SL. NO. 07 DT. 2026

BEFORE THE HON'BLE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION, LUCKNOW

PETITION NO. 2263 OF 2025

IN THE MATTER OF:

Petition under Regulation 13 read with Regulation 14(B) and other relevant provisions of the Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions of Generation Tariff) Regulations, 2024 and Regulation 15 of the Uttar Pradesh Electricity Regulatory Commission (Conduct of Business) Regulations 2019 for determination of Annual Revenue Requirement and final Generation Tariff for supply of 187 MW Gross Contracted Capacity for the Tariff Period FY 2024-29 from Unit 2 of 2 x 300 MW Coal-based thermal generating station of Dhariwal Infrastructure Limited located at Tadali, Chandrapur in the State of Maharashtra to Noida Power Company Limited read with the Power Purchase Agreement dated 26.09.2014 along with Addendum dated 04.09.2019.

AND

IN THE MATTER OF:

Dhariwal Infrastructure Limited **... PETITIONER**

VERSUS

Noida Power Company Limited **... RESPONDENT**

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NOTARY
KOLKATA
ANINDYA ROY CHOWDHURY
REGN. NO. 55745/2025
Exp. Dt. 28/5/30
GOVT. OF INDIA

Dhariwal Infrastructure Limited
Kolkata

PETITIONER / DHARIWAL INFRASTRUCTURE LIMITED

भारतीय गैर न्यायिक

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NOTARY KOLKATA ANINDYA ROY CHOWDHURY REGN. NO. 55745/2025 Exp. Dt. 28/5/30 GOVT. OF INDIA

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BEFORE THE HON'BLE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION, LUCKNOW

PETITION NO. 2263 OF 2025

IN THE MATTER OF:

Petition under Regulation 13 read with Regulation 14(B) and other relevant provisions of the Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions of Generation Tariff) Regulations, 2024 and Regulation 15 of the Uttar Pradesh Electricity Regulatory Commission (Conduct of Business) Regulations 2019 for determination of Annual Revenue Requirement and final Generation Tariff for supply of 187 MW Gross Contracted Capacity for the Tariff Period FY 2024-29 from Unit 2 of 2 x 300 MW Coal-based thermal generating station of Dhariwal Infrastructure Limited located at Tadali, Chandrapur in the State of Maharashtra to Noida Power Company Limited read with the Power Purchase Agreement dated 26.09.2014 along with Addendum dated 04.09.2019.

AND

IN THE MATTER OF:

Dhariwal Infrastructure Limited
Registered Office: CESC House
Chowringhee Square
Kolkata - 700001
West Bengal

... PETITIONER

Meenakshi Bose
Advocate
CJM Court Calcutta
F841/2023

Signature Attested
on identification of Ld. Advocate

ANINDYA ROY CHOWDHURY
NOTARY GOVT. OF INDIA
Regn. No. 55745/25
CJM Court
2&3 Banksnall Street
Kolkata-700001

ANINDYA ROY CHOWDHURY
NOTARY GOVT. OF INDIA
REGN. NO. 55745/25
CJM Court Kolkata, W.B.

09 MAR 2026

Dhariwal Infrastructure Limited Kolkata

No. 98252
Name.............
Address.............
....
Rs.............
P. S. CHOWDHURY
Ayakar Bhawan
P-7, Chowringhee Square
Kolkata - 69
No. ....Licensee Stamp Vendor

DHARIWAL INFRASTRUCTURE LTD.
CESC HOUSE
CHOWRINGHEE SQUARE
KOLKATA-700 001

26 FEB 2019

NOTARY
KOLKATA
ANINDYA ROY CHOWDHURY
REGN. NO. 55745/2025
Exp. Dt. 28/5/30
GOVT. OF INDIA

VERSUS

Noida Power Company Limited
Electric Sub-station,
Knowledge Park - IV,
Greater Noida, Gautam Buddha Nagar,
Uttar Pradesh – 201310 **... RESPONDENT**

ADDITIONAL AFFIDAVIT ON BEHALF OF THE PETITIONER/DHARIWAL INFRASTRUCTURE LIMITED IN COMPLIANCE WITH THE ORDER DATED 06.02.2026 ISSUED BY THIS HON'BLE COMMISSION

I, Avijit Chakravorty, son of Late Dulal Chakraborty, aged about 52 years, residing at Flat 2C, Block – 6, Merlin Emerald, 183 Biren Roy Road (West), Kolkata – 700061, do hereby solemnly affirm and state as under:

1. That I am the Company Secretary of the Petitioner, Dhariwal Infrastructure Limited ("**Petitioner**" / "**DIL**") in the instant matter, having registered office at CESC House, Chowringhee Square, Kolkata - 700 001, and am duly authorized vide the Power of Attorney dated 12.11.2024 and competent to make this Affidavit.

2. That I have read and understood the contents of the present Affidavit, which has been drafted under my instructions based on the information/documents available with the Petitioner in the normal course of business and I state that the contents of the same are true and correct.

3. That the present Affidavit is being filed by the Petitioner in compliance with the directions of this Hon'ble Commission in its Order dated 06.02.2026 in the instant Petition No. 2263 of 2025 ("**MYT Petition**"), to place on record the subsequent developments regarding the approved capital cost of the De-NOx system, as detailed in the succeeding paragraphs.

A. BRIEF BACKGROUND:

4. On 22.07.2025, the MYT Petition was filed by the Petitioner for determination of Annual Revenue Requirement ("**ARR**") and Generation Tariff for supply of power to the Respondent, Noida Power Company Limited ("**NPCL**") for the Tariff Period FY 2024-25 to FY 2028-29, in accordance with the Uttar Pradesh Electricity Regulatory

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Kolkata

Commission (Terms and Conditions of Generation Tariff) Regulation, 2024 ("**Generation Tariff Regulations 2024**").

5. The Petitioner had in the MYT Petition filed before this Hon'ble Commission *inter-alia:*

   (i) submitted that the approval of the capital cost of the De-NOx system and the auxiliaries for Unit 2 of the 2 × 300 MW coal-based thermal generating station of the Petitioner located at Tadali, Chandrapur ("**Project**") is pending adjudication before this Hon'ble Commission vide Petition No. 2130 of 2024; and

   (ii) prayed for approval of Supplementary Capacity Charges on account of the De-NO_X System and its Auxiliaries installed in Unit 2, supported by relevant computations, based on the final Capital Cost of the De-NO_X System as submitted before this Hon'ble Commission in Petition No. 2130 of 2024 for approval of the Capital Cost.

6. Notably, Petition No. 2130 of 2024 was filed by the Petitioner on 03.09.2024 seeking an approval of the Additional Capital Expenditure incurred on account of installation of De-NO_X System for Unit 2 necessitated by a 'Change in Law' event, i.e. Environment (Protection) Amendment Rules, 2015 dated 07.12.2015, Environment (Protection) Amendment Rules, 2018 dated 28.06.2018, Environment (Protection) Amendment Rules, 2020, and Environment (Protection) Amendment Rules, 2021 and Environment (Protection) Amendment Rules, 2022 (hereinafter collectively referred to as "**Environment Amendment Rules**") issued by the Ministry of Environment, Forest and Climate Change ("**MoEFCC**") read with the letter dated 01.10.2021 issued by Maharashtra Pollution Control Board ("**MPCB**") and the approval of the incremental tariff on account of the above.

7. Further, on 27.06.2024, the Petitioner had filed a separate Petition bearing No. 263/MP/2024 before the Hon'ble Central Electricity Regulatory Commission ("**Hon'ble CERC**") for the approval of Capital Cost and determination of Supplementary Tariff for the De-NO_X system and its Auxiliaries installed in Unit 2 for supply of 100 MW net Contracted Capacity to Tamil Nadu Power Distribution Corporation Limited ("**TNPDCL**") [erstwhile Tamil Nadu Generation and Distribution Corporation Limited or "**TANGEDCO**"].

8. Pending the disposal of the above Petition No. 2130 of 2024 and Petition No. 263/MP/2024 by this Hon'ble Commission and Hon'ble CERC respectively, the Petitioner had in the MYT Petition claimed the Supplementary Capacity Charges

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based on the proposed Capital Cost of **Rs. 13.46 Crores** on account of installation of the De-NO_X System and its Auxiliaries, for FY 2024-25 to FY 2028-29. The De-NO_x System in Unit 2 of the Project was commissioned on 30.11.2023.

9. Further, on 16.08.2025, the Hon'ble CERC passed its final Order in Petition No. 263/MP/2024 wherein it has *inter-alia* approved the Final Capital Cost of **Rs. 12.64 Crores** towards the installation of De-NO_X system and its Auxiliaries in Unit 2 as shown in the following table:

TABLE 1: FINAL CAPITAL COST OF DE-NO_X SYSTEM AND THE AUXILIARIES AS APPROVED BY THE HON'BLE CERC IN PETITION NO. 263/MP/2024

DIL Unit 2 - Break-up of Capital Cost of the De-NO_x System (as approved by Hon'ble CERC)			
Particulars	Annotation	Unit 2	
		₹ Crores	₹ Crores/MW
Hard Capital Cost			
Equipment & Material supply	A	5.70	0.019
Initial Spares	B	0.28	0.001
Total Hard Capital Cost of De-NO_x System	**C = sum(A:B)**	**5.98**	**0.020**
Soft Capital Cost			
Cost for Dismantling, Removal, Installation, Erection, Commissioning, PG Test and Reliability Run Test - **Service Cost**	D	6.56	0.022
Engineering and Project Management cost	E	0.05	0.000
Total Base Capital Cost of De-NO_x System	**F = sum(C,D,E)**	**12.59**	**0.042**
Insurance	G	0.01	0.000
Incidental Expenses during Construction	H	0.04	0.000
Total Soft Capital Cost of De-NO_x System	**J = sum(D,E,G,H)**	**6.66**	**0.022**
Total Capital Cost of De-NO_x System	**K = C+J**	**12.64**	**0.042**

10. In this regard, the relevant excerpts from the Order dated 16.08.2025 passed by the Hon'ble CERC in Petition No. 263/MP/2024 are reproduced hereinbelow for ease of reference of this Hon'ble Commission:

> *"30. The summary of the Commission's decision is as follows:*
>
> *a) The final capital cost of ₹ 13.37 crore for the installation of the De-NO_X system and auxiliaries in Unit-2 is approved, subject to a downward adjustment of ₹ 0.73 crore towards the gross asset value of dismantled equipment.* ***Accordingly, the net admissible capital cost for compensation under the 'Change in Law' provision is ₹ 12.64 crore...."***

[Emphasis Supplied]

A copy of Order dated 16.08.2025 passed by Hon'ble CERC in Petition No. 263/MP/2024 is annexed herewith and marked as ***Annexure A-1.***

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11. This Hon'ble Commission had thereafter passed its final Order in Petition No. 2130 of 2024 on 20.08.2025 wherein it had inter alia:

(i) held that it will carry out the truing-up exercise taking into account the Capital Cost of the De-NO_X System approved by the Hon'ble CERC in Petition No. 263/MP/2024; and

(ii) directed the Petitioner to file an Additional Affidavit in DIL Truing-up Petition for FY 2019-20 to FY 2023-24 with the computation of the tariff impact of the proportionate cost for De-NO_X System allocated to the Contracted Capacity with NPCL, as per the final Capital Cost approved by the Hon'ble CERC.

12. In this regard, the relevant excerpts from the Order dated 20.08.2025 passed by this Hon'ble Commission in Petition No. 2130 of 2024 are reproduced hereinbelow for ease of reference of this Hon'ble Commission:

> *"31. The Petitioner has capitalized ₹ 12.22 Crores in FY 2023-24 out of the total Capital Cost of ₹ 13.46 Crores and the balance ₹ 1.24 Crores was carried forward to FY 2024-25 as undischarged liabilities to be capitalized within Q2 FY 2024-25. The Petitioner has discharged the liabilities in Q2 FY 2024-25. Petitioner has submitted a copy of the Auditors' Certificate certifying the actual cash expenditure towards the De-NO_X system and the Auxiliaries in Q2 of FY 2024-25.*
>
> *32. The Commission has noted that CERC has reserved its order on 28.04.2025 in the matter related to the approval of final capital cost for the De-NO_X system in Unit (2) corresponding to power supplied to TNPDCL, as informed by the counsel for the Petitioner during the hearing held on 22.07.2025. The Petitioner has filed a True-up Petition for the period 2019-24 before the Commission.*
>
> ***33. Therefore, in view of above, the Commission has decided to carry out truing-up exercise taking into account CERC approved cost of the De-NO_X System under applicable provisions for additional capitalization during FY 2023-24, in terms of UPERC Generation Tariff Regulations, 2019. Further, the petitioner is directed to file an additional affidavit along with the tariff impact of the proportionate cost for the De-NO_X system allocated to NPCL as per CERC order, as and when it is issued."***

[Emphasis Supplied]

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A copy of Order dated 20.08.2025 passed by this Hon'ble Commission in Petition No. 2130 of 2024 is annexed herewith and marked as ***Annexure A-2.***

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B. DEVELOPMENTS LEADING TO SUBMISSION OF THIS ADDITIONAL AFFIDAVIT:

13. In compliance with the above directions of this Hon'ble Commission in the Order dated 20.08.2025 in Petition No. 2130 of 2024, the Petitioner had filed an Additional Affidavit dated 09.09.2025 in Petition No. 2150 of 2024, i.e., Truing-up Petition of the Petitioner for FY 2019-24 before this Hon'ble Commission, to place on record the computation of incremental tariff in FY 2023-24 on account of the installation of De-NO_X System and its Auxiliaries in Unit 2 of the Petitioner's Project as per the final Capital Cost approved by the Hon'ble CERC vide its Order dated 16.08.2025.

14. As detailed above, in terms of the provisions of the Generation Tariff Regulations 2024, the Petitioner had vide the instant MYT Petition, submitted the Supplementary Capacity Charges for the Tariff Period FY 2024-25 to FY 2028-29, based on the proposed Capital Cost of the De-NO_X System and its Auxiliaries, i.e., **Rs. 13.46 Crores**, since the decision on the final Capital Cost for the De-NO_X System and the Auxiliaries in Unit 2 was pending before this Hon'ble Commission at the time of filing the instant MYT Petition.

15. It is imperative for the decision of this Hon'ble Commission in its Order dated 20.08.2025 for truing-up of the Supplementary Capacity Charges for FY 2023-24 for the De-NO_X System based on the approved Capital Cost, to apply *mutatis mutandis* for all the subsequent years also.

16. The present MYT Petition was scheduled for hearing on 22.01.2026 wherein the Petitioner has sought leave of this Hon'ble Commission to file revised computation of its claim of Supplementary Capacity Charges on account of installation of De-NO_X System and Auxiliaries in Unit 2 of its Project based on the approved final Capital Cost of **Rs. 12.64 Crores**. This Hon'ble Commission has vide its Order dated 06.02.2026 allowed the Petitioner to submit the same within 10 (ten) days.

17. In compliance with the Order dated 06.02.2026, the Petitioner is filing the present Additional Affidavit to place on record the revised computation of Supplementary Capacity Charges on account of installation of De-NO_X System and the Auxiliaries in Unit 2 of the Project.

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C. PHASING OF THE CAPITAL EXPENDITURE FOR THE DE-NO_X SYSTEM OF UNIT 2 OF THE PROJECT:

18. The break-up of the final Capital Cost of Rs. 12.64 Crores as approved by the Hon'ble CERC and admitted by this Hon'ble Commission towards supply, erection and commissioning of the De-NO_X System along with its Auxiliaries in Unit 2, has been demonstrated in **Table 1** above.

19. Notably, the De-NO_X System was commissioned on 30.11.2023 i.e., the Date of Operation ("**ODe**") of the De-NO_X System in Unit 2. However, actual cash expenditure as on OD_e was Rs. 6.84 Crores. Thereafter, the undischarged liabilities have been discharged in a phased manner. The phasing of actual cash capital expenditure for the De-NO_X System is shown in the following Table.

TABLE 2:REVISED PHASING OF CASH EXPENDITURE FOR THE DE-NO_X SYSTEM OF UNIT 2

Revised Capital Cost of De-NO_x system - DIL Unit 2						
Asset Class	UoM	Capital Expenditure on Cash Basis as on OD_e*	Liabilities discharged during Q3 of FY 2023-24 post OD_e	Liabilities discharged during Q4 of FY 2023-24	Liabilities discharged in Q1 of FY 2024-25	Liabilities discharged in Q2 of FY 2024-25
		30-11-2023	FY 2023-24		FY 2024-25	
Plant & Machinery	₹ Crores	6.84	1.60	2.71	0.25	1.24
Total	**₹ Crores**	**6.84**	**1.60**	**2.71**	**0.25**	**1.24**

**The approved Capital Cost is ₹ 12.64 Crores due to installation of De-NO_x System and its Auxiliaries as on Date of Operation (OD_e) on accrual basis.*

D. REVISED FINANCING STRUCTURE OF ADDITIONAL CAPITALIZATION:

20. In compliance with Regulation 23 of the Generation Tariff Regulations 2024, the Petitioner has considered normative Debt-Equity ratio of 70:30 for computation of Supplementary Capacity Charges. The following Table shows the Normative Debt and Equity components considered for the De-NO_X System and its Auxiliaries installed in Unit 2 of the Project.

TABLE 3: DIL UNIT 2 – REVISED FINANCING STRUCTURE OF CAPITAL COST OF DE-NO_X SYSTEM

Revised Financing Structure of Capital Cost for De-NO_x system - DIL Unit 2					
Particulars	Norm	Capital Expenditure on Cash Basis as on ODe	Liabilities discharged during Q3 and Q4 of FY 2023-24 post OD_e	Liabilities discharged in Q1 of FY 2024-25	Liabilities discharged in Q2 of FY 2024-25
		30-11-2023	FY 2023-24	FY 2024-25	
Debt Component	70%	4.79	3.02	0.17	0.87
Equity Component	30%	2.05	1.29	0.07	0.37
Total	**100%**	**6.84**	**4.31**	**0.25**	**1.24**

E. COMPUTATION OF REVISED SUPPLEMENTARY CAPACITY CHARGES FOR DE-NO_X SYSTEM FOR FY 2024-29:

E-1. Depreciation:

21. It is submitted that though the ODe of the De-NO_X System of the Petitioner was 30.11.2023, for the purpose of computation of Depreciation, Regulation 21(9)(e) of the Generation Tariff Regulations 2024 has been complied with for reckoning the eligible value of the asset base as per the actual phasing of capital expenditure on cash basis as mentioned in the foregoing paragraphs.

22. As per Regulation 25(3)(c) of the Generation Tariff Regulations 2024, Depreciation Schedule of De-NO_X System and the Auxiliaries of Unit 2 has been computed as per Straight Line Method. It is further submitted that since capital expenditure on cash basis for undischarged liabilities has been incurred in a phased manner in both Q1 and Q2 during FY 2024-25, Depreciation has been computed considering the mid-point value of the respective quarters, up to the end of FY 2024-25. The rate of Depreciation has been considered as per Appendix III of the Generation Tariff Regulations 2024. Accordingly, the Depreciation on account of the revised Additional Capitalization of the De-NO_X System and the Auxiliaries is shown in the following table.

TABLE 4: DIL UNIT 2 – REVISED DEPRECIATION FOR DE-NO_X SYSTEM FOR FY 2024-29

Revised Depreciation on Capital Cost for De-NO_x system - DIL Unit 2								
Year	**Asset Class**	**Capital Cost**	**Depreciation Rates (%)**	**Depreciation**				
				FY 2024-25	**FY 2025-26**	**FY 2026-27**	**FY 2027-28**	**FY 2028-29**
Depreciation on Capital Cost of De-NOx System and the Auxiliaries	Plant & Machinery	6.84	5.83%	0.40	0.40	0.40	0.40	0.40
	Plant & Machinery	4.31	5.83%	0.25	0.25	0.25	0.25	0.25
	Plant & Machinery	0.25	5.83%	0.01	0.01	0.01	0.01	0.01
	Plant & Machinery	1.24	5.83%	0.05	0.07	0.07	0.07	0.07
Depreciation on De-NOx System for Unit 2		**12.64**	**₹ Crores**	**0.71**	**0.74**	**0.74**	**0.74**	**0.74**

E-2. Interest on Loan Capital:

23. The Petitioner has considered 70% of the capital deployed for installation of De-NO_X System and its Auxiliaries in Unit 2 of its Project as normative loan. Accordingly, the Petitioner has in terms of Regulation 25(3)(b) of the Generation Tariff Regulations 2024, computed the revised interest on such normative loan for the Tariff Period FY 2024-29 by considering revised Depreciation as the deemed repayment of principal amount of long-term loan and the rate of interest as the weighted average rate of actual interest on outstanding long-term loans of the Petitioner for FY 2024-25 which

works out to 9.37%. The computation of the revised Interest on Loan for the De-NO_x System of Unit 2 of the Project is shown in the following table.

TABLE 5: DIL UNIT 2 - REVISED INTEREST ON LOAN CAPITAL FOR DE-NO_x SYSTEM FOR FY 2024-29

Revised Interest on Loan for De-NO_x System - DIL Unit 2						
Particulars	**UoM**	**FY 2024-25**	**FY 2025-26**	**FY 2026-27**	**FY 2027-28**	**FY 2028-29**
Loan Balance Movement						
Gross Opening Balance of Loan	₹ Crores	7.81	8.85	8.85	8.85	8.85
Cumulative Repayment of Loan upto previous year	₹ Crores	0.18	0.88	1.62	2.36	3.09
Net Opening Balance of Loan	₹ Crores	7.63	7.96	7.23	6.49	5.75
Additions (=70% of Additional Capitalization) during the year	₹ Crores	1.04	-	-	-	-
Normative Repayment during the year	₹ Crores	0.71	0.74	0.74	0.74	0.74
Closing Balance of Loan	₹ Crores	7.96	7.23	6.49	5.75	5.02
Average Loan for the year	₹ Crores	7.80	7.60	6.86	6.12	5.38
Computation of Interest on Loan						
No of days De-NO_x in service from OD_e	Days	365	365	365	366	365
No of days in a year	Days	365	365	365	366	365
Applicable Weighted Average Rate of Interest on Loan	%	9.37%	9.37%	9.37%	9.37%	9.37%
Interest on Loan for De-NOx System of Unit 2	**₹ Crores**	**0.73**	**0.71**	**0.64**	**0.57**	**0.50**

E-3. Return on Equity:

24. The Return on Equity ("**RoE**") on account of De-NO_x System of Unit 2 of the Project for the Tariff Period FY 2024-29 has been computed as per first proviso to Regulation 25(3)(a) of the Generation Tariff Regulations 2024, i.e., at base rate of one-year SBI MCLR + 350 basis point as on 1st April of the respective financial year (subject to ceiling of 14%) as shown in the following Table. Since the actual SBI MCLR for the FY 2026-27 through FY 2028-29 is not known at present, the RoE for these years have been computed considering the SBI MCLR as on 01.04.2025 subject to truing-up at the end of the Tariff Period.

TABLE 6: DIL UNIT 2 – REVISED RETURN OF EQUITY FOR DE-NO_x SYSTEM FOR FY 2024-29

Revised Return on Equity for De-NO_x system - DIL Unit 2						
Particulars	**UoM**	**FY 2024-25**	**FY 2025-26**	**FY 2026-27**	**FY 2027-28**	**FY 2028-29**
Opening Equity at the beginning of the year	₹ Crores	3.35	3.79	3.79	3.79	3.79
Equity Addition (=30% of Additional Capitalization)	₹ Crores	0.45	0.00	0.00	0.00	0.00
Closing Equity at the end of the year	₹ Crores	3.79	3.79	3.79	3.79	3.79
Average Equity for the year	₹ Crores	3.57	3.79	3.79	3.79	3.79
Rate of Return on Equity	%	12.15%	12.50%	12.50%	12.50%	12.50%
Return on Equity for De-NOx System for Unit 2	**₹ Crores**	**0.43**	**0.47**	**0.47**	**0.47**	**0.47**

Dhariwal Infrastructure Limited Kolkata

E-4. Operation & Maintenance (O&M) Expenses:

25. In line with the Regulation 25(3)(d)(viii) of the Generation Tariff Regulations 2024, the revised normative O&M Expenses for De-NO_X System and its Auxiliaries in Unit 2 for the Tariff Period FY 2024-29 has been computed and shown in the following table:

TABLE 7: DIL UNIT 2 - REVISED O&M EXPENSES DUE TO DE-NO_X SYSTEM FOR FY 2024-29

Revised O&M Expenses for De-NO_x system - DIL Unit 2							
Particulars	**UoM**	**As on OD_e**	**FY 2024-25**	**FY 2025-26**	**FY 2026-27**	**FY 2027-28**	**FY 2028-29**
Admitted Capital Expenditure of De-NO_x System (excluding IDC and IEDC)	₹ Crores	12.60					
Annual Fixed O&M Expenses as % of Capital Cost	%	2%					
Escalation allowed Y-o-Y as per Generation Tariff Regulations 2024	%		5.25%	5.25%	5.25%	5.25%	5.25%
O&M Expenses for De-NO_x System of Unit 2	**₹ Crores**		**0.27**	**0.28**	**0.29**	**0.31**	**0.33**

E-5. Interest on Working Capital:

26. In terms of Regulation 25(3)(e)(iii) of the Generation Tariff Regulations 2024, the components of O&M Expenses, Receivables and Maintenance Spares have been considered for the computation of Working Capital for FY 2024-29. Further, as specified in the Regulations, the rate of Interest on Working Capital has been considered at Bank Rate (i.e., SBI MCLR + 350 basis points) as on 1st April of the respective financial year as shown in the following Table. Since the actual SBI MCLR for FY 2026-27 to FY 2028-29 is not known at present, the rate of Interest on Working Capital for these years have been computed considering the SBI MCLR as on 01.04.2025, subject to truing-up at the end of the Tariff Period. Accordingly, the revised Interest on Working Capital for the Tariff Period FY 2024-29 due to installation of De-NO_X System is shown in the following table:

TABLE 8: DIL UNIT 2 – REVISED INTEREST ON WORKING CAPITAL FOR DE-NO_X SYSTEM FOR FY 2024-29

Revised Interest on Working Capital for De-NO_x System - DIL Unit 2						
Particulars	**UoM**	**FY 2024-25**	**FY 2025-26**	**FY 2026-27**	**FY 2027-28**	**FY 2028-29**
Elements of Working Capital						
Working Capital as O&M Expenses for 1 month	₹ Crores	0.02	0.02	0.02	0.03	0.03
Working Capital as Receivables for 45 days	₹ Crores	0.27	0.28	0.27	0.26	0.26
Working Capital as Maintenance Spares (as 20% of O&M Expenses)	₹ Crores	0.05	0.06	0.06	0.06	0.07
Total Working Capital	**₹ Crores**	**0.34**	**0.36**	**0.35**	**0.35**	**0.35**
Applicable Rate of Interest (Bank Rate as on 1st April of the Year = SBI MCLR + 3.5%)	%	12.15%	12.50%	12.50%	12.50%	12.50%
Interest on Working Capital for De-NO_x System of Unit 2	**₹ Crores**	**0.04**	**0.04**	**0.04**	**0.04**	**0.04**

F. SUPPLEMENTARY CAPACITY CHARGES:

27. The revised Supplementary Capacity Charges due to installation of De-NO_X system and its Auxiliaries in DIL Unit 2 for FY 2024-29 have been (i) computed based on the above-mentioned components of it as stipulated in the Generation Tariff Regulations 2024; and (ii) duly apportioned to the 187 MW Gross Contracted Capacity for supply to the Respondent. The summary of revised Supplementary Capacity Charges due to installation of De-NO_X system and its Auxiliaries in DIL Unit 2 is shown in the following table.

TABLE 9: DIL UNIT 2 – REVISED SUPPLEMENTARY CAPACITY CHARGES DUE TO DE-NO_X SYSTEM FOR FY 2024-29

Summary of Revised Supplementary Capacity Charges on account of De-NO_x System for supply to NPCL during FY 2024-29 - DIL Unit 2						
Particulars	**UoM**	**FY 2024-25**	**FY 2025-26**	**FY 2026-27**	**FY 2027-28**	**FY 2028-29**
Depreciation	₹ Crores	0.71	0.74	0.74	0.74	0.74
Interest on Loan	₹ Crores	0.73	0.71	0.64	0.57	0.50
Return on Equity	₹ Crores	0.43	0.47	0.47	0.47	0.47
Normative O&M Expenses	₹ Crores	0.27	0.28	0.29	0.31	0.33
Interest on Working Capital	₹ Crores	0.04	0.04	0.04	0.04	0.04
Total Suplementary Capacity Charges - Unit 2	**₹ Crores**	**2.18**	**2.25**	**2.19**	**2.14**	**2.08**
Installed Capapcity of Unit 2	MW	300	300	300	300	300
Gross Contracted Capacity	MW	187	187	187	187	187
Supplementary Capacity Charges for supply to NPCL	**₹ Crores**	**1.36**	**1.40**	**1.37**	**1.33**	**1.30**

G. REVISED ANNUAL REVENUE REQUIREMENT:

28. In view of the foregoing, the revised ARR and Generation Tariff of Unit 2 of the Project to the extent of Contracted Capacity for the Tariff Period FY 2024-29 has been tabulated below:

TABLE 10: DIL UNIT 2 - REVISED ARR AND GENERATION TARIFF FOR FY 2024-29

Revised Annual Revenue Requirement for supply of power to NPCL for FY 2024-29 - DIL Unit 2						
Particulars	**UoM**	**FY 2024-25**	**FY 2025-26**	**FY 2026-27**	**FY 2027-28**	**FY 2028-29**
Gross Contracted Capacity	MW	187	187	187	187	187
Normative Auxiliary Power Consumption	%	8.50%	8.50%	8.50%	8.50%	8.50%
Normative Annual Plant Availability Factor (NAPAF)	%	85.00%	85.00%	85.00%	85.00%	85.00%
Net Contracted Capacity	MW	171	171	171	171	171
Ex-bus Generation	MUs	1274.05	1274.05	1274.05	1277.54	1274.05
Annual Fixed Charges for Contracted Capacity with NPCL	**₹ Crores**	**223.21**	**220.13**	**217.47**	**172.56**	**175.98**
Supplementary Capacity Charges for Contracted Capacity with NPCL	**₹ Crores**	**1.36**	**1.40**	**1.37**	**1.33**	**1.30**
Energy Charges as per UPERC Generation Tariff Regulations 2024	**₹ Crores**	**375.74**	**375.74**	**375.74**	**376.77**	**375.74**
Ex-bus Energy Charge Rate at Scheduled Generation	**₹/kWh**	**2.949**	**2.949**	**2.949**	**2.949**	**2.949**
Application Fees & Statutory Charges	₹ Crores	0.73	0.84	0.79	0.83	0.87
Total Annual Revenue Requirement for FY 2024-29 for supply to NPCL	**₹ Crores**	**601.04**	**598.12**	**595.36**	**551.49**	**553.90**

29. That in view of the aforesaid facts and circumstances, the Petitioner most respectfully prays that this Hon'ble Commission may be pleased to (i) take the present Affidavit on record; (ii) approve the revised Supplementary Capacity Charges for FY 2024-29 on account of installation of the De-NO_x System and the Auxiliaries in Unit 2 of its Project for supply of power to the Respondent, as proposed under Table 9 above; (iii) approve the revised ARR and Generation Tariff for Unit 2 for the Tariff Period FY 2024-29 as proposed under Table 10 above; and (iv) pass such further Order(s) as it may deem fit.

VERIFICATION

Verified at Kolkata on this 9th day of March, 2026 that the contents of the aforesaid Affidavit are true and correct to my knowledge and no part of it is false and nothing has been concealed therefrom.

Place: Kolkata

Date: 09.03.2026

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Annexure A-1: Copy of the Order dated 16.08.2025 passed by Hon'ble Central Electricity Regulatory Commission in Petition No. 263/MP/2024

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CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 263/MP/2024

Coram:
Shri Jishnu Barua, Chairperson
Shri Ramesh Babu V., Member
Shri Harish Dudani, Member
Shri Ravinder Singh Dhillon, Member

Date of Order: 16th August, 2025

In the matter of:

Petition under Section 79(1)(b) of the Electricity Act, 2003 read with Article 10 of the Case-1 long-term Power Purchase Agreement dated 27.11.2013 along with Addendum No. 1 dated 20.12.2013, as well as the Order of this Commission dated 13.08.2021 in Petition No. 06/SM/2021 and Order dated 08.01.2024 in Petition No. 261/MP/2022, seeking approval of the final Capital Cost of the De-NO_x System and the Auxiliaries and determination of the Supplementary Tariff on account of the same.

And
In the matter of:

Dhariwal Infrastructure Limited,
Registered Office: CESC House,
Chowringhee Square,
Kolkata-700001, West Bengal. **...Petitioner**

Vs.

Tamil Nadu Generation and Distribution Corporation Limited,
6th Floor, Eastern Wing, 144, Anna
Salai, Chennai-600002.

...Respondent

For Petitioner	:	Ms. Divya Chaturvedi, Advocate, DIL Ms. Srishti Rai, Advocate, DIL Ms. Rikit Shahi, Advocate, DIL Shri Shubhayu Sanyal, DIL
For Respondents	:	Ms. Anusha Nagrajan, Advocate, TANGEDCO Ms. Akanksha Bhola, Advocate, TANGEDCO

ORDER

Dhariwal Infrastructure Limited (DIL) has filed the instant Petition under Section 79(1)(b) of the Electricity Act, 2003 (in short' the Act') read with Article 10 of the Case-1

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long-term Power Purchase Agreement (UPPA) dated 27.11.2013 along with Addendum No. 1 dated 20.12.2013 (hereinafter collectively referred to as the TANGEDCO PPA) entered into between the Petitioner and the Respondent, Tamil Nadu Generation and Distribution Corporation Limited (Respondent/TANGEDCO), as well as the Order of this Commission dated 13.8.2021 in Petition No. 06/SM/2021 and the Order dated 8.1.2024 in Petition No. 261/MP/2022 for an approval of the additional Capital Expenditure incurred by the Petitioner on account of installation of NOx Abatement (De-NOx) system and determination of the Supplementary Tariff for recovery of the compensation from the Respondent in line with the mechanism as stipulated by this Commission in its afore-mentioned Order dated 13.8.2021.

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

"*Admit the present petition:*

a. Approve the Capital Cost of ₹ 13.46 Crores for installation of the Combustion Modification process including modification of existing burners to Low-NO_x design, adoption of new Separated Over Fire Air system with its nozzles, dampers and actuators and Low Excess Air Firing for 300 MW Unit 2 of the Generating Station for meeting the revised emission norms in respect of NO_x as per the Amendment Rules;

b. Approve the proposed Compensation/Supplementary Tariff for the supply of 100 MW power to the Respondent/TANGEDCO based on the approved Capital Cost in terms of the prescribed norms under the Order dated 13.08.2021 for the De-NO_x system installed in Unit 2 of the Project;

c. Allow the Petitioner to recover the Carrying Cost on the revenue gap accrued on account of the lag in realization of Supplementary Tariff from the OD_e till the date of issuance of final Order by this Commission;

d. Allow the Petitioner to raise Supplementary Energy Bills for recovery of compensation/Supplementary Tariff as determined by this Commission;

e. Direct the Respondent to make payments towards the Supplementary Energy Bills to be raised subsequently for recovery of compensation/Supplementary Tariff as determined by this Hon'ble Commission *towards installation of De-NO_x system in Unit 2 of the Project for supply of 100 MW Net Contracted Capacity to the Respondent, as per the Order dated 13.08.2021 passed by this Commission;*

f. Condone any inadvertent omission/errors/shortcomings and permit the Petitioner to add/change/modify/alter the present pleading/petition and may also grant leave to the Petitioner to make appropriate submissions at any future date with respect to the present proceedings; and

g. Pass such other/further order(s) as this Commission may deem fit in the present facts and circumstances."

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Background

3. Background of the instant Petition is as follows:

a) The Petitioner, Dhariwal Infrastructure Limited (DIL), is a generating company within the meaning of Section 2(28) of the Act, operating a 2×300 MW coal-based thermal power plant at Tadali, Chandrapur, Maharashtra. The Respondent, Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO), is a distribution licensee under Section 2(17) of the Act.

b) The Petitioner and the Respondent entered into a Power Purchase Agreement (TANGEDCO PPA) dated 27.11.2013 (along with Addendum No. 1 dated 20.12.2013) for the supply of 100 MW Net Contracted Capacity from Unit 2 of the Petitioner's generating station.

(c) On 30.11.2021, the Petitioner filed Petition No. 261/MP/2022 before this Commission seeking in-principle approval for additional capital expenditure required for the installation of a De-NOx system in Unit 2, mandated due to a 'Change in Law' arising from the MoEFCC's Environment (Protection) Amendment Rules issued from 2015 to 2022, read with the directive of the Maharashtra Pollution Control Board (MPCB) dated 01.10.2021; and liberty to approach the Commission later for the

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determination of compensation/supplementary tariff based on actual capital cost incurred.

c) The said 'Change in Law' event occurred after the cut-of date of 27.02.2013 as stipulated in the PPA, necessitating capital investment for continued supply under the contract. Vide Order dated 08.01.2024, the Commission disposed of Petition No. 261/MP/2022 as under:

i. Recognized the promulgation of the Amendment Rules (2015 to 2022) and the MPCB letter dated 01.10.2021 as a 'Change in Law' under Article 10 of the TANGEDCO PPA;
ii. Granted in-principle approval for the Petitioner's proposed installation of the De-NOx system in Unit 2, including combustion modifications, as approved by CEA;
iii. Approved provisionally a base capital cost of ₹12.14 crores, subject to submission of actual NOx emission levels from the past three years;
iv. Held that the Petitioner had followed a transparent bidding process, with GEPIL being selected as the qualified contractor for the installation; and
v. Granted liberty to the Petitioner to file a separate Petition after actual installation, for the determination of compensation/supplementary tariff based on actual capital cost incurred.

d) In line with the above directions, the Petitioner has now installed the De-NOx system and incurred the necessary capital expenditure. Accordingly, the Petitioner has approached this Commission for the determination of compensation and approval of supplementary tariff arising out of the said 'Change in Law'.

Submissions of the Petitioner

4. The Petitioner has mainly submitted as under:

(a) The Petitioner signed a PPA with TANGEDCO on 27.11.2013 for 100 MW from Unit 2, with an addendum added on 20.12.2013. Unit 2 began commercial operations on 2.8.2014 and started supplying power to TANGEDCO on 16.12.2015 after Long-Term Access was operational. Separately, the Petitioner supplies the 187 MW to NPCL under a PPA dated 26.9.2014, approved by UPERC. A Petition has been filed with UPERC to determine the NPCL's share of costs for complying with environmental norms through the installation of the De-NOx system.

(b) The generating station, including Unit 2, was not originally equipped to meet the revised NOx emission standards of 450 mg/Nm³ introduced through amendments to environmental regulations. To comply, the Petitioner engaged Tata Consulting Engineers Ltd. (TCE) to study and recommend the optimal NOx abatement technology. TCE suggested implementing combustion modifications such as converting burners to a Low-NOx design, installing a Separated Over Fire Air system, and using Low Excess Air Firing. This proposal was submitted to the Central Electricity Authority (CEA), which approved the plan on 22.9.2021, and directed the Petitioner to approach the Appropriate Commission for further steps.

(c) Accordingly, the Petitioner filed Petition No. 261/MP/2022 before the Commission, seeking in-principle approval of the estimated capital expenditure for the De-NOx system. While the Petition was pending, the Petitioner conducted competitive bidding, finalized vendors, and submitted the discovered cost to the Commission vide an affidavit dated 31.5.2023. The Commission, by its order dated 8.1.2024, granted in-principle approval to the provisional base capital cost and permitted the Petitioner to approach it again for final approval and tariff revision upon commissioning.

(d) Subsequently, the Petitioner provided data on NOx emission levels from Unit 2 for the three-year period between October 2020 and September 2023 as under:

TABLE 1: DIL UNIT 2 - NOX EMISSION FOR OCTOBER 2020 TO SEPTEMBER 2023

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DIL Unit 2 - NO_x emission (mg/Nm^3) for the period October 2020 to September 2023								
Month	**Max**	**Min**	**Month**	**Max**	**Min**	**Month**	**Max**	**Min**
Oct-20	482	200	**Oct-21**	696	224	**Oct-22**	1033	221
Nov-20	525	201	**Nov-21**	690	204	**Nov-22**	1034	203
Dec-20	535	200	**Dec-21**	1186	201	**Dec-22**	1017	213
Jan-21	564	200	**Jan-22**	696	207	**Jan-23**	1007	215
Feb-21	469	201	**Feb-22**	772	212	**Feb-23**	1058	203
Mar-21	581	203	**Mar-22**	747	202	**Mar-23**	1124	204
Apr-21	618	204	**Apr-22**	727	200	**Apr-23**	1040	209
May-21	694	211	**May-22**	735	206	**May-23**	1096	211
Jun-21	582	201	**Jun-22**	805	212	**Jun-23**	1036	209
Jul-21	609	212	**Jul-22**	794	204	**Jul-23**	1013	202
Aug-21	932	202	**Aug-22**	839	209	**Aug-23**	946	223
Sep-21	758	212	**Sep-22**	963	208	**Sep-23**	984	224

***Note**: The above monthly maximum and minimum NO_x emission values exclude periods of unit shutdown and instrument calibration.*

(e) The De-NOx system was commissioned on 30.11.2023, in compliance with the 31.12.2023 deadline set by environmental authorities. The Petitioner notified TANGEDCO of the commissioning on 1.12.2023, and confirmed that performance guarantee tests were conducted successfully. The Petitioner has requested the Commission to recognize 30.11.2023, as the Date of Operation (ODe) for the De-NOx system.

Capital Cost Of De-Nox System Installed in Unit 2 of the Petitioner's Generating Station

(f) The De-NOx system in Unit 2 was supplied, erected, and commissioned by vendors selected through competitive bidding. Initially, a capital cost of ₹15.14 crores was submitted (with a base cost of ₹12.14 crores), and the Commission had granted in-principle approval for the provisional base cost of ₹12.14 crores in its order dated 08.01.2024. This base cost excluded estimated taxes and duties of about ₹2.08 crores. Now, the final capital cost has been determined as ₹13.46 crores, which includes not only the base cost but also components such as initial spares, applicable taxes and duties, insurance, Interest During Construction (IDC), and Incidental Expenditure During Construction (IEDC). A detailed cost breakdown is provided in the accompanying table.

TABLE 2: DIL UNIT 2 - BREAK-UP OF FINAL CAPITAL COST OF DE-NO_x SYSTEM

DIL Unit 2 - Break-up of Capital Cost of the De-NO_x System			
Particulars	Annotation	Unit 2	
		₹ Crores	₹ Crores/MW
Hard Capital Cost			
Equipment & Material supply	A	6.43	0.021
Initial Spares	B	0.28	0.001
Total Hard Capital Cost of De-NO_x System	**C = sum(A:B)**	**6.71**	**0.022**
Soft Capital Cost			
Cost for Dismantling, Removal, Installation, Erection, Commissioning, PG Test and Reliability Run Test - **Service Cost**	D	6.56	0.022
Engineering and Project Management cost	E	0.05	0.000
Total Base Capital Cost of De-NO_x System	**F = sum(C,D,E)**	**13.32**	**0.044**
Insurance	G	0.01	0.000
Incidental Expenses during Construction	H	0.04	0.000
IDC (@Rate of Interest 8.58%)	I	0.09	0.000
Total Soft Capital Cost of De-NO_x System	**J = sum(D,E,G,H,I)**	**6.75**	**0.023**
Total Capital Cost of De-NO_x System	**K = C+J**	**13.46**	**0.045**

(g) The capital cost of the De-NOx system and auxiliaries (excluding IDC) has been certified by the Petitioner's auditors. As on 30.11.2023, the Petitioner incurred actual cash expenditure of ₹7.66 crores (including IDC). Additional liabilities were paid as follows: ₹1.60 crores by 31.12.2023 (end of Q3 FY 2023-24), ₹2.71 crores in Q4 FY 2023-24, and ₹0.25 crore in Q1 FY 2024-25. A remaining ₹1.24 crores is held as retention money, expected to be released by 30.9.2024 (end of Q2 FY 2024-25) upon fulfilment of contractual obligations by vendors. A table detailing actual and projected phasing of these payments is provided:

TABLE 3: DIL UNIT 2 - ACTUAL CASH EXPENDITURE AND PHASING OF LIABILITIES DISCHARGED

Phasing of Actual Cash Expenditure and Discharge of Liabilities of De-NO_x System - DIL Unit 2						
Particulars	**Capital Cost (Acquisition Value)**	**Capitalized as on OD_e**	**Capitalized During Q3 FY 2023-24**	**Capitalized during Q4 FY 2023-24**	**Capitalized during Q1 FY 2024-25**	**Undischarged Liabilities - to be capitalized by Q2 FY 2024-25**
Hard Capital Cost of De-NO_x System	6.71	4.42	0.86	0.89	0.02	0.52
Cost for Dismantling, Removal, Installation, Erection, Commissioning, PG Test and Reliability Run Test - **Service Cost**	6.56	3.05	0.73	1.82	0.23	0.72
Engineering and Project Management cost	0.05	0.04	-	0.00	-	-
Insurance	0.01	0.01	-	-	-	-
Incidental Expenses during Construction	0.04	0.04	-	-	-	-
IDC (@Rate of Interest 8.58%)	0.09	0.09	-	-	-	-
Total Capital Cost of De-NO_x System	**13.46**	**7.66**	**1.60**	**2.71**	**0.25**	**1.24**

(h) A copy of the Auditors' Certificate verifying the actual cash expenditure and its phasing for the De-NOx system and auxiliaries is attached.

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Hard Capital Cost of the De-NOx system

(i) As demonstrated in Table 2 above, the Hard Capital Cost of the De-NOx system consists of the elements, namely cost of equipment and material supply and other related modifications, and cost of initial spares.

(j) The Petitioner has considered the cost of the elements (a) and (b) above based on the actual cash expenditure incurred till date, which works out to ₹ 6.19 Crores and the balance liabilities of ₹ 0.52 Crores, which is expected to be discharged by 30.09.2024. Accordingly, the total Hard Capital Cost of the De-NOx system, including Taxes and Duties, works out to ₹ 6.71 Crores, which translates to ₹ 0.022 Crore/MW of installed capacity of Unit 2.

Soft Capital Cost of the De-NOx system

(k) As demonstrated in Table 2 above, the Soft Capital Cost of the De-NOx system consists of the following elements:

a) Cost of Dismantling, Removal, Installation, Erection, Commissioning, Performance Guarantee Test and Reliability Run Test or Service Cost;
b) Engineering and Project Management cost;
c) Insurance;
d) Incidental Expenses During Construction; and
e) IDC.

(l) **Cost of Dismantling, Removal, Installation, Erection, Commissioning, Performance Guarantee Test and Reliability Run Test or Service Cost**: The service costs relate to the services rendered by various vendors and the same works out to ₹ 6.56 crores, including taxes and duties. Out of the above, ₹ 5.84 crores have been capitalized till date based on actual cash expenditure, and the balance of ₹ 0.72 crores shall be capitalized by 30.09.2024.

(m) **Engineering & Project Management:** The costs for consultancy furnished by the competent vendors towards Engineering & Project Management works out to ₹ 0.05 crores, and the same has been capitalized during Q4 FY 2023-24. The Hard Capital Cost, along with Service Cost and the cost of Engineering & Project Management form

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the Base Capital Cost of the De-NO_x system. The actual cash expenditure towards the Base Capital Cost incurred till date works out to ₹ 12.08 crores, and the balance liabilities of ₹ 1.24 crores are expected to be discharged by 30.09.2024. Accordingly, the Base Capital Cost of the De-NO_x system, including Taxes and Duties, works out to ₹ 13.32 crores and translates to ₹ 0.044 crore/MW of installed capacity of Unit 2. The above Base Capital Cost at ₹ 13.32 crores, including Taxes & Duties, and the undischarged liabilities, is lower than ₹ 14.22 crores as proposed by the Petitioner in Petition No. 261/MP/2022 (out of which ₹ 12.14 crores were approved in principle by Commission vide its Order dated 08.01.2024, and the taxes & duties were estimated at ₹ 2.08 crores).

(n) **Insurance:** The Petitioner had procured insurance coverage for the erection, commissioning, and testing period towards material damage and third-party liability amounting to ₹ 0.01 crores, and the same has been capitalized on OD_e.

(o) **IEDC:** The IEDC includes the costs on account of the pre-operative expenses, *viz.*, tender evaluation and bid review by the external agency and the same works out to ₹ 0.04 Crore, which has been capitalized on OD_e.

(p) **IDC:** The Petitioner has deployed internal accruals to fund the entire project cost towards installation of the proposed De-NO_x system which has been completed within a period of about 6.5 months, considering the date of issuance of LOI, i.e., 15.5.2023, as the Zero Date of the project. The capital has been infused by way of making payment to the vendors.

(q) The Commission, vide its Suo-motu Order dated 13.08.2021 (Petition No. 06/SM/2021), adopted a 'cost of capital' approach for projects with tariffs discovered under Section 63 of the Act that seek compensation for De-NOx system installation under a 'Change in Law' event. While no fixed debt-equity ratio was prescribed, the Petitioner assumed 70% of the capital as a normative loan for Interest During Construction (IDC) calculation. IDC was computed based on quarterly fund disbursements from the project's Zero Date to its operational date (30.11.2023), using a weighted average interest rate of 8.58% (as on 01.04.2023), which is below the

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allowed cap of 12.00%. The total IDC over 6.5 months amounts to ₹0.09 crore, supported by an auditor's certificate.

(r) The final Capital Cost of the De-NOx system for Unit 2 amounts to ₹13.46 crores, which is lower than the earlier projected cost of ₹15.14 crores in Petition No. 261/MP/2022. The project was completed on time, meeting all technical and commercial standards through a transparent process. Given the efficient execution and alignment with the in-principle approval granted by the Commission in its Order dated 08.01.2024, the Petitioner has sought approval of the final capital cost and its phasing as detailed in Table 2.

Supplementary Tariff in terms of the Commission's Order dated 13.8.2021

(s) The Amendment Rules, along with the MPCB letter dated 1.10.2021, have been recognized as a 'Change in Law' event under Article 10 of the TANGEDCO PPA. As such, the Petitioner should be compensated to restore its economic position as if the event had not occurred. This principle of economic restitution has been firmly upheld by the Commission in its Order dated 13.8.2021 (Petition No. 06/SM/2021), which also outlines the applicability of compensation and the methodology for determining the Supplementary Tariff for projects with PPAs under Section 63 prior to the Amendment Rules 2015.

(t) As per the norms specified in the Order dated 13.08.2021, the Petitioner has computed the compensation/Supplementary Tariff towards the installation of the De-NOx system in Unit 2 of its Project. The summary of the Capital Cost and the levelized compensation/Supplementary Tariff for the De-NOx system is provided in the following Table:

TABLE 4: DIL UNIT 2 – SUMMARY OF SUPPLEMENTARY TARIFF OF DE-NOX SYSTEM

DIL Unit 2 - Summary of Supplementary Tariff of De-NO_x System during Service Period				
FY	Year Counter	Supplementary Fixed Charge Rate (₹/kWh)	Supplementary Energy Charge Rate (₹/kWh)	Supplementary Tariff (₹/kWh)
FY 2023-24	1	0.008	0.000	0.008
FY 2024-25	2	0.009	0.000	0.009
FY 2025-26	3	0.009	0.000	0.009
FY 2026-27	4	0.009	0.000	0.009
FY 2027-28	5	0.009	0.000	0.009
FY 2028-29	6	0.009	0.000	0.009
FY 2029-30	7	0.008	0.000	0.008
FY 2030-31	8	0.008	0.000	0.008
FY 2031-32	9	0.008	0.000	0.008
FY 2032-33	10	0.008	0.000	0.008
FY 2033-34	11	0.008	0.000	0.008
FY 2034-35	12	0.008	0.000	0.008
FY 2035-36	13	0.007	0.000	0.007
FY 2036-37	14	0.007	0.000	0.007
FY 2037-38	15	0.007	0.000	0.007
FY 2038-39	16	0.007	0.000	0.007
FY 2039-40	17	0.007	0.000	0.007
FY 2040-41	18	0.007	0.000	0.007
FY 2041-42	19	0.006	0.000	0.006
FY 2042-43	20	0.006	0.000	0.006
FY 2043-44	21	0.006	0.000	0.006
FY 2044-45	22	0.006	0.000	0.006
FY 2045-46	23	0.006	0.000	0.006
FY 2046-47	24	0.006	0.000	0.006
FY 2047-48	25	0.006	0.000	0.006
FY 2048-49	26	0.006	0.000	0.006

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TABLE 5: DIL UNIT 2 – SUMMARY OF CAPITAL COST AND LEVELIZED SUPPLEMENTARY TARIFF OF DE-NOX SYSTEM

DIL Unit 2 - Summary of Capital Cost and Levelized Supplementary Tariff of De-NO_x System		
Particulars	UoM	Unit 2
Installed Capacity	MW	300
Capital Cost of the De-NO_x System	₹ Crores	13.46
OD_e of DE-NO_x System	Date	30-11-2023
End of Service Period of De-NO_x System	Date	30-11-2048
NAPLF	%	85%
Levelized Supplementary Fixed Charge Rate	₹/kWh	0.008
Levelized Supplementary Energy Charge Rate	₹/kWh	0.000
Levelized Supplementary Ex-Bus Tariff	₹/kWh	0.008

The detailed computation of the Supplementary Tariff, along with relevant supporting documents, is attached.

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(u) The Petitioner has sought approval to recover the Supplementary Tariff related to the De-NOx system installation under the TANGEDCO PPA, limited to 85% normative plant availability against the 100 MW net contracted capacity, through monthly energy bills. As per Clause 10.3.2 of the PPA, such recovery is permissible only if the revenue impact from 'Change in Law' events exceeds 1% of the Standby Letter of Credit value for the relevant Contract Year(s). For the related 187 MW gross contracted capacity under the NPCL PPA, a separate Petition will be filed before the appropriate Commission.

(v) The applicability of Carrying Cost on the revenue gap arising due to the time lag between the occurrence of 'Change of Law' event and the actual payment of compensation due to the same has been dealt with by this Commission vide the Order dated 13.8.2021 in Petition No. 06/SM/2021. The De-NOx system in DIL Unit 2 was declared operational on 30.11.2023 and, from that date, is entitled to recover the compensation through the Supplementary Tariff for the 100 MW net contracted capacity until the Commission issues its order. Accordingly, the Petitioner is entitled to the Carrying Cost on the resulting revenue gap, as per the applicable rate under the TANGEDCO PPA.

Recovery of Supplementary Tariff

(w)The Petitioner proposes to recover the proposed Supplementary Tariff from the Respondent to the extent of the Contracted Capacity as per the TANGEDCO PPA based on the Order passed by this Commission on 13.8.2021, in which recovery of compensation has been prescribed.

Maintainability of the Petition

(x) The Petitioner's Unit 2 qualifies as an Inter-State Generating Station (ISGS) as it supplies power to both Tamil Nadu (TANGEDCO) and Uttar Pradesh (NPCL), bringing the case under CERC's jurisdiction per Section 79(1)(b) of the Electricity Act, 2003. The 100 MW supply to TANGEDCO is governed by a Section 63 PPA, which allows compensation for 'Change in Law' events. CERC has recognized new environmental norms and an MPCB letter as such an event. To comply, the Petitioner installed a De-NOx system, incurring costs exceeding the 1% threshold under the PPA, making it eligible for compensation through a Supplementary Tariff. Thus, the Petition is maintainable before CERC. Further, the CERC's Order dated 13.8.2021 (in Petition No. 06/SM/2021) has been challenged by the Association of Power Producers (APP) before the Appellate Tribunal for Electricity (Appeal No. 306 of 2021), and the matter is currently pending. Accordingly, the Petitioner may be granted permission to amend the Petition, if required.

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<u>Hearing dated 26.9.2024</u>

5. During the course of the hearing, the learned counsel for the Petitioner reiterated and submissions made in the Petition and requested to admit the Petition. Vide Record of Proceedings (ROP) for the hearing dated 26.9.2024, the Petitioner was directed to file the information called for in the said ROP. The Petitioner, vide its affidavit dated 25.11.2024, has submitted the information called for and has mainly submitted as under:

a) **Reasons for the increase in the total hard capital cost of the De-Nox system from the projected cost provisionally approved**

i. The De-NOx system for Unit 2 of its 2×300 MW plant in Chandrapur, Maharashtra, was supplied, erected, and commissioned by vendors selected through competitive bidding, with related details submitted in Petition No. 261/MP/2022. The Commission granted in-principle approval on 08.01.2024 for a provisional Base Capital Cost of ₹12.14 crores (excluding estimated taxes and duties of ₹2.08 crores) from a total proposed cost of ₹15.14 crores. The earlier estimated Hard Capital Cost was ₹5.88 crores, excluding ₹2.08 crores in taxes and duties. While the Commission allowed these to be claimed post-installation, the Petitioner has not claimed them separately in this Petition since the paid amount already includes taxes and duties. A comparative table of estimated vs. actual costs is as under:

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COMPARISON OF HARD CAPITAL COST OF DE-NO$_X$ SYSTEM AS CLAIMED BY THE PETITIONER

Comparison of Hard Capital Cost of De-NO$_x$ System as claimed by the Petitioner			
Particulars	UoM	As estimated in Petition No. 261/MP/2022	As claimed in Petition No. 263/MP/2024
Hard Capital Cost	₹ Crores	5.88	5.69
Taxes & Duties (@18% of Hard Capital Cost)	₹ Crores	1.06	1.02
Hard Capital Cost, inclusive of Taxes & Duties	**₹ Crores**	**6.94**	**6.71**

ii. Therefore, (i) there has been no increase in the Hard Capital Cost of the De-NOx System and the Auxiliaries from the projected cost provisionally approved by this Commission in its Order dated 08.01.2024, and (ii) the Petitioner has achieved the commissioning of the De-NOx System and the Auxiliaries within the cost as projected/provisionally approved earlier.

b) **De-capitalized Value of the Dismantled Items for the installation of De-NOx system and the Auxiliaries in Unit 2 of the petitioner's project**

i. The following equipment has been dismantled and replaced with the newly designed equipment as supplied by the successful bidder, i.e., GE Power India Limited (GEPIL), pursuant to the competitive bidding undertaken by the Petitioner due to the installation of the De-NOx system and the Auxiliaries in Unit 2:

LIST OF EQUIPMENT DISMANTLED DUE TO COMMISSIONING OF DE-NOX SYSTEM IN UNIT 2

List of Dismantled Equipment			
Sl. No.	Particulars	Quantity replaced for each corner of the Boiler	Total quantity for Boiler of Unit 2
1	Coal Nozzle tip	6	24
2	Oil Nozzle tip	3	12
3	Nozzle tip for CCOFA	2	8
4	Nozzle tip for Top End air	1	4
5	Nozzle tip for Intermediate Air	2	8
6	Nozzle tip for Bottom End air	1	4

ii. Every type of Nozzle tip has been replaced with newly designed tips compatible with the newly installed De-NOx system. However, the above equipment installed at the time of commissioning of Unit 2 of the Petitioner's Project, was a part of the entire Boiler-Turbine-Generator (BTG) supply package of the Unit. The cost of each such Nozzle tip was a part of the cost of the entire BTG

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package as a whole, and the segregated cost of each such Nozzle tip, capitalized at the time of commissioning of Unit 2, is not readily available with the Petitioner.

iii. For the purpose of assessment of the historical cost of various types of Nozzle tips, the Petitioner has adopted the following methodology:

a) **For Coal Nozzle tips**: The price of the newly designed Coal Nozzle tips and those of older design, which have been replaced, are different. Therefore, to assess the price of the Coal Nozzle tips of older design which have been replaced, the Petitioner has referred to the Purchase Order **(PO)** dated 03.08.2022 placed on the relevant vendor for the procurement of such Coal Nozzles, of earlier design, as spares. Since such Coal Nozzles were of similar design and were used as replacement spares for the original Coal Nozzles installed at the time of commissioning, the Petitioner found it appropriate to refer to such price, as quoted in the aforesaid PO dated 03.08.2022, as the reference price of the original Coal Nozzles which have been replaced during the commissioning of De-NO_x system and the Auxiliaries in Unit 2.

(b) For other Nozzle tips: The Petitioner has referred to the copy of the Purchase Order (**PO**) dated 27.07.2023 placed on GEPIL for the supply of Mandatory Spares, wherein the unit price of all types of Nozzle tips which have been replaced is available. Although such a price indicates the price of newly designed Nozzle tips, which are different from those which have been replaced, the Petitioner has no other reference price available. The Petitioner has placed on record the copies of the Purchase Orders dated 27.07.2023 and 03.08.2022. However, the price of the Coal Nozzle tips is at the level of August 2022, and the price of the other types of Nozzle tips is at the level of July 2023. The original equipment was installed and commissioned with Unit 2 on 02.08.2014. Therefore, to arrive at the historical value of all such dismantled equipment, i.e., the August 2014 price level, the Petitioner has adopted the methodology prescribed by this Commission in Regulation 26 of the CERC (Terms & Conditions of Tariff) Regulations, 2024. In accordance with methodology prescribed in the above Regulations for arriving at the historical value of assets, the Petitioner has computed the historical cost of the above equipment, which has been dismantled and replaced with newly designed tips by de-escalating the cost of such Nozzle tips by 5% each year, as shown in the following Table:

ESTIMATED HISTORICAL COST OF DISMANTLED EQUIPMENT FOR INSTALLATION OF DE-NOX SYSTEM

Estimated Historical Cost of Dismantled Equipment		
Particulars	**UoM**	**Value**
(A) Coal Nozzle Tip		
Price of Coal Nozzle tip as per PO dated 03.08.2022	₹	203400
IGST (@18%) on above	₹	36612
Total Price of Coal Nozzle tip as on August 2022	₹	240012
Rate of de-escalation per year	%	5%
Estimated price of Coal Nozzle tip as on August 2014	₹	162450
Total No. Coal Nozzle tips for replacement	No.	24
Estimated historical cost of Coal Nozzle tips replaced due to commissioning of De-NO_x system in Unit 2	₹	**3898790**
(B) Other Nozzle Tips		
Price as per PO dated 23.07.2023		
- Oil Nozzle Tip	₹	168525
- Nozzle tip for CCOFA	₹	129938
- Nozzle tip for Top End air	₹	133875
- Nozzle tip for Intermediate Air	₹	147263
- Nozzle tip for Bottom End air	₹	129325
Number of tips replaced -		
- Oil Nozzle Tip	No.	12
- Nozzle tip for CCOFA	No.	8
- Nozzle tip for Top End air	No.	4
- Nozzle tip for Intermediate Air	No.	8
- Nozzle tip for Bottom End air	No.	4
Total Price of Other Nozzle tips as on July 2023	₹	5292704
Rate of de-escalation per year	%	5%
Estimated historical cost of Other Nozzle tips replaced due to commissioning of De-NO_x system in Unit 2	₹	**3411724**
Total Estimated historical cost of dismantled equipment due to commissioning of De-NO_x system in Unit 2 (A + B)	₹	**7310514**

iv. Based on the above historical cost, the net asset value of the dismantled equipment as on 30.11.2023, i.e., the date of commissioning of the De-NOx system and the Auxiliaries in Unit 2, is shown in the following Table:

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NET ASSET VALUE OF DISMANTLED EQUIPMENT AS ON 30.11.2023

Net Asset Value of Dismantled Equipment		
Particulars	**UoM**	**Value**
Gross Asset Value of Dismantled Equipment as on 02.08.2014	₹ Crores	0.73
Applicable Rate of Depreciation (Asset Class: Plant & Machinery)	%	5.28%
No. of Years elapsed	No.	9.33
Accumulated Depreciation	₹ Crores	0.36
Net Asset Value of Dismantled Equipment as on 30.11.2023	**₹ Crores**	**0.37**

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c) **Documents in support of the Achievement of Emission Norms after commissioning of the De-NOx System and the Auxiliaries in Unit 2 of the petitioner's project**

i. The Performance Guarantee Test (PG Test) of Unit 2 for commissioning of the De-NOx system and the Auxiliaries have been performed by GEPIL, wherein the NOx emission values have been demonstrated against the guaranteed values under the work contract. A copy of the PG Test Report as submitted by GEPIL has been placed on record. Further, the NOx emission design value for the boiler of Unit 2, as indicated in the work contract, was 750 mg/Nm3. However, there was no specific PG Test Report of Unit 2 containing the NOx emission level which can be referred to at this stage.

d) **Timeline of completion of various milestone activities**

i. The timeline for completion of the various milestone activities for the De-NOx system and the Auxiliaries is provided in the following Table:

TIMELINE OF COMPLETION OF MILESTONE ACTIVITIES IN INSTALLATION OF DE-NOX SYSTEM

Sl. No.	Milestone Activities		Scheduled date of completion as per L1 Schedule		Actual date of completion		Reason(s) for delay	Details of LD Recovered from the vendor, If any
			From	To	From	To		
1	Combustion Modification System for Unit 2	Main Equipment Supply Package (GE Power India Ltd.)	29.05.2023	30.09.2023	29.05.2023	30.09.2023	Completed within scheduled timeline	Not applicable

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		Erection Package (Power Mech Projects Ltd.)	01.09.2023	18 days from the date of issuance of permit post shutdown	01.09.2023	Job completed within scheduled timeline	Completed within scheduled timeline	Not applicable
2	Any other work		-	-	-	-	-	-

ii. In view of the above, it is thus evident that the various milestone activities have been completed within the scheduled timeline and there has been no delay in the completion of the same.

e) **Data Submitted to CPCB for the years 2020-21, 2021-22 and 2022-23**

i. The real time NOx emission data of Unit 2 of the Petitioner's Project are transmitted to the Central Pollution Control Board (CPCB). The NOx emissions levels of the past 3 (three) years, i.e., FY 2020-21, FY 2021-22 and FY 2022-23, are shown in the following table:

DATA PERTAINING TO NOx EMISSION LEVEL – DIL UNIT 2

2020-21, 2021-22 and 2022-23	**Total No. of times NO_x value exceeded 450 mg/Nm^3 limit on 15 min average data**
	Unit-2
<450	52494
>450	36357
Total	88851
2020-21, 2021-22 and 2022-23	**Total % NO_x value exceeded 450 mg/Nm^3 limit on 15 min average data**
<450	59%
>450	41%

Note: *The above NOx emission summary is based on data as transmitted to CPCB. NOx emission data during unit start-ups/shutdowns, instrument calibration and instrument malfunctions have not been considered.*

6. Respondent, Tamil Nadu Power Distribution Corporation Limited (TNPDCL), erstwhile Tamil Nadu Generation and Distribution Corporation Limited, vide its reply dated 26.12.2024 has mainly submitted as under:

a) The Respondent generally denied all claims in the Petition that conflict with its own position, except where specifically admitted or based on official records. It stated that any non-response should not be taken as acceptance and reserves the right to modify its statements.

b) The De-NOx system is not yet fully commissioned, with ₹12.08 crores already spent and ₹1.24 crores to be paid by 30.09.2024.

c) The Commission had earlier granted in-principle approval for a provisional base capital cost of ₹12.14 crores (plus estimated taxes and duties of ₹2.08 crores) for the De-NOx system. However, in the current Petition, the Petitioner has now claimed a total of ₹13.46 crores (₹6.71 crores as hard cost and ₹6.75 crores as soft cost), without providing justification for this cost escalation.

d) The Petitioner vide its additional affidavit dated 25.11.2024, has clarified that the claimed amount of ₹13.46 crores for the De-NOx system includes interest, duties, and taxes, with ₹6.71 crores attributed to hard costs and ₹6.75 crores to soft costs. This amount remains within the previously approved provisional limit of ₹15.14 crores, which comprised a base capital cost of ₹12.14 crores and estimated taxes and duties of ₹2.08 crores. Accordingly, the Commission may declare ₹13.46 crores as the final inclusive amount and bar the Petitioner from claiming any further costs.

e) The Petitioner's claimed capital cost of ₹13.46 crores for the De-NOx system must be apportioned based on the PPA with TNPDCL, which covers only 100 MW of the 300 MW Unit-2.

f) While the De-NOx system has a 25-year service life (2023–2049), the Petitioner's PPA with TNPDCL ends in 2028, and yet the Petitioner is proposing higher fixed capacity charges during the early years of the system's operation. No justification has been provided for this front-loaded cost recovery, especially during the last phase of the PPA, and the proposed charges must be subject to proper scrutiny by TNPDCL. Without this, in-principle approval of the costs is unwarranted.

g) Further, the Petitioner has failed to provide any clarification, either in Petition No. 261/MP/2022 or in the subject Petition, regarding the specific measures implemented to ensure that the ECS (Environmental Control System), i.e., the De-NOx system, is operational 24 hours a day, 7 days a week, and functions continuously without interruption. The Petitioner has not addressed how the system will maintain its availability and efficiency throughout the year, which is crucial for ensuring compliance with environmental and regulatory standards.

h) The Petitioner may be directed to submit detailed data and documents to support its Change in Law claims, specifically seeking confirmation that there is no duplication or overlap in the claimed compensation between the 100 MW supply to TNPDCL and the 170 MW supply to Noida Power Company Limited or other distribution companies.

7. On 3.1.2025, the Petitioner has submitted vide its additional affidavit has placed on the record the subsequent developments, including the Commission's order dated 29.11.2024 in Petition No. 04/SM/2024, and has made the following submissions.

a) During the pendency of Petition No. 263/MP/2024, the following developments have taken place: (a) discharge of liabilities related to the NOx Abatement System for Q2 of FY 2024-25; (b) the Commission's order dated 29.11.2024 in Suo Motu Petition No. 04/SM/2024, which amended certain tariff norms for emission control-related capital expenditure; and (c) the revised Compensation/Supplementary Tariff calculated in accordance with that order.

b) At the time of filing the Petition, the Petitioner submitted the capital cost of the De-NOx system and auxiliaries for Unit 2 of its 2×300 MW coal-based plant in Chandrapur, Maharashtra, based on actual expenses up to Q1 of FY 2024-25 and estimated payments to be made by the end of Q2 of FY 2024-25, for the Commission's approval.

c) The Petitioner calculated the Compensation/Supplementary Tariff for recovering fixed charges related to the De-NOx system in Unit 2, based on the norms set by the Commission's Order dated 13.08.2021 (Petition No. 06/SM/2021). The Petitioner also requested the Commission's permission to revise its claims later, depending on any future APTEL`s judgment or the Commission`s orders.

d) The Petitioner submitted the revised Compensation/Supplementary Tariff, reflecting the amendments made by the Commission in its Order dated 29.11.2024

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(Suo-motu Petition No. 04/SM/2024), read with the Order dated 13.08.2021 (Suo Motu Petition No. 06/SM/2021), and sought the Commission's approval.

Revised Capital Cost of the De-Nox System Along with Capitalization Phasing

e) The final capital cost for the supply, erection, and commissioning of the De-NOx system and Auxiliaries in Unit 2 amounts to ₹13.46 crores, which includes initial spares, applicable taxes and duties, insurance, interest during construction (IDC), and incidental expenditure during construction (IEDC). This is based on the discharge of liabilities in Q2 FY 2024-25. Additionally, the discharge of liabilities for Unit 2 in Q2 of FY 2024-25 totals ₹1.24 crores.

f) The Petitioner has placed on record a copy of the Auditors' Certificate, certifying the actual cash expenditure for the De-NOx system and Auxiliaries as of the end of Q2 FY 2024-25.

Revised Supplementary Tariff in terms of the Order dated 29.11.2024 read with the earlier Order dated 13.08.2021 as passed by this Commission

g) As per the norms specified in the Orders dated 29.11.2024 and 13.08.2021, the Petitioner has calculated the revised Compensation/Supplementary Tariff for the installation of the De-NOx system in Unit 2. The difference in the Supplementary Tariff due to the revised norms is minimal. The year-wise Supplementary Tariff recoverable from the beneficiaries, as well as the levelized Compensation/Supplementary Tariff for the De-NOx system, are provided in the following tables:

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DIL UNIT 2 – SUMMARY OF SUPPLEMENTARY TARIFF OF DE-NOX SYSTEM

DIL Unit 2 - Summary of Supplementary Tariff of De-NO_x System during Service Period				
FY	Year Counter	Supplementary Fixed Charge Rate (₹/kWh)	Supplementary Energy Charge Rate (₹/kWh)	Supplementary Tariff (₹/kWh)
FY 2023-24	1	0.010	0.000	0.010
FY 2024-25	2	0.011	0.000	0.011
FY 2025-26	3	0.011	0.000	0.011
FY 2026-27	4	0.011	0.000	0.011
FY 2027-28	5	0.010	0.000	0.010
FY 2028-29	6	0.010	0.000	0.010
FY 2029-30	7	0.010	0.000	0.010
FY 2030-31	8	0.009	0.000	0.009
FY 2031-32	9	0.009	0.000	0.009
FY 2032-33	10	0.009	0.000	0.009
FY 2033-34	11	0.008	0.000	0.008
FY 2034-35	12	0.008	0.000	0.008
FY 2035-36	13	0.008	0.000	0.008
FY 2036-37	14	0.006	0.000	0.006
FY 2037-38	15	0.005	0.000	0.005
FY 2038-39	16	0.005	0.000	0.005
FY 2039-40	17	0.005	0.000	0.005
FY 2040-41	18	0.005	0.000	0.005
FY 2041-42	19	0.005	0.000	0.005
FY 2042-43	20	0.005	0.000	0.005
FY 2043-44	21	0.005	0.000	0.005
FY 2044-45	22	0.005	0.000	0.005
FY 2045-46	23	0.005	0.000	0.005
FY 2046-47	24	0.005	0.000	0.005
FY 2047-48	25	0.005	0.000	0.005
FY 2048-49	26	0.006	0.000	0.006

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DIL UNIT 2 – SUMMARY OF CAPITAL COST AND LEVELIZED SUPPLEMENTARY TARIFF OF DE-NO_x SYSTEM

DIL Unit 2 - Summary of Capital Cost and Levelized Supplementary Tariff of De-NO_x System		
Particulars	**UoM**	**Unit 2**
Installed Capacity	MW	300
Capital Cost of the De-NO_x System	**₹ Crores**	**13.46**
OD_e of De-NO_x System	Date	30-11-2023
End of Service Period of De-NO_x System	Date	30-11-2048
NAPLF	%	85%
Levelized Supplementary Fixed Charge Rate	**₹/kWh**	**0.009**
Levelized Supplementary Energy Charge Rate	**₹/kWh**	**0.000**
Levelized Supplementary Ex-Bus Tariff	**₹/kWh**	**0.009**

h) Additionally, the documents submitted along with the affidavit may be taken on record, which were not previously part of the record, and consider them as part of the current Petition.

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Hearing dated 7.1.2025

8. During the course of the hearing, the learned counsel for the Petitioner requested for time to file a rejoinder to the Respondent's reply dated 26.12.2024, while the Respondent's counsel sought time to respond to the Petitioner's additional affidavit dated 03.01.2025.

9. The Petitioner, vide its rejoinder dated 15.2.2025, has mainly submitted as below:

a) The Respondent's claim in Paragraph 8 of its reply alleging that Petition No. 261/MP/2022 was filed without sharing the required details under Regulations 29(1) and 29(2) of the Tariff Regulations 2019, is incorrect. The Respondent is merely repeating issues already raised and conclusively adjudicated by the Commission in its final Order dated 08.01.2024 in the same Petition.

b) The issues raised by the Respondent regarding non-compliance with Tariff Regulations were already adjudicated by the Commission in its order dated 08.01.2024 in Petition No. 261/MP/2022. Since that order has not been challenged, it has attained finality and does not warrant further response. The Petitioner also cited settled legal principles preventing re-litigation of issues already decided between the same parties.

c) Additionally, the Respondent's statements in Paragraphs 9–11 of its reply relating to the tendering process, issuance of LoI to GE Power India Ltd., and in-principle approval of ₹12.14 crore as base capital cost, are acknowledged as factual summaries already considered by the Commission in its final order. Therefore, the Petitioner does not find it necessary to respond further to these points.

d) The Respondent's claims regarding non-commissioning of the De-NOx system and unauthorized cost escalation are incorrect and misleading. The De-NOx system was fully commissioned on 30.11.2023, and the Respondent was duly informed through a letter dated 01.12.2023, along with a Management Certificate confirming the commissioning. The Petitioner has also conducted Performance

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Guarantee Tests to ensure compliance with environmental norms. The difference between the in-principle approved base capital cost of ₹12.14 Crores and the final capital cost of ₹13.46 Crores reflects additional components and final liabilities, making the two figures not directly comparable. These details have already been submitted through the Petitioner's filings dated 25.11.2024 and Additional Affidavit dated 03.01.2025, and the Respondent's objections should therefore be rejected.

e) The Petitioner has already discharged liabilities amounting to ₹1.24 Crores for the De-NOx system in Unit 2 during Q2 of FY 2024-25, and details of the actual cash expenditure and phasing have been provided in the Additional Affidavit dated 03.01.2025. Regarding the Respondent's claim of an increase in capital cost from ₹12.14 Crores to ₹13.46 Crores, the Petitioner submitted that the earlier figure excluded estimated Taxes and Duties, and thus cannot be directly compared to the final cost submitted in the current Petition. These objections, aimed at misrepresenting facts, lack merit, and the Commission is requested to consider the final capital cost breakdown as submitted in the said Additional Affidavit.

f)In response to the Respondent's contention that the Petitioner should not be allowed to claim any amount beyond ₹13.46 Crores, the Petitioner stated that ₹13.46 Crores is the final and firmed-up capital cost for the supply, erection, and commissioning of the De-NOx system and auxiliaries in Unit 2. This amount includes all components such as initial spares, taxes and duties, insurance, IDC, and IEDC, based on the final discharge of liabilities in Q2 FY 2024-25. These details were already submitted through the Additional Affidavit dated 03.01.2025, and since the system has been installed and commissioned, no further upward revision of the capital cost will be sought.

g) The Petitioner's PPA with the respondent only covers 100 MW of contracted capacity, so any costs towards TANGEDCO's liability should be proportionally allocated for the 100 MW from Unit-2 of the Project. The Petitioner has requested, in their Petition and subsequent Additional Affidavit (dated 03.01.2025), the Commission to approve the Supplementary Tariff and allow recovery of

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compensation for only up to the 100 MW net contracted capacity under the TANGEDCO PPA, following the Commission's previous Orders (dated 29.11.2024 and 13.08.2021). The Petitioner confirmed that no overlapping or duplication should occur in the claims. Additionally, the Petitioner has approached the Uttar Pradesh Electricity Regulatory Commission (UPERC) via Petition No. 2130 of 2024 to approve the proportionate liability for the installation of a De-NOx system in Unit 2, which will be recovered from Noida Power Company Limited (NPCL) for the 187 MW contracted capacity from the same unit.

h) The Petitioner is agreed with the Respondent's claim in Paragraph 19 that it is seeking higher Capacity Charges for 2023 to 2028. The Petitioner asserted that it has followed the principles and computations outlined in the Commission's Suo-Motu Orders from 29.11.2024 and 13.08.2021 for the Supplementary Tariff related to the De-NOx system. The Petitioner referred to Annexure A-3(Colly.) of its additional Affidavit dated 03.01.2025 for further details.

i) The Respondent, in Paragraphs 20 to 22 of its Reply, has asked the Commission to request additional details from the Petitioner regarding the availability of the system and to substantiate the claims made in the Petition, also seeking confirmation that there will be no overlapping claims. In response, the Petitioner asserted that it has already provided all necessary details in their Submission dated 25.11.2024 and addressed all queries from the Commission. The Petitioner confirmed that it is only seeking recovery of compensation for up to 100 MW net contracted capacity under the TANGEDCO PPA, with no overlapping or duplication in the claims. The Petitioner further stated that if the Commission requires any additional details, they will fully comply.

Hearing dated 28.4.2025

10. During the course of the hearing, the Petitioner's counsel presented detailed oral submissions, while the Respondent's counsel requested that the reply filed by the Respondent be considered in the order. Based on the agreement of both parties, the order in the Petition was reserved.

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Analysis and Decision

11. We have considered the submissions of the Petitioner, Dhariwal Infrastructure Limited (DIL), and the Respondent, Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO). The Petitioner, in the present matter, sought approval for the final capital cost of ₹13.46 crores incurred towards the installation of a De-NOx system and its auxiliaries in Unit-2 (300 MW) of its thermal power plant at Chandrapur. The installation was in compliance with the revised NOx emission norms notified by the Ministry of Environment, Forest and Climate Change (MoEFCC), which mandated a limit of 450 mg/Nm³. The Petitioner has submitted that this constituted a 'Change in Law' event under Article 10 of the PPA with TANGEDCO and claimed compensation through a Supplementary Tariff. The Petitioner has confirmed that it has apportioned cost and compensation claims strictly to the 100 MW contracted capacity under the TANGEDCO PPA and that a separate Petition was filed before UPERC for the remaining capacity. Additionally, the Petitioner sought recovery of carrying cost due to the time lag in tariff realization and submitted revised tariff computations in line with the Commission's Suo Motu Orders dated 13.08.2021 and 29.11. 2024. In response, the Respondent, TANGEDCO, questioned the justification for the increase in capital cost from ₹12.14 crores (provisionally approved) to ₹13.46 crores and argued that this escalation lacked adequate explanation. It raised concerns over the apportionment of cost given the 100 MW contracted capacity and objected to any recovery beyond the Petitioner's PPA term, which ends in 2028, while the system's life extends to 2049. TANGEDCO also questioned the operational continuity and availability of the De-NOx system and requested the Commission to ensure that compensation claims were proportionately and transparently allocated, avoiding any duplication with claims made before UPERC.

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12. We have examined the submissions of the Petitioner and the Respondent, in the matter of approval of the final capital cost for installation of the De-NOx system in Unit-2 of the Petitioner's generating station, and determination of compensation through Supplementary Tariff under the 'Change in Law' provision of the Power Purchase Agreement (PPA). With respect to capital cost i.e. Additional capital expenditure on the emission control system/s, the Commission, in its order dated 13.8.2021 in Petition No. 6/SM/2021, has held that the additional capital expenditure on the emission control systems must be based on a transparent competitive bidding process and shall include hard cost, incidental expenses during construction, financing and insurance charges, IDC, gain or loss on foreign exchange rate variations, and initial spares. Admissibility of any other expenditure shall be decided on a case-by-case basis, and once the capital cost is determined and admitted, the compensation mechanism shall be applied accordingly. The relevant extracts of the Commission's order dated 13.8.2021 in 6/SM/2021 is as under:

> ***"Capital cost***
> *20. Additional capital expenditure on emission control system/s shall include hard cost, incidental expenditure during construction, financing charges, insurance charges, interest during construction, gain or loss on foreign exchange rate variations and initial spares. Hard cost of emission control system would need to be discovered through a process of transparent competitive bidding by the generating company owning the thermal generating station. Admissibility of any other expenditure shall be decided on case to case basis. Once the capital cost (additional capital expenditure) of emission control system is determined, the compensation mechanism shall be applicable to work out the compensation."*

Capital Cost

13. The Commission has examined the Petitioner's request for approval of the final capital cost of ₹13.46 crore incurred for the installation of the De-NOx system and associated auxiliaries in Unit-2 (300 MW) of its thermal power plant at Tadali, Chandrapur.

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This installation was necessitated to comply with the revised NOx emission standards notified by the Ministry of Environment, Forest and Climate Change (MoEFCC), which apply to the generating units commissioned between 1.1.2003 and 31.12.2016, including Unit-2 commissioned on 2.8.2014. The Commission, in its order dated 8.1.2024 in Petition No. 261/MP/2022, granted in-principle approval to the provisional base capital cost and permitted the Petitioner to approach it again for final approval and tariff revision upon commissioning.

14. We observe that the final cost of ₹13.46 crores submitted by the Petitioner includes all relevant components viz. hard cost, insurance, Interest During Construction (IDC), Incidental Expenditure During Construction (IEDC), and applicable taxes and duties—and remains within the earlier ceiling of ₹15.14 crore (out of which the base cost of Rs. 12.14 crores was accorded in-principle approval). The break-up of the actual cash expenditure, along with the phasing of the discharged liabilities submitted by the Petitioner, are as under:

DIL UNIT 2 - BREAK-UP OF CAPITAL COST OF DE-NOx SYSTEM

DIL Unit 2 - Break-up of Capital Cost of the De-NO_x System			
Particulars	Annotation	Unit 2	
		₹ Crores	₹ Crores/MW
Hard Capital Cost			
Equipment & Material supply	A	6.43	0.021
Initial Spares	B	0.28	0.001
Total Hard Capital Cost of De-NO_x System	**C = sum(A:B)**	**6.71**	**0.022**
Soft Capital Cost			
Cost for Dismantling, Removal, Installation, Erection, Commissioning, PG Test and Reliability Run Test - **Service Cost**	D	6.56	0.022
Engineering and Project Management cost	E	0.05	0.000
Total Base Capital Cost of De-NO_x System	**F = sum(C,D,E)**	**13.32**	**0.044**
Insurance	G	0.01	0.000
Incidental Expenses during Construction	H	0.04	0.000
IDC (@Rate of Interest 8.58%)	I	0.09	0.000
Total Soft Capital Cost of De-NO_x System	**J = sum(D,E,G,H,I)**	**6.75**	**0.023**
Total Capital Cost of De-NO_x System	**K = C+J**	**13.46**	**0.045**

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DIL UNIT 2 – PHASING OF ACTUAL CASH EXPENDITURE OF DE-NOx SYSTEM

Phasing of Actual Cash Expenditure of De-NO_x System - DIL Unit 2							
Particulars	Capital Cost (Acquisition Value)	Capitalized as on OD_e	Capitalized During Q3 FY 2023-24	Capitalized during Q4 FY 2023-24	Capitalized during Q1 FY 2024-25	Capitalized during Q2 FY 2024-25
Hard Capital Cost of De-NO_x System	6.71	4.42	0.86	0.89	0.02	0.52
Cost for Dismantling, Removal, Installation, Erection, Commissioning, PG Test and Reliability Run Test - **Service Cost**	6.56	3.05	0.73	1.82	0.23	0.72
Engineering and Project Management cost	0.05	0.04	-	0.00	-	-
Insurance	0.01	0.01	-	-	-	-
Incidental Expenses during Construction	0.04	0.04	-	-	-	-
IDC (@Rate of Interest 8.58%)	0.09	0.09	-	-	-	-
Total Capital Cost of De-NO_x System	**13.46**	**7.66**	**1.60**	**2.71**	**0.25**	**1.24**

15. We further observe that the Petitioner had submitted an auditor's certificate confirming that an amount of ₹13.37 crores was actually spent, on a cash basis, as of 30.09.2024. This expenditure relates to the supply, erection, and commissioning of the De-NOx system along with its auxiliaries for Unit-2 of the 2×300 MW Thermal Power Station operated by DIL. However, the Petitioner, in its tariff claim, has stated a slightly higher amount of ₹13.46 crores, along with the phasing details of the actual cash expenditure. This creates a difference of ₹0.09 crore between the audited figure and the amount claimed. On examining this difference, we note that this difference is on account of the inclusion of Interest During Construction (IDC) in the Petitioner's claim. The Petitioner has submitted that it has deployed internal accruals to fund the entire project cost towards the installation of the proposed De-NOx system and has, for the purpose of computation of IDC, considered 70% of deployed capital as a normative loan. Based on the weighted average rate of actual interest on outstanding loans of the Petitioner, which works out to 8.58% as on 01.04.2023, the Petitioner has claimed the IDC of Rs. 0.09 crore. Since the Petitioner has funded the entire cost towards installation of the proposed De-NOx system from internal accruals, the IDC claimed by the Petitioner is a notional IDC that has not been certified by the auditor. We note that there is no provision that allows for

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capitalisation of notional IDC in the proposed compensation mechanism in Petition Nos. 6/SM/2021 & 4/SM/2024, and this notional IDC component is disallowed. Accordingly, we approve ₹13.37 crores as the capital cost incurred on a cash basis towards the supply, erection, and commissioning of the De-NOx system and auxiliaries for Unit-2. This approved amount will be considered for tariff determination, subject to appropriate adjustment for the value of de-capitalized assets resulting from the replacement of old components.

16. Additionally, in compliance with the Commission's directive, the Petitioner has submitted the de-capitalized value of dismantled equipment using the methodology prescribed in Regulation 26(3) of the CERC Tariff Regulations, 2024. The Petitioner has submitted that it had undertaken the installation of a De-NOx system and its auxiliaries in Unit 2 of its generating station, which necessitated the dismantling of certain existing components. These components primarily consisted of various types of nozzle tips, such as coal nozzle tips, and other associated nozzles, that were originally supplied as part of the Boiler-Turbine-Generator (BTG) package during the unit's commissioning in 2014. Since the newly designed De-NOx system—procured through competitive bidding from GE Power India Ltd. (GEPIL)—was not compatible with the old nozzle tips, their removal became essential. As these dismantled items were part of the original BTG supply and not separately capitalized in the fixed asset register, the Petitioner did not have access to individual historical cost records. To overcome this, the Petitioner adopted a reasonable estimation approach in this regard. For coal nozzle tips, it refers to the unit price from a Purchase Order dated 3rd August 2022 for similar spares. For other types of nozzle tips, the Petitioner used the unit price as per the Purchase Order dated 27th July 2023, even though these were not identical to the old tips. These prices were used solely as

substitutes due to the absence of better cost references. To determine the historical cost as of August 2014 (the commissioning year), the Petitioner applied the de-escalation methodology as provided under Regulation 26(3) of the CERC Tariff Regulations, 2024. In line with the regulation, the replacement costs were de-escalated at a rate of 5% per annum up to the year of commissioning, with a floor limit of 10% of the replacement cost. This approach allowed the Petitioner to estimate a notional historical cost for the dismantled items in a consistent and regulatory-compliant manner. Following this, the Petitioner also calculated the net asset value of the dismantled equipment as of 30th November 2023 by applying the appropriate depreciation norms. The estimated historical costs were depreciated using straight-line depreciation or as per the useful life norms defined under the relevant CERC regulations. The resulting net asset values reflected the book value of the dismantled items at the time of their removal. The net asset value of the dismantled equipment as on 30.11.2023 i.e., the date of commissioning of the De-NOx system and the Auxiliaries in Unit 2 submitted by the Petitioner is as under:

NET ASSET VALUE OF DISMANTLED EQUIPMENT AS ON 30.11.2023

Net Asset Value of Dismantled Equipment		
Particulars	**UoM**	**Value**
Gross Asset Value of Dismantled Equipment as on 02.08.2014	₹ Crores	0.73
Applicable Rate of Depreciation (Asset Class: Plant & Machinery)	%	5.28%
No. of Years elapsed	No.	9.33
Accumulated Depreciation	₹ Crores	0.36
Net Asset Value of Dismantled Equipment as on 30.11.2023	**₹ Crores**	**0.37**

17. We have examined the submissions and noted that due to the installation of a De-NOx system, certain existing components originally supplied as part of the Boiler-Turbine-Generator (BTG) package during the commissioning of unit-2 in 2014, have been

dismantled. Since such dismantled items were part of the original BTG supply, the Petitioner was not able to ascertain the original gross value of individual items. However, for the purpose of the de-capitalized value of the dismantled items, the Petitioner has taken certain assumptions, such as referring to purchase orders for similar spares and considering the de-escalation methodology as provided under Regulation 26(3) of the CERC Tariff Regulations, 2024. The Petitioner has submitted the gross value of dismantled assets as Rs. 0.73 crore and net asset value as Rs. 0.37 crore.

18. As the Petitioner supplies power from Unit-2 through a Case-1 competitive bidding process, the actual capital cost incurred remains unknown, which presents a particular challenge/issue. Therefore, taking into consideration the consistent methodology followed by the Commission for the purpose of de-capitalisation, we are of the view that de-capitalisation of the dismantled assets should be carried out on a gross value basis in the instant case. Accordingly, the gross value of dismantled assets of Rs. 0.73 crore is to be adjusted against the capital cost of Unit 2, as part of the additional capitalization claimed for the installation of the De-NOx system. The Commission also directs the Petitioner to maintain detailed records and necessary supporting documentation for the de-capitalized assets.

19. Further, we have also examined the objections raised by the Respondent, TANGEDCO, regarding the alleged escalation of capital cost, the allocation of cost over the life of the De-NOx system beyond the PPA period, the lack of evidence on continuous system availability, and the risk of overlapping claims with another beneficiary (NPCL). However, these concerns are found to be unsubstantiated. It is clarified that the increase from ₹12.14 crores to ₹13.46 crores does not constitute an escalation but reflects the

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finalized actual cost, which includes all necessary components and remains within the approved ceiling. With regard to cost apportionment, it was affirmed that the Petitioner's claim is restricted solely to TANGEDCO's contracted 100 MW capacity and is limited to the PPA duration ending in 2028, even though the De-NOx system's useful life extends to 2049—consistent with the regulatory principles that allow cost recovery over the asset's life while restricting the actual compensation to the contractual scope. With regard to the Petitioner's concern about the lack of evidence on continuous system availability and the risk of overlapping claims with NPCL, the documents submitted by the Petitioner, including performance test results and real-time emission data filed with the Central Pollution Control Board (CPCB), are accepted as sufficient to establish compliance with emission norms. Further, as per the Order dated 13.8.2021 in Petition No. 06/SM/2021, the Commission has held that the availability of the Environmental Control System (ECS) need not be declared separately, and for the purpose of payment of the supplementary capacity charges, the availability declared by the thermal generating station shall be applicable to the ECS as well. On the issue of potential duplication of claims, we note that the Petitioner has already filed a separate Petition the Uttar Pradesh Electricity Regulatory Commission (UPERC) for NPCL's proportionate share. The Petitioner has also confirmed that the compensation sought in the present Petition is strictly limited to TANGEDCO's 100 MW allocation, thereby ruling out the possibility of duplicate recovery.

20. In view of the above, the Commission, approves the final capital cost of ₹13.37 crores for the installation of the De-NOx system and auxiliaries in Unit-2 of the Petitioner's thermal power plant, subject to adjustment for the gross asset value of Rs. 0.73 crore of the dismantled equipment. Accordingly, after deducting this amount, the Commission

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approves the net admissible capital cost of ₹12.64 crores for the purpose of determination of compensation under the 'Change in Law' provision of the PPA.

Operation & Maintenance Expenses

21. With respect to Operation & Maintenance (O&M) expenses, it is noted that the Commission, in Suo Motu Order dated 13.08.2021 in Petition No. 06/SM/2021, allowed O&M expenses at 2.5% of the additional capital cost (excluding IDC and FERV), with 3.5% annual escalation up to 31.03.2024. In the first year, it is allowed proportionately based on ECS operation, and the norms will be reviewed after 31.03.2024. The relevant extracts of the Suo Motu Order are as under:

> "......
> *44. Accordingly, the Commission is of the view that operation and maintenance expenses shall be allowed @2.5% (instead of 2% proposed in the draft Suo-Motu order) of the additional capital expenditure (ACEe) for installation of ECS (excluding IDC and FERV) as admitted by the Commission and to be escalated at the rate of 3.5% per annum for the period up to 31.03.2024 and, thereafter, the norms shall be reviewed based on available data. Till 31.03.2024, the additional O&M expenses (O&Me) shall be worked out as follows:*
>
> *First Year: 2.5% of ACEe excluding IDC and FERV (to be allowed proportionately if operation of ECS is for part of the year).*
>
> *Second Year onwards: 2.5% of ACEe escalated annually at the rate of 3.5%.*
> ...."

22. Subsequently, the Commission, in its Suo Motu Order dated 29.11.2024 in Petition No. 04/SM/2024, revised the recovery relating to O&M expenses, including depreciation, cost of debt and equity, and interim relief. With respect to O&M expenses, it had decided that, in the absence of actual O&M cost data, normative O&M expenses for the emission control systems (ECS) shall be allowed at 2% of the admitted capital cost (excluding IDC, IEDC, and FERV), with annual escalation at 5.25% up to 31.03.2029 or until revised based on the actual data. The Commission also directed that any income from the sale of gypsum

or other by-products must be deducted from such expenses and that generating companies must maintain ECS O&M costs separately and submit them to the Commission as and when required. The relevant extracts of the Suo Motu Order are as under:

".....

30. We have considered the suggestions of the stakeholders. We agree with the suggestions of the distribution licensees and the consumer groups that a lack of O&M data should not be detrimental to the beneficiaries. In the 2024 Tariff Regulations, the Commission has specified the norm of the O&M expenses of the emission control system as 2% of capital cost for the interim period till the norms are based on actual data.

31. Accordingly, the Commission is of the view that operation and maintenance expenses shall be allowed @2.0% of the additional capital expenditure (ACEe) for installation of ECS (excluding IDC, IEDC, and FERV) as admitted by the Commission and to be escalated at the rate of 5.25% per annum till 31st March 2029 or revision by the Commission based on availability of data, whichever is earlier. Till 31.03.2029, the additional O&M expenses (O&Me) shall be worked out as follows

First Year: 2.0% of ACEe excluding IDC, IEDC, and FERV (to be allowed proportionately if the operation of the ECS is for part of the year)

Second Year onwards: 2.0% of ACEe escalated annually at the rate of 5.25%. The additional O&M expenses payable shall be worked out by reducing the income generated from the sale of gypsum or other by-products from the operation and maintenance expenses.

44A. All generating companies are directed to maintain the operation & maintenance expenses of the emission control system separately and submit them to the Commission as and when directed."

23. In the present case, the Commission observes that the nature of the De-NOx installation in the present case involved only the replacement of the specific nozzle tips within the boiler system and did not involve the addition of standalone capital-intensive equipment like SCR or SNCR modules requiring continuous auxiliary operations or dedicated maintenance staff. As such, this activity does not give rise to incremental O&M requirements distinct from the station's regular O&M functions. It is noted that the Commission in Para 31 of Order dated 29.11.2024 in Petition No. 04/SM/2024, has laid

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down that the O&M expenses shall be allowed only in cases where actual ECS systems are installed and involve standalone capital equipment, with the norm being 2% of ACE (excluding IDC, IEDC, and FERV). Since the present installation involved no such capital equipment but merely the replacement of nozzle tips, the Commission is of the considered view that no O&M expenses are admissible for this activity. Accordingly, no separate provision towards O&M shall be allowed in the Supplementary Tariff computation in the present case.

Supplementary Tariff

24. The Petitioner has submitted that it has recalculated the Compensation/Supplementary Tariff for the De-NOx system in Unit 2 based on the norms specified in the Commission's Orders dated 13.08.2021 (Petition No. 06/SM/2021) and 29.11.2024 (Petition No. 04/SM/2024). As per the Petitioner, the revised calculation shows only a minimal change in the tariff.

25. The Commission has analysed the submissions of the parties and, based on the approved net admissible capital cost of ₹12.64 crores, the Supplementary Tariff for the De-NOx system in Unit 2 shall be calculated and recovered in accordance with the principles laid down in the Suo Motu Order dated 13.08.2021 in Petition No. 06/SM/2021 for the period from 13.11.2023 to 28.11.2024 and for the period 29.11.2024 onwards as per Suo Motu Order dated 29.11.2024 in Petition No. 04/SM/2024. Recovery of the Supplementary Tariff shall be limited to the contracted 100 MW with TANGEDCO and shall commence from 30.11.2023 through monthly energy bills, following the framework specified in the aforementioned Suo Motu Orders.

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Carrying Cost

26. As per the Petitioner, it is entitled to recover the carrying cost on the revenue gap arising from the delay between the operationalization of the De-NOx system in DIL Unit 2 on 30.11.2023 and the actual payment of compensation. Citing the Commission's Order dated 13.08.2021 (06/SM/2021), the Petitioner has highlighted that carrying cost is allowed under the principle of restitution, even if not expressly mentioned in the PPA, as upheld by the APTEL and the Hon'ble Supreme Court. Accordingly, the Petitioner has requested for compensation via Supplementary Tariff for the 100 MW contracted capacity, along with carrying cost at the applicable TANGEDCO PPA rate.

27. Articles 10.2, 10.3 and 10.5 of the PPA read as follows:

"10.2 Application and Principles for computing impact of Change in Law 10.2.1: While determining the consequence of Change in Law under this Article 10, the Parties shall have due regard to the principle that the purpose of compensating the Party affected by such Change in Law, is to restore through monthly Tariff Payment, to the extent contemplated in this Article 10, the affected Party to the same economic position as if such Change in Law has not occurred.

10.3. Relief for Change in Law

10.3.1. -----

10.3.2. During Operating Period: The compensation for any decrease in revenue or increase in expenses to the Seller shall be payable only if the decrease in revenue or increase in expenses of the Seller is in excess of an amount equivalent to 1% of the value of the standby Letter of Credit in aggregate for the relevant Contract Year.

10.3.3 For any claims made under Articles 10.3.1 and 10.3.2 above, the Seller shall provide to the Procurer(s) and the Appropriate Commission documentary proof of such increase/ decrease in cost of the Power Station or revenue/ expense for establishing the impact of such Change in Law.

10.3.4 The decision of the Appropriate Commission, with regards to the determination of the compensation mentioned above in Articles 10.3.1 and 10.3.2, and the date from which such compensation shall become effective, shall be final and binding on both the Parties subject to right of appeal provided under applicable Law.

....

10.5 Tariff Adjustment Payment on account of Change in Law

10.5.1 Subject to Article 10.2, the adjustment in monthly Tariff Payment shall be effective from:

(i) the date of adoption, promulgation, amendment, re-enactment or repeal of the Law or Change in Law; or

(ii) the date of order/ judgment of the Competent Court or tribunal or Indian Governmental Instrumentality, if the Change in Law is on account of a change in interpretation of Law.

10.5.2 The payment for Change in Law shall be through Supplementary Bill as mentioned in Article 8.8. However, in case of any change in Tariff by reason of Change in Law, as determined in accordance with this Agreement, the Monthly Invoice to be raised by the Seller after such change in Tariff shall appropriately reflect the changed Tariff."

28. Clause 10.3 of the PPA provides for a compensation methodology to be applied, if a Change in Law event results in an increase in capital cost during the operating period, e.g. the instant Change in Law event requiring the installation of a De-NOx system. Clause 10.3.4 of the PPA provides for the Commission to arrive at the compensation for any increase/ decrease in revenues or costs. Also, as per Clause 10.2 of the PPA, the purpose of compensating the Party affected by such Change in Law is to restore, through Monthly Tariff Payments, to the extent contemplated in this Article 10, the affected Party to the same economic position as if such Change in Law had not occurred.

29. As already stated, the Commission has issued Suo-Motu order in Petition No. 06/SM/2021 dated 13.8.2021, providing detailed compensation mechanism on account of Change in Law (for installation of ECS) during operation phase of thermal generating station, whose tariff is determined under Section 63 of the Act, wherein the Commission has already held the generating company's entitlement to the carrying cost in light of the restitutionary principle contained in the PPA. Accordingly, the Petitioner shall be entitled to carrying cost starting from 30.11.2023 (the system's operational date) till the date of

issuance of this Order, at the actual rate of interest paid by the Petitioner for arranging funds (supported by Auditor's Certificate) or the rate of interest on working capital as per the applicable Tariff Regulations prevailing at that time or the late payment surcharge rate as per the PPA, whichever is the lowest. Once a supplementary bill is raised by the Petitioner in terms of this order, the provision of a Late Payment Surcharge in the PPA would kick in if the payment is not made by the Respondents within the due date.

30. The summary of the Commission's decision is as follows:

a) The final capital cost of ₹13.37 crore for the installation of the De-NOx system and auxiliaries in Unit-2 is approved, subject to a downward adjustment of ₹0.73 crore towards the gross asset value of dismantled equipment. Accordingly, the net admissible capital cost for compensation under the 'Change in Law' provision is ₹12.64 crore.

b) No O&M expenses shall be admissible towards the De-NOx system installed, as it constitutes mere replacement of nozzle tips.

c) Based on the approved capital cost of ₹12.64 crore, the Supplementary Tariff for the De-NOx system in Unit 2 shall be calculated and recovered in accordance with the principles laid down in the Suo Motu Order dated 13.08.2021 in Petition No. 06/SM/2021 for the period from 13.11.2023 to 28.11.2024 and for the period 29.11.2024 onwards as per Suo Motu Order dated 29.11.2024 in Petition No. 04/SM/2024. The recovery will be limited to the contracted 100 MW with TANGEDCO and will begin on 30.11.2023 through monthly energy bills, following the specified framework.

d) The Petitioner is entitled to carrying cost in terms of the order dated 13.8.2021 in Petition No. 6/SM/2021.

e) The Petitioner shall maintain detailed records and documentation supporting the capital expenditure and the de-capitalized asset values.

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31. The Petitioner has submitted that it has filed a Petition before UPERC to determine the NPCL's share of costs for complying with environmental norms through the installation of the De-NOx system. Accordingly, a copy of this order should be sent to the UPERC for its information and record.

32. With regard to the contention of the Petitioner that the Order dated 13.8.2021 in Petition No. 06/SM/2021 has been challenged by the Association of Power Producers (APP) before the Appellate Tribunal for Electricity (Appeal No. 306 of 2021), and the matter is currently pending. Accordingly, the Petitioner sought permission to amend the Petition, if required. The Petitioner is always free to approach the Commission in accordance with the law. Therefore, no specific direction is required in this regard.

33. Petition No. 263/MP/2024 is disposed of in terms of the above.

Sd/-	**sd/-**	**sd/-**	**sd/-**
(Ravinder Singh Dhillon)	**(Harish Dudani)**	**(Ramesh Babu V)**	**(Jishnu Barua)**
Member	**Member**	**Member**	**Chairperson**

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Annexure A-2: Copy of the Order dated 20.08.2025 passed by this Hon'ble Commission in Petition No. 2130 of 2024

Dhariwal Infrastructure Limited
Kolkata

THE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION

LUCKNOW

Petition No. 2130 of 2024

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QUORUM

Hon'ble Shri Arvind Kumar, Chairman

Hon'ble Shri Sanjay Kumar Singh, Member

IN THE MATTER OF

Petition under Regulation 20(2)(ii) of the UPERC (Terms and Conditions for Generation Tariff) Regulations, 2019 read with Article 13 of the long-term Power Purchase Agreement dated 26.09.2014 entered into between the Petitioner and the Respondent, Noida Power Company Limited, seeking an approval of the additional Capital Expenditure incurred on account of installation of De-NOx System for Unit 2 necessitated by a 'Change in Law' event i.e. Environment (Protection) Amendment Rules, 2015 dated 07.12.2015, Environment (Protection) Amendment Rules, 2018 dated 28.06.2018, Environment (Protection) Amendment Rules, 2020, and Environment (Protection) Amendment Rules, 2021 and Environment (Protection) Amendment Rules, 2022 issued by the Ministry of Environment, Forest and Climate Change read with the letter dated 01.10.2021 issued by Maharashtra Pollution Control Board and the approval of the incremental Tariff on account of the above.

AND

IN THE MATTER OF

Dhariwal Infrastructure Ltd. (DIL)

CESC House, Chowringhee Square, Kolkata – 700001, West Bengal

.... Petitioner

VERSUS

Noida Power Company Ltd. (NPCL)

Electric Sub-station, Knowledge Park-IV, Gr. Noida, Gautam Buddha Nagar, Uttar Pradesh, Pin- 201301 **........ Respondent**

Dhariwal Infrastructure Limited Kolkata

Uttar Pradesh Electricity Regulatory Commission

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THE FOLLOWING WERE PRESENT

1. Ms. Shikha Ohri, Advocate, DIL
2. Sh. Shubhayu Sanyan, Representative, DIL
3. Sh. Akash Chatterjee, Executive, DIL
4. Ms. Srishti Rai, Advocate, NPCL

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ORDER

(DATE OF HEARING: 22.07.2025)

1. The Petitioner, Dhariwai Infrastructure Limited, has filed the instant Petition for approval of the estimated additional Capital Expenditure to be incurred on account of the installation of NOx Abatement (De-NOx) system for Unit 2 of the Petitioner's 2 x 300 MW Coal-based generating station necessitated by Change-in-Law event, i.e. Environment (Protection) Amendment Rules, 2015 dated 07.12.2015, Environment (Protection) Amendment Rules, 2018 dated 28.06.2018, Environment (Protection) Amendment Rules, 2020 dated 19.10.2020 and Environment (Protection) Amendment Rules, 2021 dated 31.03.2021 issued by the Ministry of Environment, Forest and Climate Change (MoEFC) read with the letter dated 01.10.2021 issued by the Maharashtra Pollution Control Board (MPCB).

2. The Petitioner has made the following prayers:

   a) Admit the instant Petition;

   b) Declare that the Amendment Rules vide MoEFCC Notifications dated 07.12.2015, 28.06.2018, 19.10.2020, 31.03.2021 and 05.09.2022 read with the MPCB Letter dated 01.10.2021 qualify as a 'Change in Law' event for Unit 2 of the Petitioner's Project in terms of Article 13 of the NPCL PPA;

   c) Approve the Capital Cost of ₹ 13.46 Crores for installation of the Combustion Modification/Process including modification of existing burners to Low-NOx design, adoption of new Separated Over Fire Air system with its nozzles, dampers and actuators and Low Excess Air Firing for 300 MW Unit 2 of the Generating Station for meeting the revised emission norms in respect of NOx as per the Amendment Rules under Regulation 20(2)(ii) of Generation Tariff Regulations 2019;

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d) Approve the incremental Tariff for the supply of 187 MW Gross Contracted Capacity to the Respondent/NPCL for FY 2023-24 based on the approved Capital Cost of De-NOx system in terms of the provisions of the Generation Tariff Regulations 2019;

e) Direct the Respondent to make payments towards the invoice(s) for Supplementary Capacity Charges to be raised subsequently for recovery of the approved incremental Tariff for FY 2023-24 as determined by this Hon'ble Commission towards installation of De-NOx system and the Auxiliaries in DIL Unit 2 for supply of 187 MW Gross Contracted Capacity to the Respondent along with applicable Carrying Cost as per the provisions of Generations Tariff Regulations 2019;

f) The Petitioner seeks liberty of the Commission to submit further information in case it is so directed by the Commission;

g) Condone any inadvertent omissions/errors/rounding-off differences/shortcomings and permit the Petitioner to add/alter this filing and make further submissions as may be required in future; and

h) Pass such other Order/s, as the Commission may deem fit and proper, keeping in view the facts and circumstances of the case.

Background as submitted by Petitioner:

3. The Petitioner has developed 2 X 300 MW coal fired thermal generating station at Tadali, Chandrapur in the state of Maharashtra. On 26.09.2014, the Petitioner had signed PPA with the Respondent for the supply of 187 MW Gross Contracted Capacity from 300 MW Unit (2) of its Project. The said PPA was approved by the Commission vide its order dated 20.04.2016 in Petition No. 971 of 2014 read with order dated 15.01.2016. The Petitioner had also executed a long-term PPA dated 27.11.2013 read with its Addendum No.1 dated 20.12.2013 with TNPDCL (erstwhile TANGEDCO) for the supply of 100 MW Net Contracted Capacity from Unit (2) of its Project. The TNPDCL PPA was executed under the Case-1 bidding process, in terms of Section 63 of the Electricity Act and was approved by the Tamil Nadu Electricity Regulatory Commission (TNERC).

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4. On 07.12.2015, the MoEFCC notified the Environment (Protection) Amendment Rules, 2015. The said Amendment Rules were further amended from time to time. Subsequently, on 19.10.2020, the MoEFCC had issued the Amendment Rules 2020, thereby revising the standards for emission of NOx from 300 mg/Nm^3 to 450 mg/Nm^3 for thermal power plants installed after 01.01.2003 and upto 31.12.2016. Accordingly, the applicable standard for NOx reduction for Unit 2 of the Petitioner's Project, having commissioned on 02.08.2014, is 450 mg/Nm3 as per the Amendment Rules 2020.

5. Thereafter, MoEFCC issued the Amendment Rules 2021 on 31.03.2021 thereby amending the timeline for compliance with the revised norms, including, the above norm for NOx abatement. As per the categorization by the task force, constituted under these Rules, the Petitioner's Project was classified under 'Category B' and accordingly, the timeline for meeting the emission standards by the Petitioner was revised to 31.12.2023. The plant and machinery erected by the Petitioner at the Generating Station including Unit 2, were not equipped to meet the new norm of NOx emission notified through the Amendment Rules, 2020, and thus obligating the Petitioner to implement the requisite De-NOx technology.

6. The Petitioner, in terms of Article 13 of the PPA, is entitled to be compensated on account of occurrence of 'Change in Law' events thereby resulting into any additional recurring/non-recurring expenditure by the seller w.e.f. the Cut-off Date (for Change in Law events), i.e., 26.10.2015 as approved by the Commission vide its Order dated 29.05.2020 in Petition No. 1440 of 2019. The relevant extract of the Order dated 29.05.2020 is reproduced herein below:

> *"33 The variable cost in Tariff is impacted by various 'Change in Law' event over the period of PPA and assumptions/principles as on cut-off date may not hold good. In view of the Petitioner's submissions dated 26.10.2015, vide which the details of tariff with all assumptions based on the then prevalent price of coal were submitted, it would be reasonable and proper to glue the Petitioner to the proposal made on the basis of assumptions valid as on such date, i.e. 26.10.2015. Therefore, we are inclined to accept 26.10.2015 as the cut-off date for the purposes of determining Change in Law events in the instant case."*

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7. The Ministry of Power (MoP) issued a direction to the Central Commission vide communication dated 30.05.2018, stating that the Amendment Rules, 2015 qualify as an event under 'Change in Law' in respect of PPAs under both, Section 62 as well as Section 63 of the Electricity Act, between generating companies and distribution licensees and the cost implications due to installation of the ECS and its operational cost to meet the new environment norms would be considered for pass through in tariff by the Appropriate Commission. The relevant portion of MoP directions is as follows:

> "........
>
> *5.1 The MoEFCC Notification requiring compliance of Environment (Protection) Amendment Rules, 2015 dated 7th December, 2015 is of the nature of Change in Law event except in following cases:*
>
> *a) Power Purchase Agreements of such TPPs whose tariff is determined under Section 63 of the Electricity Act, 2003 having bid deadline on or after 7th December, 2015; or*
>
> *b) TPPs where such requirement of pollutions control system was mandated under the environment clearance of the plant or envisaged otherwise before the notification of amendment rules;*
>
> *5.2 The additional cost implication due to installation or up-gradation of various emission control systems and its operational cost to meet the new environment norms, after award of bid or signing of PPA as the case may be, shall be considered for being made pass through in tariff by Commission in accordance with the law.*
>
> ....
>
> *5.4 For the TPPs that are under the purview of the Central Commission, the Commission shall develop appropriate regulatory mechanism to address the impact on tariff, and certainty in cost recovery on account of additional capital and operational cost, under concluded long term and medium term PPAs for this purpose*
>
> ...."

8. The Petitioner had, vide its Letter Ref No. DIL/GM-Coord/NPCL/1349 dated 13.08.2020, duly served the 'Change in Law' Notice on the Respondent regarding the

developments pertaining to the notification of the Amendment Rules which *inter-alia* qualifies as a 'Change in Law' event and also meets the threshold stipulated under Article 13 of the NPCL PPA.

9. The Petitioner had earlier approached CERC vide Petition No. 261/MP/2022 for grant of in-principle approval of the estimated Capital Cost of installation of De-NOx system and Auxiliaries in Unit 2 for the purpose of determination of Supplementary Tariff for recovery from TNPDCL owing to supply of 100 MW Net Contracted Capacity in terms of Section 63 of the Electricity Act under Case-1 long-term PPA from DIL Unit 2. CERC vide its Order dated 08.01.2024 in the said Petition acknowledged the promulgation of Amendment Rules 2015 along with all subsequent amendments read with the MPCB letter dated 01.10.2021 as a 'Change in Law' event in accordance with terms of the TNPDCL PPA and granted its approval for installation of the De-NOx system in Unit 2 of the Petitioner's Generating Station. The approval of Capital Cost and determination of Compensation/Supplementary Tariff for the De-NOx system and the Auxiliaries installed in Unit (2) corresponding to 100 MW Net Contracted Capacity for supply of power to Tamil Nadu Power Distribution Corporation Limited (TNPDCL) is currently pending before CERC.

10. The Petitioner had also filed Petition No. 1830 of 2022 for approval of the estimated Capital Expenditure, i.e. ₹ 17.72 Crores, towards installation of De-NO_x system for Unit (2) based on the estimates provided by the competent agency through a Feasibility Study Report. Subsequently, the Petitioner vide IA dt. 03.09.2024 withdrew Petition No. 1830 of 2022, since it has already incurred the capital expenditure towards the installation of De-NOx system and has filed instant Petition before the Commission for approval of the same.

11. The Petitioner has commissioned the De-NO_x system and the Auxiliaries in Unit (2) of its Project on 30.11.2023 and has already incurred the capital expenditure towards the same, except for some minor balance liabilities which are expected to be discharged by 30.09.2024.

12. Tata Consulting Engineers Limited (TCE) was engaged in August 2021 for the study and identification of technologies available for NOx abatement systems to provide

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comprehensive optimal solutions to comply with the new NOx emission limits. TCE compared available technologies, which are broadly grouped as Combustion Modification/Process and post Combustion Modification/Process as follows:

A. Combustion Modification/Process Control
   a. Low NOx Burners (LNB)
   b. Over Fire Air (OFA)
   c. Low Excess Air Firing

B. Post Combustion Control
   a. Selective Catalytic Reduction (SCR)
   b. Selective Non-Catalytic Reduction (SNCR)
   c. Hybrid SCR-SNCR

13. TCE recommended combustion modification including modification of existing burners to low NOx design, adoption of new Separated Over Fire Air (SOFA) system with its nozzles, dampers and actuators and Low Excess Air (LEA) firing as the most suitable technology at optimal cost for NOx emission control.

14. The proposal for the adoption of Combustion Modification/Process for NOx abatement was made to CEA for its approval on 3.9.2021, CEA vide its letter dated 22.09.2021 approved the technology to be adopted by the Petitioner for NOx abatement and further advised the Petitioner to approach the Appropriate Commission for further course of action.

15. Pursuant to CEA's recommendation dated 22.09.2021, the Petitioner floated the NIT dated 15.10.2022 for supply of De-NOx system and Auxiliaries under the International Competitive Bidding (ICB) mode. The details of the bidders participated in the bidding and their price bids have been reproduced herein below:

Table 1: Price Bids Submitted by the Bidders

Name of Bidder	Initial Bid Price Incl. Tax (₹/Cr.)	Revised Bid Price Incl. Tax (₹/Cr.)	Loading on Bids (₹/Cr.)	Final Price Incl. loading (₹/Cr.)	Remarks on Loading on Bids
GEPIL	15.86	14.69	-	14.69	-

LMB	15.01	Not Revised	1.27	16.28	Loading on account of deviation in delivery schedule
SEC	USD 3993693 Conversion rate as on 20.12.2022 1 USD = ₹ 82.7902)	Not Revised	12.40	45.46	Loading on account of deviation in delivery schedule and considering custom duties and inland transport charges

16. GE Power India Limited (GEPIL) emerged as the L1 bidder with a quoted price of ₹ 14.69 Crores. After the negotiation process, the Petitioner on 15.05.2023 issued the LOI to GEPIL for the supply of De-NOx System and Auxiliaries at ₹ 13.34 Crores (including delivery charges, transit insurance charges, all applicable taxes, duties and other levies including GST prevailing as on to the date of issuing the LOI) for the Generating Station including Unit 1 and Unit 2. The final capital cost of the De-NO_x system along with the Auxiliaries in Unit 2, works out to ₹ 13.46 Crores including Initial Spares, applicable Taxes and Duties, IDC and IEDC. The detailed break-up of the final capital cost has been shown in the following Table:

Table 2: Detailed break-up of the Final Capital Cost

DIL Unit 2- Break-up of Capital Cost of the De-Nox System			
Particulars	**Annotation**	**Unit 2**	
		₹Crores	**₹Crores/MW**
Hard Capital Cost			
Equipment & Material supply	A	6.43	0.021
Initial Spares	B	0.28	0.001
Total Hard Capital Cost of De-Nox System	**C=sum (A:B)**	**6.71**	**0.022**
Soft Capital Cost			
Cost for Dismantling, Removal, Installation, Erection, Commissioning, PG Test and Reliability Run Test-**Service Cost**	D	6.56	0.022
Engineering and Project Management cost	E	0.05	0.000
Total Base Capital Cost of De-Nox System	**F=sum (C,D,E)**	**13.32**	**0.044**
Insurance	G	0.01	0.000
Incidental Expenses during Construction	H	0.04	0.000
IDC (@Rate of Interest 8.58%)	I	0.09	0.000
Total Soft Capital Cost of De-Nox System	**J=sum (D,E,G,H,I)**	**6.75**	**0.023**
Total Capital Cost of De-Nox System	**K=C+J**	**13.46**	**0.045**

17. Petitioner has deployed internal accruals to fund the entire project cost towards installation of the De-NO_x system and considered the normative Debt: Equity ratio of 70:30 for computation of the incremental Fixed Charges for FY 2023-24. The Petitioner requests the Commission to consider such expenditure for approval under Regulation

20(2)(ii) of Generation Tariff Regulations 2019 and grant consequential increase in tariff to be recovered from the Respondent through monthly invoices.

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Record of Proceedings

18. During the hearing dated 12.11.2024, the Commission admitted the Petition and directed the parties to submit reply and rejoinder. NPCL vide affidavit dated 21.02.2025 filed its reply. During the hearing dated 25.02.2025, the Commission directed the Petitioner to submit status of NOx emission levels pre and post installation of the De-NOx system. Petitioner vide affidavit dated 02.04.2025 filed its rejoinder against the Petitioner's reply dated 21.02.2025 and submitted its response to the queries raised by the Commission vide its RoP Order dated 04.03.2025.

19. During the hearing dated 22.04.2025, the Commission directed the petitioner to submit certification / validation of NOx emission levels by CPCB and also to clarify regarding NOx emission values exceeding the prescribed limit of 450 mg/Nm3 during January 2024 and October 2024. The Petitioner submitted its response on 09.06.2025. During the hearing dated 22.07.2025, counsel for the Petitioner informed the Commission that CERC had reserved the order on 28.04.2025 in the matter related to approval of final capital cost for the De-NOx system in Unit 2 corresponding to power supplied to TNPDCL. The Commission heard the parties, concluded the hearing and reserved its order.

Reply of NPCL

20. On 21.02.2025, NPCL filed its reply and mainly submitted as under:

    a) The Petitioner has relied upon the MoP letter dated 30.05.2018 to support its 'Change in Law' claims qua the Amendment Rules. However, the Petitioner falls under the exception contained in the above-mentioned letter of the MoP dated 30.05.2018, since the requirement of installation of ECS was envisaged under the EC granted to it on 04.12.2009 i.e., prior to the notification of the Amendment Rules. As per the conditions laid in the EC dated 04.12.2009, it appears that DIL was required to make provisions for ECS in its capital cost and regularly monitor the critical emissions, such as SO2, NOx, PM, Hg etc. Accordingly, DIL is required

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to explain that prior to notification of the Amendment Rules, there was no requirement for installation of the ECS, including the De-Nox system.

b) DIL has relied upon the CERC's Order dated 08.01.2024 in Petition no. 261/MP/2022 qua TNPDCL PPA, wherein the CERC held that the Amendment Rules qualify as a 'Change in Law' event under the TNPDCL PPA and granted in-principle approval to the base capital cost of De-NOx System of Rs. 12.14 Crore. However, in the instant Petition, DIL has sought approval of the Rs. 13.46 Crores. In view of the same, DIL is required to explain with respect to the following:

   i. The reasons for the increase in total hard capital cost of De-NOx system from the projected cost provisionally approved by the CERC along with Justification and supporting documents thereof;

   ii. Details of de-capitalized value of the dismantled equipment(s) for the installation of DE-NOx system and the Auxiliaries in Unit 2 of the generating station;

   iii. The copy of PG test report of the De-NOx system and relevant data showing emission norms achieved in respect of the subject installation of De-NOx system and the Auxiliaries in compliance with notifications issued by MoEFCC;

   iv. Summary of the data submitted to Central Pollution Control Board (CPCB) for the years 2020-21, 2021-22 and 2022-23, also providing for the number of times NOx value exceeded 450mg/Nm^3 limit on an average data of fifteen (15) minutes along with total percentage (%) NOx value exceeding 450 mg/Nm3 limit on an average data of fifteen (15) minutes.

c) DIL is required to confirm that there is no overlap or duplication in the determination of compensation under the 'Change in Law' events, particularly between the supply of 100 MW Net Contracted Capacity to TNPDCL under the TNPDCL PPA and the supply of 187 MW Gross Contracted Capacity to the Respondent/NPCL under the NPCL PPA, or any other distribution company.

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Rejoinder of DIL

21. On 02.04.2025, DIL filed its rejoinder and submitted as under:

a) The contentions of NPCL are based on an incorrect interpretation of the EC conditions. The Petitioner has submitted that in terms of EC dated 4.12.2009, the allocated fund was limited to 275-meter-high Bi-flue stacks with an online emission monitoring system, High Efficiency Electrostatic Precipitators, dry ash handling systems for fly ash with silos, ash-ponds for unutilized fly ash, dust extraction and suppression system, sewage treatment, Green Belt development, closed cycle cooling systems with cooling towers, etc. The Petitioner does not fall under the exception contained in the MoP letter dated 30.05.2018, as there was no mandate/requirement of installation of the De-NOx System under the EC granted to the Petitioner.

b) With regard to increase for hard cost of De-NOx system, DIL submitted that the CERC vide its Order dated 08.01.2024 had granted an in-principle approval to the provisional Base Capital Cost of ₹ 12.14 Crores, which was exclusive of the taxes and duties of approximately Rs. 2.08 Croes and allowed the Petitioner to claim the Taxes and Duties after the installation of the De-NO_x system.

c) Regarding De-capitalized value of dismantled items, DIL submitted that the net asset value of the dismantled equipment as on 30.11.2023, i.e., the date of commissioning of the De-NO_x system and the Auxiliaries in Unit 2, was Rs. 0.37 Crores.

d) PG Test of Unit 2 for commissioning of De-NOx system and the Auxiliaries has been conducted by GEPIL, wherein the NOx emission values have been demonstrated against the guaranteed values under the work contract. DIL submitted the copy of the PG Test Report as submitted by GEPIL.

e) Regarding data pertaining to NOx Emission Level of DIL Unit 2, DIL submitted that the real time NOx emission data of Unit 2 are transmitted to the CPCB and submitted NOx emissions levels of the past 3 years are as below:

2020-21, 2021-22 and 2022-23	Total No. of times NO_x value exceeded 450 mg/Nm^3 limit on 15 min average data
<450	52494
>450	36357
Total	88851
2020-21, 2021-22 and 2022-23	**Total % NO_x value exceeded 450 mg/Nm^3 limit on 15 min average data**
<450	59%
>450	41%

f) DIL submitted following data pertaining to NOx Emission level of DIL Unit 2 – Pre & Post-Commissioning of De-NOx System:

DIL Unit 2 -Nox emission (mg/Nm3) for the period					
October 2022 to September 2023 (pre-installation			January 2024 to December 2024 (Post installation)		
Month	Max	Min	Month	Max	Min
Oct-22	1033	221	**Jan-24**	640	200
Nov-22	1034	203	**Feb-24**	411	200
Dec-22	1017	213	**Mar-24**	428	204
Jan-23	1007	215	**Apr-24**	409	201
Feb-23	1058	203	**May-24**	421	200
Mar-23	1124	204	**Jun-24**	380	201
Apr-23	1040	209	**July-24**	393	200
May-23	1096	211	**Aug-24**	393	200
June-23	1036	209	**Sep-24**	412	201
July-23	1013	202	**Oct-24**	457	200
Aug-23	946	223	**Nov-24**	393	201
Sep-23	984	224	**Dec-24**	436	200
Note: 1. *12 blocks (each of 15 minutes duration) in Jan-2024 have NOx emission values >450 mg/Nm3, as operation tuning for De-NOx System was being carried out.* 2. *The above monthly maximum and minimum NOx emission values exclude periods of unit shutdown and instrument calibration.*					

Additional Submission of DIL

22. On 09.06.2025, DIL made following submissions in response to the queries raised by the Commission in its Order dated 25.04.2025:

a) In response to the Petitioner's request regarding validation of the data of the NOx emissions levels, CPCB, vide its e-mail dated 16.05.2025, intimated that the data were available in the public domain. The Petitioner has downloaded month wise NOx emissions data for unit 2 for the same periods pre and post installation of De-NOx system from CPCB RTDMS website. The data available in the CPCB website are in the form of graphical representation and not in quantitative form.

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b) With regard to NOx Emission values exceeding the prescribed levels during January, 2024 and October, 2024, DIL submitted following reasons for deviation:

i. The De-Nox system was commissioned on 30.11.2023 and the commissioning team were conducting tuning activities in various load ranges post commissioning to test the operational performance of the newly installed De-Nox System. An excursion of NOx emission during January, 2024 on account of such activities cannot be ruled out.

ii. Deviation in NOx Emission Level during October 2024 was on account of a technical glitch which was immediately attended and the system was restored to normal maintenance team.

Commission's Analysis and Decision:

23. The Petitioner had earlier filed a Petition bearing Petition No. 1830 of 2022 for approval of the estimated additional capital expenditure towards the installation of the De-NOx System in Unit-2 of the Petitioner's generating station to comply with the revised Environment (Protection) Amendment Rules issued by MoEFCC in respect of NOx. The Commission had kept the matter in abeyance, since the judgement in a related matter was pending before the Hon'ble Supreme Court, while granting liberty to the parties to approach the Commission after Judgement in the related matter by Hon'ble Supreme Court. Subsequently, the Petitioner filed an IA in the matter to withdraw the Petition No. 1830 of 2022 pending before the Commission since it had already incurred the capital expenditure towards the installation of De-NOx system. The Commission had permitted the Petitioner to withdraw the Petition No. 1830 of 2022. The present Petition has been filed for approval of capital cost and tariff determination.

24. The instant petition is for approval of additional capital expenditure (ACE) towards the installation of the De-Nox system in unit-2 of the petition's generating station to meet the revised norms issued by MoEFCC in respect of NOx. The revised NOX emission norm as per the MoEFCC Notification dated 19.10.20 is 450 mg/Nm^3 for thermal power plants installed during the period 01.01.2003 to 31.12.2016. The Unit-2 of the Petitioner's generating station was put into commercial operation on 02.08.2014, accordingly, the revised norm in case of Unit-2 of the petitioner has to be 450 mg/Nm^3.

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The Petitioner has submitted that Unit-2 of its generating stations does not meet this norm, hence necessitates installation of the De-NOX system to meet the revised ECNs. Accordingly, ACE towards the installation of the DE-NOX system is claimed in the instant petition.

25. NPCL has contended that the MoEFCC notification dated 7.12.2015 is not applicable in the case of petitioner in view of the MOP letter dated 30.5.2018. NPCL has submitted that as per the MOP's letter thermal power projects, which were mandated to provide for environment protection measures under the EC issued before the MoEFCC notification dated 7.12.2015, cannot claim any relief under the 'Change in Law'. NPCL has also contended that EC was granted to the petitioner before the issue of the MoEFCC notification dated 7.12.2015 i.e. on 4.12.2009, as per which the petitioner's was required to include the cost of the pollution control measures in the project cost at the time of bidding. The petitioner cannot claim the same as ACE subsequently under change in law.

26. In response, the petitioner has submitted that it does not fall under paragraph 5.1.(b) of the MOP's letter dated 30.5.2018 as the FGD/De-NOx system was not specified in the EC and no fund was earmarked for the installation of the same. The petitioner has submitted that in terms of EC dated 4.12.09, the allocated fund was limited to 275-meter-high Bi-flue stacks with an online emission monitoring system, high efficiency electrostatic precipitators, dry ash handlining system for fly ash with silos, ash-ponds for unutilised fly ash, dust extraction and suppression system, sewage treatment, green belt development, closed cycle cooling stems with cooling towers, etc. and same cannot be considered for the measures related to revised ECNs.

27. The Commission observed that the Petitioner is supplying 187 MW to NPCL and 100 MW to TNPDCL from Unit-2 of its generating station. The Petitioner had filed the Petition No. 261/MP/2022 before the CERC for approval of estimated cost for installation of the De-NOx system in Unit 2 of the Petitioner's Generating Station. CERC vide its Order dated 08.01.2024 in the said Petition made following observations regarding installation of the De-NOx System at the time of availing of the EC in the year 2009:

"24. TANGEDCO's contention is that the EC was issued to the Petitioner by MoEFCC before the issue of revised ECNs, and the EC includes the pollution control system. Therefore, the Petitioner's proposal to install De-NOx in Unit-2 of its generating station to meet the revised ECNs cannot be considered a 'Change in Law' event. According to the Petitioner, the EC issued to the Petitioner specified certain pollution control systems, but it does not include the De-NOx system, which has been proposed by the Petitioner in the instant petition. It is observed that the EC was issued to the Petitioner on 4.12.2009, and according to it, the Petitioner is required to provide funds to meet the expenditure towards the pollution control systems mentioned in the EC. The MoEFCC Notification revising the NOx emission norms was issued much later, on 7.12.2015. Further, the Petitioner is required to provide funds for certain pollution control systems mentioned in the EC, and it does not include the De-NOx systems. Therefore, we are of the view that the Petitioner could not have envisaged the installation of De-NOx systems at the time of availing of the EC in 2009 and, accordingly, could not have provided funds for the same. Therefore, we are not able to agree with TANGEDCO's contention that the De-NOx proposed by the Petitioner is included in the pollution control systems specified in the EC issued to the Petitioner by the Pollution Control Board. Accordingly, TANGEDCO's contention that, as per the EC, the Petitioner was required to provide funds to install the De-NOx systems does not hold good, and accordingly, it is rejected."

28. Considering the above discussion, the Commission is of the view that NPCL has misinterpreted the conditions laid in the EC dated 4.12.2009 granted to DIL and DIL does not fall under the exception contained in the MoP letter dated 30.05.2018, as there was no requirement of installation of the De-NOx System under the EC granted to the Petitioner, hence the petitioner is entitled to claim expenditure incurred towards installation of De-NOx System under UPERC Generation Tariff Regulations, 2019.

29. Petitioner has approached CERC on 27.06.2024 for approval of the final Capital Cost of De-NO_x system and the Auxiliaries of Unit 2 and determination of Compensation/Supplementary Tariff for the supply of 100 MW power to TNPDCL, in terms of the Order dated 08.01.2024 passed by the CERC. The above Petition is pending before CERC. The Petitioner is, by way of the present Petition, only seeking

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the approval of the Commission on the final Capital Cost of De-NO_x system and the Auxiliaries of Unit 2 as additional capitalization on account of 'Change in Law' event and the determination of the incremental Tariff for FY 2023-24 in terms of Generation Tariff Regulations 2019 for recovery thereto as supplementary Capacity Charges for supply of 187 MW Gross Contracted Capacity to the Respondent. The incremental annual fixed charges as claimed by the Petitioner are as follows:

Table 3: Summary of Incremental Annual Fixed Charges for De-NO_x System of Unit 2 for FY 2023-24

Summary of Incremental Annual Fixed Charges on account of De-NO_x system for supply to NPCL during FY 2023-24 – Unit 2		
Particulars	**UoM**	**FY 2023-24**
Depreciation	₹ Crores	0.19
Interest on Loan	₹ Crores	0.20
Return on Equity	₹ Crores	0.15
Normative O&M Expenses	₹ Crores	0.05
Interest on Working Capital	₹ Crores	0.01
Total Incremental Annual Fixed Charges – Unit2	**₹ Crores**	**0.60**
Installed Capacity of Unit – 2	MW	300
Operationalized Gross Contracted Capacity	MW	187
Incremental Annual Fixed Charges for supply to NPCL	**₹ Crores**	**0.37**
Ex-bus Generation at NAPLF 85%	Mus	429.34
Ex-bus Incremental Fixed Charge Rate	**₹ kWh**	**0.009**

30. The timelines for commissioning of De-NOx system for Unit (2) of the Petitioner's Generating Station, for the purpose of compliance with the prescribed NO_x emission limits as per the Amendment Rules read with MPCB letter dated 01.10.2021, was 31.12.2023. In compliance to the above, the Petitioner had, on 30.11.2023, commissioned the De-NO_x system and the Auxiliaries in Unit 2. Therefore, the Petitioner has requested the Commission to consider 30.11.2023 as the Date of Operation (OD_e) for the De-NO_x system and its Auxiliaries.

31. The Petitioner has capitalized ₹ 12.22 Crores in FY 2023-24 out of the total Capital Cost of ₹ 13.46 Crores and the balance ₹ 1.24 Crores was carried forward to FY 2024-25 as undischarged liabilities to be capitalized within Q2 FY 2024-25. The Petitioner has discharged the liabilities in Q2 FY 2024-25. Petitioner has submitted a copy of the Auditors' Certificate certifying the actual cash expenditure towards the De-NO_x system and the Auxiliaries in Q2 of FY 2024-25.

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32. The Commission has noted that CERC has reserved its order on 28.04.2025 in the matter related to the approval of final capital cost for the De-NOx system in Unit (2) corresponding to power supplied to TNPDCL, as informed by the counsel for the Petitioner during the hearing held on 22.07.2025. The Petitioner has filed a True-up Petition for the period 2019-24 before the Commission.

33. Therefore, in view of above, the Commission has decided to carry out truing-up exercise taking into account CERC approved cost of the De-NOx System under applicable provisions for additional capitalization during FY 2023-24, in terms of UPERC Generation Tariff Regulations, 2019. Further, the petitioner is directed to file an additional affidavit along with the tariff impact of the proportionate cost for the De-NOx system allocated to NPCL as per CERC order, as and when it is issued.

The Petition No. 2130 of 2024 is disposed of with the above directions.

(Sanjay Kumar Singh)
Member

(Arvind Kumar)
Chairman

Place: Lucknow
Dated: 20 .08.2025

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