by the Petitioner for the time over-run is the nonapproval of shutdown by NRPC. We have gone through the submissions of the Petitioner. The Petitioner has submitted minutes of the various OCC meetings regarding approval of the shutdown and the details of the same is as follows:

	Scheduled outage proposal for May, 2021 to March, 2023-NRPC System								
Sr. No	Line/Equip- ment	From date	From time	To Date	To Time	Basis	Reason	Agency	Approval status
1	400 kV Adani- Dhanoda Ckt-2	3.5.2021	08:00	31.5.2021	18:00	Continu ous	For Erection of series reactor in Adani- Dhanonda CKt-2	ATIL	Rejected
2	400 kV Adani- Dhanoda Ckt-1	1.7.2021	08:00	28.7.2021	20:00	Continu ous	Continuous shutdown required for completion of all Erection activities for Line-1	ATIL	Rejected
3	400 kV Adani- Dhanoda Ckt-1	16.8.2021	08:00	13.9.2021	20:00	Continu ous	Continuous shutdown required for completion of all Erection activities for Line-1	ATIL	Rejected
4	400 kV Adani- Dhanoda Ckt-1	2.9.2021	08:00	30.9.2021	20:00	Continu ous	Shutdown required for Testing and commissioning of Line-1	ATIL	Rejected
5	400 kV Adani- Dhanoda Ckt-1	2.10.2021	08:00	30.10.2021	20:00	Continu ous	Continuous shutdown required for completion of all Erection activities for Line-1	ATIL	Rejected
6	400 kV Adani- Dhanoda Ckt-1	2.11.2021	08:00	30.11.2021	20:00	Continu ous	Continuous shutdown required for completion of all Erection activities for Line-1	ATIL	Approved
7	400 kV Adani- Dhanoda Ckt-2	1.12.2021	08:00	22.12.2021	20:00	Continu ous	Erection &Commissioni ng of 400 kV Mahindergarh(APL)-Dhanoda (HV)(ATIL) CKt-1.	ATIL	Approved
8	400 kV Adani- Dhanoda Ckt-1	24.12.2021	08:00	31.12.2021	20:00	Continu ous	Connection of new equipment with existing 400 kV Mahindergarh (APL)- Dhanoda (HV) (ATIL)Ckt-2	ATIL	Rejected



9	400 kV Adani- Dhanoda Ckt-1	1.2.2022	08:00	15.2.2022	18:00	Continu ous	Continuous shutdown required for Commissionin g and testing Activities of New 12 ohm Series Reactor for 400 kV Mahindergarh (APL)- Dhanoda (HV) (ATIL)Ckt-1	ATIL	Approved
10	400 kV Adani- Dhanoda Ckt-2	16.2.2022	08:00	28.2.2022	18:00	Continu ous	Continuous shutdown required for Commissionin g and testing Activities of New 12 ohm Series Reactor for 400 kV Mahindergarh (APL)- Dhanoda (HV) (ATIL)Ckt-2	ATIL	Approved
11	400 kV Adani- Dhanoda Ckt-2	1.3.2022	08:00	11.3.2022	18:00	Continu ous	Continuous shutdown required for Commissionin g and testing Activities of New 12 ohm Series Reactor for 400 kV Mahindergarh (APL)- Dhanoda (HV) (ATIL)Ckt-2	ATIL	Approved
12	400 kV Adani- Dhanoda Ckt-1	12.3.2022	08:00	22.3.2022	18:00	Continu ous	Continuous shutdown required for Commissionin g and testing Activities of New 12 ohm Series Reactor for o 400 kV Mahindergarh (APL)- Dhanoda (HV) (ATIL)Ckt-1	ATIL	Approved

33. From the above, it is observed that the Petitioner obtained approval for the shutdown in March, 2022. We also went through the 192nd OCC Meeting held on



17.2.2022, wherein the shutdown was approved from 1.3.2022 to 11.3.2022 for 400 kV Mahinderga RH(APL)-Dhanoda (HV) (ATIL) CKT- 2 and from 12.3.2022 to 22.3.2022 for 400 kV Mahinderga RH(APL)-Dhanoda (HV) (ATIL) CKT-1 and finally the transmission asset was put into commercial operation on 30.3.2022. From the table in the paragraph above, it is observed that on a number of occasions, the Petitioner's request for shut down between July 2021 and December 2021 was rejected. We are of the view that the time over-run from 8.11.2021 to 30.3.2022 (142 days) was due to non-approval of the shutdown, and it was beyond the control of the Petitioner. Therefore, the time over-run of 142 days in the case of the transmission asset from 8.11.2021 to 30.3.2022 is, accordingly, condoned.

Interest During Construction (IDC)

34. The Petitioner has claimed an amount of ₹630.28 lakh as IDC for the transmission asset. The Petitioner has submitted an Auditor's Certificate in support of the claim of IDC. The Petitioner has submitted that it has borrowed an amount of ₹29.44 crore from Adani Transmission Limited at an interest rate of 13.25% per annum. The interest payment date is 15 days from the end of the quarter. Accordingly, the Petitioner has claimed the IDC of ₹630.28 lakh considering the interest rate of 13.25% per annum.

35. The Petitioner was directed vide RoP dated 6.6.2023 to furnish the reasons for availing of ICD (Inter-Company Deposit) Loan @13.25% instead of a bank or any other financial institution. In response, the Petitioner has submitted as follows:

"Adani Transmission (India) Limited has availed Long Term Loan in the form of Inter Corporate Deposit (ICD) from Adani Transmission Limited. ATL had infused Fixed rate ICD @ 13.25% in ATIL as a refinancing of existing external Loan. As ATL has already funded ATIL in way of long-term loan and considering nominal additional project cost ATIL has approached ATL to fund project (12 OHM Series Line Reactor) with existing rate of interest rather than securing loan from external market.

Sourcing additional loan from market (bank or any other financial institutions) would cause additional cost in form of processing fees/ Rating agency certification/ upfront fees, which would be time consuming and result in delay of project execution considering timeline to complete the project."

36. We have considered the submissions of the Petitioner. It is observed that the rate of interest claimed by the Petitioner for computing IDC, as well as Interest on Loan (IoL) for the transmission asset, is 13.25%. The Petitioner has availed of an Inter-company Deposit (ICD) from its group company instead of taking a loan from a bank or any other financial institution. The Petitioner, in justification, has submitted that Adani Transmission Limited (ATL) had infused ICD @ 13.25% in the Petitioner's company as a refinancing of an existing external loan. The Petitioner has further submitted that sourcing additional loans from banks or any other financial institutions would cause additional costs in the form of processing fees/ rating agency certification/ upfront fees, which would be time consuming and result in a delay in the execution of the project. Therefore, ATIL has availed ICD from ATL to fund the transmission asset.

37. The Petitioner has claimed an interest rate of 13.25% for claiming IDC as well as IoL. We have perused the financial statements and other documents of Adani Energy Solutions Ltd, formerly known as Adani Transmission Ltd., available in the public domain. It is observed that the average cost of debt for the year 2021-22 is around 9.20%. The Petitioner's claim of a 13.25% rate of interest is much higher than the average cost of debt of Adani Energy Solutions Ltd. Therefore, we are not inclined to allow the Petitioner's claim of 13.25% as the rate of interest.

38. We allow the interest rate of 9.20% on a provisional basis for computing the IDC and IOL of the transmission asset. The Petitioner is directed to submit the details of the weighted average interest rate of its parent company, i.e. Adani Energy Solutions Ltd. for review at the time of truing up. The loan amount details submitted in Form-9C for the 2019-24 tariff period have been considered for the purpose of IDC calculations on a cash and accrued basis. The un-discharged IDC as on COD of the transmission asset has been considered as ACE during the year in which it has been discharged.

39. an The IDC worked out for transmission asset is as follows:

(₹ in lakh)

IDC claimed	IDC admissible	IDC disallowed	IDC discharged as on COD	IDC un-discharged as on COD	
Α	В	C=A-B	D	E=B-D	
630.28	436.89	193.39	370.84	66.04	

40. In view of the above, we have considered the claim of the Petitioner as on COD and adjusted the capital cost as on COD to the extent of computational difference of ₹164.32 lakh. Further, IDC of ₹29.07 lakh is deducted from the ACE of 2022-23. Therefore, the capital cost as on COD considered for the purpose of tariff calculation, including IDC, is as follows:

(₹ in lakh)

Capital cost claimed as on COD	IDC disallowed due to computational difference as on COD	Capital cost allowed as on COD	
Α	В	C=A-B	
4509.21	164.32	4344.89	

Additional Capital Expenditure (ACE)

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



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

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

- (a) Undischarged liabilities recognized to be payable at a future date;
- (b) Works deferred for execution;
- (c) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 23of 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."

42. The Petitioner has claimed ₹597.28 lakh as Additional Capital Expenditure

during the 2022-23 period. The said amount claimed by the Petitioner is proposed to

be discharged during 2022-23, which includes an amount of ₹425.00 lakh against sub-

station equipment and an amount of undischarged IDC.

43. We have considered the submissions of the Petitioner. The ACE claimed by the

Petitioner for 2022-23 towards undischarged liability of ₹597.28 lakh is allowed under

Regulation 24(1)(a) of the 2019 tariff Regulations after reducing the disallowed IDC of

₹ 29.07 lakh. Accordingly, the capital cost of the transmission asset considered for the

2019-24 tariff period, subject to truing up, is as follows:

		(₹ in lakh)
Capital cost allowed as on COD	Additional capitalization allowed from COD to 31.3.2024	Total completion cost up to 31.3.2024
4344.89	568.21	4913.09



Debt-Equity ratio

44. 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."

45. The Petitioner has claimed a Debt-Equity Ratio of 66:34 as per Form-6. We

have considered the debt-equity ratio in accordance with Regulation 18 of the 2019

Tariff Regulations. The details of the debt-equity ratio as on COD and as on 31.3.2024

with respect to the transmission asset are as follows:

Particulars	Capital cost as on COD (₹ in lakh)	(in %)	Capital cost as on 31.3.2024 (₹ in lakh)	(in %)
Debt	3041.42	70.00	3439.17	70.00
Equity	1303.47	30.00	1473.93	30.00
Total	4344.89	100.00	4913.09	100.00

Depreciation

46. 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

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shall be allowed up to maximum of 90% of the capital cost of the asset:

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

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

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

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

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

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

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

(6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 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."

47. The transmission asset was put into commercial operation in 2021-22. Accordingly, it will complete 12 years beyond 2023-24 and thus, depreciation has been calculated annually based on the Straight Line Method and at rates specified in the 2019 Tariff Regulations. Depreciation has been allowed considering the capital expenditure as on COD and approved ACE during the 2019-24 tariff period. The Gross Block during the 2019-24 tariff period has been depreciated at the weighted average rate of depreciation (WAROD). WAROD at Annexure has been worked out considering the depreciation rates of the transmission asset as prescribed in the 2019 Tariff Regulations. Depreciation allowed for the transmission assets for the 2019-24 tariff period is as follows:

				(₹ in lakh)
SI. No.	Particular	2021-22 (pro-rata for 02 days)	2022-23	2023-24
А	Opening Gross Block	4344.89	4344.89	4913.09
В	ACE	0.00	568.21	0.00
С	Closing Gross Block (A+B)	4344.89	4913.09	4913.09
D	Average Gross Block (A+C)/2	4344.89	4628.99	4913.09
Е	Average Gross Block (90% depreciable assets)	4344.89	4628.99	4913.09
F	Average Gross Block (100% depreciable	0.00	0.00	0.00



SI. No.	Particular	2021-22 (pro-rata for 02 days)	2022-23	2023-24
	assets)			
G	Depreciable value (excluding IT equipment and software) (E*90%)	3910.40	4166.09	4421.79
Н	Depreciable value of IT equipment and software (F*100%)	0.00	0.00	0.00
Ι	Total Depreciable Value (G+H)	3910.40	4166.09	4421.79
J	Weighted Average Rate of Depreciation (WAROD) (in %)	5.28	5.28	5.28
к	Lapsed useful life at the beginning of the year (Year)	0	0	1
L	Balance useful life at the beginning of the year (Year)	25	24	23
Μ	Depreciation during the year (D*J)	1.26	244.41	259.41
Ν	Cumulative Depreciation at the end of the year	1.26	245.67	505.08
0	Remaining Aggregate Depreciable Value at the end of the year(I-N)	3909.14	3920.42	3916.71

Interest on Loan (IoL)

48. Regulation 32 of the 2019 Tariff Regulations provides as follows:

"32. Interest on Ioan capital: (1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered as gross normative loan for calculation of interest on loan.

(2) The normative loan outstanding as on 1.4.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.

(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalisation of such asset.

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

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

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

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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."

49. We have already approved 9.20% rate of interest for computation of IDC and IoL. Accordingly, IoL is allowed at the rate of 9.20% interest for the 2019-24 tariff period for the transmission asset.

50. The interest on the loan has been worked out for the transmission asset as follows:

- (i) Gross amount of loan, repayment of instalments and rate of interest on actual loans have been considered as per petition.
- (ii) The yearly repayment for the tariff period 2019-24 has been considered to be equal to the depreciation allowed for that year.
- (iii) The weighted average rate of interest on the actual average loan worked out as per (i) above is applied on the notional average loan during the year to arrive at the interest on the loan.

51. The IoL allowed in respect of the transmission asset for the 2019-24 tariff period are as follows:

SI. No.	Particular	2021-22 (pro-rata for 02 days)	2022-23	2023-24
А	Gross Normative Loan	3041.42	3041.42	3439.17
В	Cumulative Repayments up to Previous Year	0.00	1.26	245.67
С	Net Loan-Opening (A-B)	3041.42	3040.16	3193.50
D	Addition due to ACE	0.00	397.74	0.00
Е	Repayment during the year	1.26	244.41	259.41
F	Net Loan-Closing (C+D-E)	3040.16	3193.50	2934.09
G	Average Loan (A+F)/2	3040.79	3116.83	3063.79
н	Weighted Average Rate of Interest on Loan (in %)	9.20%	9.20%	9.20 %
Ι	Interest on Loan (GxH)	1.53	286.75	281.87

Return on Equity (RoE)

52. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provides 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-ofriver 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*



(**≆** in lakh)

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 ₹ 1,000 crore;
- (b) Estimated Advance Tax for the year on above is ₹ 240 crore;
- (c) Effective Tax Rate for the year 2019-20 = ₹ 240 Crore/₹ 1000 Crore = 24%;
- (d) Rate of return on equity = 15.50/(1-0.24) = 20.395%.

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

53. The Petitioner has submitted that it is liable to pay income tax at the MAT rate

prescribed under the Taxation Laws (Amendment) Ordinance, 2019.

54. We have considered the Petitioner's submissions . The MAT rate applicable in

2019-20 has been considered for the purpose of RoE, which shall be trued up with

actual tax rate in accordance with Regulation 31(3) of the 2019 Tariff Regulations.

55. RoE allowed for the transmission asset under Regulation 30 of the 2019 Tariff

Regulations is as follows:

				(₹ in lakh)
SI. No.	Particular	2021-22 (pro-rata for 02 days)	2022-23	2023-24
А	Opening Equity	1303.47	1303.47	1473.93
В	Additions	0.00	170.46	0.00
С	Closing Equity (A-B)	1303.47	1473.93	1473.93
D	Average Equity (A+B)/2	1303.47	1388.70	1473.93
Е	Return on Equity (Base Rate) (in %)	15.50%	15.50%	15.50%
F	MAT Rate for respective year (in %)	17.472%	17.472%	17.472%
G	Rate of Return on Equity (in %)	18.782%	18.782%	18.782%
Н	Return on Equity (DxG)	1.34	260.83	276.83



Interest on Working Capital (IWC)

56. Regulation 34(1)(c), Regulation 34(3), Regulation 34(4) and Regulation 3(7) of

the 2019 Tariff Regulations specify as follows:

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

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

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

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

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

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

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

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

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

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

57. The rate of IWC considered is 10.50% (SBI 1 year MCLR applicable as on

1.4.2021 of 7.00% plus 350 basis points) for 2021-22 to 2022-23 and 12.00% (SBI 1

year MCLR applicable as on 1.4.2023 of 8.5% plus 350 basis points) for 2023-24. The

components of the working capital and interest allowed thereon for the transmission

asset are as follows:



			(₹ in lakh)
Particular	2021-22 (pro-rata for 02 days)	2022-23	2023-24
Working Capital for O&M Expenses (O&M Expenses for one month)	0.00	0.00	0.00
Working Capital for Maintenance Spares (15% of O&M Expenses)	0.00	0.00	0.00
Working Capital for Receivables (Equivalent to 45 days of annual fixed cost/ annual transmission charges)	94.18	98.92	102.09
Total Working Capital	94.18	98.92	102.09
Rate of Interest for working capital (in %)	10.50%	10.50%	12.00%
Interest of working capital	0.05	10.39	12.25

Annual Fixed Charges for the 2019-24 Tariff Period

58. The transmission charges allowed for the transmission asset for the 2019-24

tariff period are as follows:

			(₹ in lakh)		
Particular	2021-22 (pro-rata for 02 days)	2022-23	2023-24		
Depreciation	1.26	244.41	259.41		
Interest on Loan	1.53	286.75	281.87		
Return on Equity	1.34	260.83	276.83		
Interest on Working Capital	0.05	10.39	12.25		
O & M Expenses	0.00	0.00	0.00		
Total	4.19	802.37	830.36		

Filing Fee and the Publication Expenses

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

Licence Fee & RLDC Fees and Charges

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

61. The Petitioner has prayed to allow it to consider the transmission asset along with the transmission line for the purpose of calculating the "availability". We have considered the Petitioner's prayer. The Commission, in an order dated 3.11.2017 in Petition No. 146/TT/2016 has already specified the methodology for the calculation of incentives in respect of HVAC and HVDC. The same methodology will be adopted in the instant case as well. The relevant portion of the order dated 3.11.2017 in Petition No.146/TT/2016 is extracted hereunder:

62. We have considered the submissions of the Petitioner.

"131. The Commission vide order dated 3.11.2017 In Petition No. 146/TT/2016 has held as under w.r.t. incentive and sharing of transmission charges of the transmission assets:

"Sharing of Transmission Charges

95. The transmission charges determined through this order shall be recovered through POC mechanism in accordance with the Sharing Regulations with effect from 1.10.2013. However, for calculating the incentive and target availability during 2009-14 tariff period, the relevant provision of the 2009 Tariff Regulations in respect of HVAC and HVDC shall be kept in view. Since the tariff of Asset-I has been worked out on consolidated basis the calculation of incentive in respect of HVAC and HVDC shall be in proportion to the capital cost of HVAC and HVDC as allowed in this order."

132. The Petitioner in the instant true up petition has again not submitted separate capital cost of HVAC and HVDC portion of Asset-I. Therefore, the proportion considered



by CTU may be adopted for the calculation of incentive in respect of HVAC and HVDC in proportion to the capital cost of HVAC and HVDC availability."

Sharing of Transmission Charges

63. The billing, collection and disbursement of the transmission charges granted for the transmission asset in this order shall be recovered in terms of the provisions of the 2020 Sharing Regulations as provided in Regulation 57 of the 2019 Tariff Regulations.

64. To summarise, the AFC approved for the transmission asset for the 2019-24 tariff period is as follows:

		(₹ in lakh)
2021-22 (pro-rata for 02 days)	2022-23	2023-24
4.19	802.37	830.36

65. The Annexure to this order form part of the order.

66. This order disposes of Petition No. 13/TT/2023 in terms of the above findings and discussions.

sd/-(P. K. Singh) Member sd/-(Arun Goyal) Member sd/-(Jishnu Barua) Chairperson



<u>Annexure</u>

(₹ in lakh)

2019-24	Admitted Capital Cost as on COD	ACE			Admitted Capital Cost as on 31.3.2024 (₹ in lakh)	Rate of Depreciati on (in %)	Annual Depreciation as per Regulations		as per
Capital		2021-22	2022-23	2023-24			2021-22	2022-23	2023-24
Expenditure as									
on COD									
Sub-Station	4344.89	0.00	568.21	0.00	4913.09	5.28	229.41	244.41	259.41
PLCC	0.00	0.00	0.00	0.00	0.00	6.33	0.00	0.00	0.00
IT Equipment	0.00	0.00	0.00	0.00	0.00	15.00	0.00	0.00	0.00
and software									
Total	4344.89	0.00	568.21	0.00	4913.09		229.41	244.41	259.41
Avg. Gross Block						4466.62	4628.99	4913.09	
WAROD (in %)						5.28	5.28	5.28	