CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 647/GT/2025

Coram:

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

Date of Order: 19th October, 2026

In the matter of:

Petition for determination of the tariff of Singrauli Super Thermal Power Station (2000 MW) for the period 2024-29.

And

In the matter of:

NTPC Limited,
NTPC Bhawan, Core – 7, Scope Complex, 7, Institutional Area,
Lodhi Road, New Delhi – 110 003 …**Petitioner**

Vs.

1. Uttar Pradesh Power Corporation Limited,
Shakti Bhawan, 14, Ashok Marg, Lucknow – 226 001

2. Rajasthan Urja Vikas Nigam Limited,
Vidyut Bhawan, Janpath, Jaipur – 302 005

3. Tata Power Delhi Distribution Limited,
Grid Substation, Hudson Road, Kingsway Camp, Delhi – 110 009

4. BSES Rajdhani Power Limited,
2nd Floor, B-Block, BSES Bhawan, Nehru Place, New Delhi – 110 019

5. BSES Yamuna Power Limited,
Shakti Kiran Building, Karkardooma, Delhi – 110 092

6. Haryana Power Purchase Centre,
Shakti Bhawan, Sector- VI, Panchkula – 134 109, Haryana

7. Punjab State Power Corporation Limited,
The Mall, Patiala – 147 001

8. Uttarakhand Power Corporation Limited,
Urja Bhawan, Kanwali Road, Dehradun – 248 001, Uttarakhand **…. Respondents**

Parties Present:

Ms. Swapna Seshadri, Advocate, NTPC
Ms. Ritu Apurva, Advocate, NTPC
Shri Karthikeyan, Advocate, NTPC
Ms. Pragya, Advocate, NTPC
Shri Nitin Kala, Advocate, TPDDL
Shri Kunal Singh, Advocate, TPDDL
Shri Tanmay Jain, Advocate, TPDDL
Ms. Bhargavi Kannan, Advocate, BRPL and BYPL
Shri Nitin Kala, Advocate, TPDDL
Shri Kunal Singh, Advocate, TPDDL
Shri Tanmay Jain, Advocate, TPDDL
Shri Savyasachi S. Advocate, UPPCL
Shri Kaustub N., Advocate, UPPCL
Shri Rohan N. Advocate, UPPCL

ORDER

This petition has been filed by the Petitioner, NTPC Limited (in short, 'NTPC'), for approval of the tariff of Singrauli Super Thermal Power Station (2000 MW) (in short, 'the generating station') for the period 2024-29, in accordance with the provisions of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 (in short ', the 2024 Tariff Regulations').

2. The generating station has a total capacity of 2000 MW, comprising five units of 200 MW each and two units of 500 MW each. The dates of commissioning of the various units and that of the generating station are as under:

Unit	CoD
Unit – I	1.6.1982
Unit – II	1.2.1983
Unit – III	1.7.1983
Unit – IV	1.1.1984
Unit – V	1.6.1984
Unit – VI	1.7.1987
Unit – VII/ **Generating Station**	1.5.1988

3. The Commission, vide its order dated 16.8.2026 in Petition No. 648/GT/2025, had revised the tariff of the generating station for the period 2019-24 after a truing-up

exercise. The capital cost and annual fixed charges allowed in the said order are as under:

Capital Cost allowed for the period 2019-24

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
(a) Allowed to be eligible for ROE at base rate of 15.50%:					
Opening capital cost	119301.50	115092.75	113128.46	113565.47	113974.18
Add: Additional capital expenditure	(-) 4208.75	(-) 1964.29	437.01	408.71	(-) 1313.63
Closing capital cost	**115092.75**	**113128.46**	**113565.47**	**113974.18**	**# 112660.54**
Average capital cost	117197.13	114110.61	113346.97	113769.82	113317.36
(b) Allowed to be eligible for ROE at base rate of WAROI					
Opening capital cost	0.00	12656.73	19281.20	19715.44	22623.94
Add: Additional capital expenditure	12656.73	6624.47	434.24	2908.49	1431.21
Closing capital cost	**12656.73**	**19281.20**	**19715.44**	**22623.94**	**@ 24055.14**
Average capital cost	6328.37	15968.97	19498.32	21169.69	23339.54
(c) Total capital cost allowed					
Opening capital cost	119301.50	127749.49	132409.66	133280.91	136598.11
Add: Additional capital expenditure	8447.99	4660.17	871.25	3317.20	117.57
Closing capital cost	**127749.49**	**132409.66**	**133280.91**	**136598.11**	**136715.69**
Average capital cost	123525.49	130079.58	132845.29	134939.51	136656.90

 # net of un-discharged liabilities of Rs.6076.15 lakh; @ net of un-discharged liabilities of Rs.992.47 lakh.

Annual Fixed Charges allowed for the period 2019-24

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	373.91	925.36	1186.74	1372.18	1553.31
Interest on loan	371.42	764.35	865.64	1065.86	1226.05
Return on Equity	6787.50	6822.27	6834.37	6961.54	7043.08
Interest on Working Capital	8798.67	8388.73	7879.86	8474.68	9859.51
O&M Expenses	69746.42	67542.56	68793.57	75959.17	77216.91
Special allowance	19000.00	19000.00	19000.00	19000.00	19000.00
Total	**105077.92**	**103443.27**	**104560.19**	**112833.43**	**115898.86**

Present Petition

4. The Petitioner has filed the present petition for the determination of tariff of the generating station for the period 2024-29 in accordance with Regulation 9 of the 2024 Tariff Regulations. The capital cost and annual fixed charges claimed by the Petitioner, for the tariff period 2024-29, are as under:

Capital Cost claimed

(Rs. in lakh)

	2024-25	2025-26	2026-27	2027-28	2028-29
(a) Eligible for ROE at base rate of 15.50%:					
Opening capital cost	146143.32	146143.32	147443.32	147443.32	147443.32

Add: Additional capital expenditure	0.00	1300.00	0.00	0.00	0.00
Closing capital cost	**146143.32**	**147443.32**	**147443.32**	**147443.32**	**147443.32**
Average capital cost	146143.32	146793.32	147443.32	147443.32	147443.32
(b) Eligible for ROE at base rate of 1-year SBI MCLR + 350 bps					
Opening capital cost	0.00	1866.00	5181.00	11759.00	13259.00
Add: Additional capital expenditure	1866.00	3315.00	6578.00	1500.00	0.00
Closing capital cost	**1866.00**	**5181.00**	**11759.00**	**13259.00**	**13259.00**
Average capital cost	933.00	3523.50	8470.00	12509.00	13259.00
(c) Total capital cost claimed					
Opening capital cost	146143.32	148009.32	152624.32	159202.32	160702.32
Add: Additional capital expenditure	1866.00	4615.00	6578.00	1500.00	-
Closing capital cost	**148009.32**	**152624.32**	**159202.32**	**160702.32**	**160702.32**
Average capital cost	147076.32	150316.82	155913.32	159952.32	160702.32

Annual Fixed Charges claimed

(Rs. in lakh)

	2024-25	**2025-26**	**2026-27**	**2027-28**	**2028-29**
Depreciation	26661.88	4153.50	5920.20	1350.00	0.00
Interest on loan	699.75	0.00	0.00	0.00	0.00
Return on Equity	8275.80	8426.84	8681.93	8860.32	8893.45
Interest on Working Capital	12382.37	12481.96	12721.27	11882.44	12092.15
O&M Expenses	120301.05	129320.00	133580.00	117940.00	122500.00
Special Allowance	21500.00	21500.00	21500.00	21500.00	21500.00
Total	**189820.86**	**175882.30**	**182403.40**	**161532.76**	**164985.60**

5. The Petition was heard on 22.7.2025, and the Commission directed the Petitioner to furnish the additional information sought vide Technical Validation (TV) letter dated 4.7.2025. In compliance with the aforesaid direction, the Petitioner submitted the additional information vide affidavit dated 2.9.2025. The Respondent, TPDDL, filed its reply vide affidavit dated 12.9.2025, to which the Petitioner filed its rejoinder vide affidavit dated 30.9.2025. Subsequently, during the hearing held on 16.10.2025, the Commission directed for completion of pleadings. The Respondents, BRPL and BYPL (common reply) and UPPCL, filed their replies by way of affidavits dated 4.11.2025 and 10.11.2025, respectively. The Petitioner filed its rejoinders to the said replies by way of affidavits dated 12.12.2025. The Commission thereafter heard the Petition on 23.12.2025 and reserved an order after permitting the parties to complete their submissions. The Petitioner has also filed its written submissions by

way of affidavit dated 2.2.2026. Based on the parties' submissions and the documents on record, we proceed to determine the generating station tariff for the period 2024-29, after a prudence check, as stated in the subsequent paragraphs.

Capital Cost

6. Regulation 19(1) of the 2024 Tariff Regulations provides that the capital cost as determined by the Commission after a prudence check, in accordance with this regulation, shall form the basis of determination of tariff for existing and new projects. Regulation 19(3) of the 2024 Tariff Regulations provides as follows:

> *"(3) The Capital cost of an existing project shall include the following:*
>
> *(a) Capital cost admitted by the Commission prior to 1.4.2024 duly trued up by excluding liability, if any, as on 1.4.2024;*
>
> *(b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
>
> *(c) Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;*
>
> *(d) Capital expenditure on account of ash disposal and utilization, including handling and transportation facility;*
>
> *(e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal up to the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway;*
>
> *(f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under the Perform, Achieve and Trade (PAT) scheme of the Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries;*
>
> *(g) Expenditure required to enable flexible operation of the generating station at lower loads;*
>
> *(h) Capital expenditure on account of biomass handling equipment and facilities, for cofiring; and*
>
> *(i) Expenditure on account of change in law and force majeure events;*
>
> *(j) Expenditure incurred or projected to be incurred, on account of the integrated energy storage system."*

7. The Commission, vide order dated 16.8.2026 in Petition No. 648/GT/2025, while truing up the tariff of the generating station for the period 2019-24, had allowed the closing capital cost of Rs.136715.69 lakh (Rs.112660.54 lakh eligible for ROE at base rate of 15.50% and Rs.24055.14 lakh eligible for ROE at base rate of 1-year SBI MCLR + 350 bps) on cash basis, as on 31.3.2024. Accordingly, in terms of Regulation

19(3) of the 2024 Tariff Regulations, the capital cost of Rs.136715.69 lakh has been considered as the opening capital cost as on 1.4.2024, on a cash basis, for determination of tariff for the period 2024-29.

Additional Capital Expenditure

8. Regulations 25 and 26 of the 2024 Tariff Regulations provide as under:

> *"**25. Additional Capitalisation within the original scope and after the cut – off date***
>
> *(1) The additional capital expenditure incurred or projected to be incurred in respect of an existing project or a new project including integrated energy storage system on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:*
>
> *(a) Payment made against award of arbitration or for compliance with the directions or order of any statutory authority, or order or decree of any court of law;*
>
> *(b) Change in law or compliance with any existing law which is not provided for in the original scope of work;*
>
> *(c) Deferred works relating to ash pond or ash handling system or raising of ash dyke in the original scope of work;*
>
> *(d) Payment made towards liability admitted for works within the original scope executed prior to the cut-off date;*
>
> *(e) Force Majeure events;*
>
> *(f) Works within original scope executed after the cut-off date and admitted by the Commission, to the extent of actual payments made; and*
>
> *(2) In case of replacement of assets deployed under the original scope of the existing project after the cut-off date, the additional capitalization may be admitted by the Commission after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:*
>
> *(a) Assets whose useful life is not commensurate with the useful life of the project and such assets have been fully depreciated in accordance with the provisions of these regulations;*
>
> *(b) The replacement of the asset or equipment is necessary on account of a change in law or Force Majeure conditions;*
>
> *(c) The replacement of such asset or equipment is necessary on account of obsolescence of technology; and*
>
> *(d) The replacement of such asset or equipment has otherwise been allowed by the Commission.*
>
> *(e) The additional expenditure, excluding recurring expenses covered in O&M expenses, involved in relation to the renewal of lease of lease hold land on case to case basis.*

Provided that any claim of additional capitalisation with respect to the replacement of assets under the original scope and on account of obsolescence of technology, less than Rs. 20 lakhs shall not be considered as part of Capital cost and shall be met through normative O&M expenses.

26. Additional Capitalisation beyond the original scope

(1) The capital expenditure, in respect of the existing generating station or the transmission system, including the communication system including integrated energy storage system, incurred or projected to be incurred on the following counts beyond the original scope, may be admitted by the Commission, subject to prudence check:

(a) Payment made against award of arbitration or for compliance of order or directions of any statutory authority, or order or decree of any court of law;

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

(c) Force Majeure events;

(d) Need for higher security and safety of the plant as advised or directed by appropriate Indian Government Instrumentality or statutory authorities responsible for national or internal security;

(e) Deferred works relating to ash pond or ash handling system or raising of ash dyke in addition to the original scope of work, on case to case basis: Provided also that if any expenditure has been claimed under Renovation and Modernisation (R&M) or repairs and maintenance under O&M expenses, the same shall not be claimed under this Regulation;

(f) Usage of water from the sewage treatment plant in the thermal generating station.

(g) Works required towards biomass handling system to enable biomass co-firing and towards enabling flexible operation of the generating station as may be required.

(h) Works pertaining to Railway Infrastructure and its augmentation for transportation of coal up to the receiving end of the generating station (excluding any transportation cost and any other appurtenant cost paid to railways) that are not covered under Regulation 24, 25 and 27, but shall result in better fuel management and can lead to a reduction in operation costs, or shall have other tangible benefits:

Provided that the generating company shall have to mandatorily seek prior approval of the Commission before implementing such works based on a detailed cost-benefit analysis of such schemes;

(i) Any additional capital expenditure which has become necessary for efficient operation of generating station or transmission system as the case may be, including the works required towards projects acquired through NCLT process. The claim shall be substantiated with the technical justification and cost benefit analysis.

(2) Any claim of additional capitalisation less than Rs. 20 lakhs shall not be considered under Clause (1) of this regulation and shall be met through normative O&M expenses.

(3) In case of de-capitalisation of assets of a generating company or the transmission licensee, as the case may be, the original cost of such asset as on the date of de-capitalisation shall be deducted from the value of gross fixed asset and corresponding loan as well as equity shall be deducted from outstanding loan and the equity respectively in the year such de-capitalisation takes place with corresponding adjustments in cumulative depreciation and cumulative repayment of loan, duly taking into consideration the year in which it was capitalised.

Provided that in cases where an asset forming part of a scheme is de-capitalised and wherein the historical value of such asset is not available, the value of de-capitalisation shall be computed by de-escalating the value of the new asset by 5% per year until the year of capitalisation of the old asset subject to a minimum of 10% of the replacement cost of the asset."

9. Regulations 25 and 26 of the 2024 Tariff Regulations provide that the additional capital expenditure may be admitted by the Commission, subject to a prudence check, either within the original scope of work after the cut-off date on specified counts such as undischarged liabilities payable at a future date, or beyond the original scope of work on specified grounds. Accordingly, the application for determination of tariff shall be based on admitted capital cost, including any additional capital expenditure already admitted up to 31.03.2024 (either based on actual or projected additional capital expenditure) along with estimated additional capital expenditure for the respective years of the period 2024-29.

10. The year-wise additional capital expenditure claimed by the Petitioner in respect of the generating station for the period 2024-29 is as under:

(Rs. in lakh)

Head / Equipment	Regulation	2024-25	2025-26	2026-27	2027-28	2028-29
Works under Original scope eligible for ROE at Normal Rate						
HMI Upgradation	25(2)(b), 25(2)(c)	0.00	1300.00	0.00	0.00	0.00
Works beyond Original scope eligible for ROE at MCLR Rate						
Dry Ash Extraction system	26(1)(b)	1866.00	240.00	0.00	0.00	0.00
Ash Utilisation Infrastructure	26(1)(b) read with 19(3)(d)	0.00	875.00	3285.00	900.00	0.00
AWRS Augmentation	26(1)(b)	0.00	1500.00	3000.00	600.00	0.00
Expenditure for enabling Biomass Cofiring	26(1)(b), 26 (1)(g) read	0.00	500.00	0.00	0.00	0.00

	with 19(3)(h)					
Setup of peripheral security surveillance system at NTPC Singrauli	26(1)(d)	0.00	200.00	293.00	0.00	0.00
Sub Total (B)		**1866.00**	**3315.00**	**6578.00**	**1500.00**	**0.00**
Total Additional Capital Expenditure claimed		**1866.00**	**4615.00**	**6578.00**	**1500.00**	**0.00**

11. The Commission, while determining tariff for the period 2014-19 in respect of other generating stations of NTPC that had completed their useful life, had disallowed capitalisation of certain projected additional capital expenditure. The disallowance was on the ground that the generating stations had already completed their useful life and were availing Special Allowance during the relevant period for meeting capital expenditure requirements. Aggrieved by these decisions, the Petitioner had preferred appeals in batch matters before the Appellate Tribunal for Electricity (APTEL). APTEL, vide judgment dated 28.8.2023 in the said batch matters, remanded the matters back to the Commission with a direction to examine the Appellant's entitlement to additional capitalisation under clauses (ii), (iii) and (iv) of Regulation 14(3) of the 2014 Tariff Regulations, after first determining whether the useful life of the generating stations required extension and, if so, the period of such extension.

12. Subsequently, the Commission, vide order dated 24.3.2026 disposed of the remanded batch matters by extending the useful life of the generating stations for a specified period and allowing additional capital expenditure strictly limited to the categories falling under Regulation 14(3)(ii) (Change in Law or compliance of any existing law), Regulation 14(3)(iii) (expenditure incurred towards higher security and safety of the plant as advised or directed by appropriate Government Agencies or statutory authorities responsible for national/internal security), and Regulation 14(3)(iv) (deferred works relating to ash pond or ash handling system within the original approved scope of work) of the 2014 Tariff Regulations.

13. In view of the fact that the instant generating station has also completed its useful life in the year 2013-14, the additional capital expenditure claimed by the Petitioner for the period 2024-29 shall be examined and considered in accordance with the findings and directions contained in the aforesaid order, which are dealt with in the subsequent paragraphs.

14. Further, the Petitioner, vide affidavit dated 7.11.2025 in Petition No. 648/GT/2025, has submitted the latest available Residual Life Assessment (RLA) Study Reports (2023), comprising observations relating to various inspected areas of the boiler of Unit-7, the condition and quality of the equipment, and the assessment of its residual life. Based on the findings of the said RLA studies, the equipment has been found fit for continued operation for a further period of six years, i.e., up to 2029. Accordingly, we consider it appropriate to extend the operational life of the generating station up to 31.3.2029. The impact of such extension on the admissibility and computation of depreciation has been dealt with separately in the relevant paragraph of this order.

15. Though we have considered the extension of the operational life of the generating station up to 31.3.2029 based on the RLA Report submitted by the Petitioner, we also observe that the Petitioner has consistently claimed Additional Capital Expenditure as well as Special Allowance after the completion of the original useful life of the generating station for ensuring its continued efficient operation, without opting for Renovation and Modernisation (R&M). This demonstrates that the generating station has remained operational and has been adequately maintained to justify its continued operation beyond the originally specified useful life, which expired during the tariff period 2009-14. Having regard to the aforesaid facts, we are of the view that the generating station may continue to remain well-maintained and capable

of efficient operation even beyond the presently approved extended life ending on 31.3.2029. Accordingly, if the Petitioner seeks to continue operating the generating station beyond 31.3.2029, it shall submit the RLA study and all other supporting documents at the time of filing of truing-up, which shall be reviewed in accordance with the applicable Regulations.

Dry Ash Extraction System (DAES)

16. The Petitioner has claimed additional capital expenditure of Rs.1866.00 lakh and Rs.240.00 lakh in the year 2024-25 and 2025-26 respectively towards DAES, under Regulation 26(1)(b) of the 2024 Tariff Regulations. In justification, the Petitioner has submitted that 100% ash utilisation has been mandated by the Ministry of Environment, Forest and Climate Change (MOEF&CC) vide its notification dated 25.1.2016 and the subsequent order of the National Green Tribunal (NGT) dated 20.11.2018. The Petitioner has also submitted that it is incurring expenditure to achieve the 100% ash utilisation target to avoid a penalty for environmental restoration damages. The Petitioner has submitted copies of the MoEF&CC notification and the NGT order. Further, the Petitioner has submitted that the work was partially capitalised in the tariff period 2019-24, and this expenditure pertains to the remaining capitalisation for Units 6 and 7, pending the completion of trial runs and the performance guarantee (PG) test.

17. The Respondents, TPDDL and UPPCL, have submitted that the Petitioner has claimed substantial additional capitalisation towards DAES under Regulation 26(1)(b) read with Regulation 19(3)(d) of the 2024 Tariff Regulations on the ground of compliance with the MoEF&CC notification and the NGT order dated 20.11.2018. However, the said claims are unsupported by any detailed justification, cost break-up, or documentary evidence, despite Regulation 26 mandating a prudence check. The

Respondents have further submitted that the Commission had already allowed additional capital expenditure under these very heads in its earlier order, yet the Petitioner has sought additional amounts without explaining the spill-over of works, delay in completion, or the basis for the increased cost. Additionally, while the Petitioner has admitted that expenditure towards ash utilisation has been booked under O&M and that no revenue has been generated from the sale of ash/fly ash, it has simultaneously claimed additional capex towards ash utilisation infrastructure, giving rise to a clear risk of double recovery, which warrants strict scrutiny and reconciliation before any amount is allowed.

18. The Petitioner, vide its rejoinder, has submitted that the expenditure towards DAES and ash utilisation infrastructure has already been allowed by the Commission in its Order dated 5.9.2023 as a Change in Law compliant expenditure, subject to a prudence check and truing up. Further, the requisite details have been furnished through the additional affidavit dated 2.9.2025, stating that ash utilisation expenses have been separately booked as Additional O&M expenses in Form-3A, and that the present claim pertains to balance capitalisation for Units 6 & 7 pending trial runs and PG tests. The Petitioner has further submitted that no revenue has been generated from fly ash, that it has submitted an audited Form-3A, and that the Commission has already recognised the recovery of fly ash-related expenditure as O&M under Change in Law; therefore, the allegation of double recovery is incorrect.

19. The matter has been considered. It is observed that an amount of Rs. Rs.4572.00 lakh was already allowed by the Commission towards DAES vide order dated 5.9.2023 in Petition No. 424/GT/2020 (determination of tariff of the instant generating station for the tariff period 2019-24). Further, the Commission allowed Rs. 2466.74 lakh towards DAES vide its order dated 16.8.2026 in Petition No.

648/GT/2025, while truing up tariff for the period 2019-24. Considering that the expenditure pertains to balance works which were already allowed by the Commission, the claim of the Petitioner is allowed under Regulation 26(1)(b) of the 2024 Tariff Regulations.

20. However, the allowance is subject to the condition that the Petitioner, at the time of truing up, shall furnish the actual cost envisaged and proposed for the work of DAES in the investment approval and other costs associated with it, and actual cost incurred as on date and approach the Commission with reasonable justification for the variation in the expenditure, if any.

HMI Upgradation

21. The Petitioner has claimed additional capital expenditure of Rs.1300.00 lakh towards HMI upgradation during 2025-26, under Regulation 25(2)(b) and 25(2)(c) of the 2024 Tariff Regulations. In justification, the Petitioner has submitted that the SG, TG, and BOP station and C&I system at NTPC Singrauli (Unit 4 and Unit 5) operate on the ABB Symphony platform with Windows XP. Additionally, Microsoft has officially ended support for Windows XP on 8.4.2014. The Petitioner has provided a copy of the Windows XP lifecycle policy. Further, the Petitioner has submitted that the CEA (Cyber Security in Power Sector) Guidelines, 2021 (CEA Guidelines, 2021), mandate (i) phasing out legacy systems, (ii) hardening existing systems with additional security controls in consultation with the OEM, and (iii) maintaining system logs for a minimum of six months. In view of the same, the Petitioner has submitted that the proposed upgradation involves upgradation of the existing HMI System and implementing a cybersecurity suite to strengthen system hardening.

22. The Respondent, TPDDL, has submitted that the Petitioner's claim towards HMI upgradation, though invoked under Regulations 25(2)(b) and 25(2)(c) of the 2024

Tariff Regulations, essentially pertains to maintenance and modernisation of existing units and ought to be met from the Special Allowance already granted. In the absence of a clear demonstration that the expenditure is over and above and not recoverable through the Special Allowance, the claim is not maintainable. Further, the Petitioner has failed to furnish adequate justification or supporting documents for the projected cost. Accordingly, the claim for additional capital expenditure under this head ought to be disallowed.

23. The Petitioner, in its rejoinder, has submitted that the HMI upgradation has become necessary due to the discontinuation of official support by Microsoft for Windows XP systems deployed at the generating station, necessitating modernisation for operational reliability and support. The Petitioner has further submitted that the CEA Guidelines, 2021 mandate phasing out legacy systems, hardening existing systems with additional security controls, and maintaining system logs, making the proposed upgrade and cybersecurity implementation essential for statutory compliance. Accordingly, the expenditure is justified as a regulatory compliance requirement and merits allowance under Regulations 25(2)(b) and 25(2)(c) of the 2024 Tariff Regulations.

24. The matter has been examined. It is observed that the Petitioner has claimed expenditure of Rs.1300.00 lakh towards HMI upgradation under Regulation 25(2)(b) and 25(2)(c) of the 2024 Tariff Regulations. In support of its claim, the Petitioner has submitted the life cycle policy of Windows XP indicating obsolescence of the existing system, the CEA Guidelines, 2021, and an OEM letter highlighting the need to upgrade the HMI system.

25. We have considered the submissions of the parties. Regulation 25(2)(b) of the 2024 Tariff Regulations provides for admissibility of additional capital expenditure

towards replacement of assets deployed under the original scope only where such replacement becomes necessary on account of Change in Law. We also note that, while remanding the matter, APTEL directed that additional capital expenditure may be considered only for limited categories, such as Change in Law or compliance with any existing law. In the present case, although the Petitioner has relied upon the CEA Guidelines, 2021 and the obsolescence of the existing HMI system, the Petitioner has not placed on record any specific statutory provision or mandatory direction requiring replacement/upgradation of the existing HMI system. Further, the documents furnished do not establish that the proposed expenditure has become unavoidable solely due to any Change in Law event or binding statutory requirement. We observe that mere obsolescence of equipment or technological advancement cannot, by itself, qualify as a Change in Law under Regulation 25(2)(b) of the 2024 Tariff Regulations.

26. We are, therefore, not inclined to allow the projected additional capital expenditure of Rs.1300.00 lakh towards HMI upgradation for the period 2025-26 at this stage. Accordingly, the Petitioner's claim is **not allowed**. However, a liberty is granted to the Petitioner to approach the Commission at the time of truing-up with complete documentary evidence establishing that the proposed expenditure is directly attributable to compliance with a statutory mandate or qualifies as a Change in Law under the applicable Tariff Regulations.

Ash Utilisation Infrastructure

27. The Petitioner has claimed additional capital expenditure of Rs.875.00 lakh, Rs.3285.00 lakh, and Rs.900.00 lakh for the years 2025-26, 2026-27, and 2027-28 respectively towards Ash Utilisation Infrastructure, under Regulation 26(1)(b) read with 19(3)(d) of the 2024 Tariff Regulations. In justification, the Petitioner has submitted that in accordance with the MoEF&CC notification dated 31.12.2021, all coal or lignite-

based thermal power plants are responsible for ensuring 100% utilization of the ash generated by them in an eco-friendly manner and to comply with this mandate, various expenditures are proposed to be incurred in the station during which include works such as development of a rail ash loading system to enhance ash utilization through the ash loading silos and transportation via the rail network, procurement of weighbridges to ensure accurate weightment of ash for utilization.

28. The matter has been examined. It is observed that the Petitioner has submitted that various expenditures are proposed to be incurred in the generating station during the period 2024-29, including works such as developing a rail ash loading system to enhance ash utilisation through ash loading silos and transportation via the rail network.

29. Regulation 19(3)(d) of the 2024 Tariff Regulations defines the components of capital cost and includes expenditure on ash disposal and utilisation, including handling and transportation facilities. However, the said provision does not independently provide for admission of additional capital expenditure incurred or projected to be incurred after the cut-off date. Since the claim pertains to additional capitalisation beyond the cut-off date, its admissibility is required to be examined under the specific enabling provisions governing additional capital expenditure. In the absence of an enabling provision under which the expenditure has been appropriately claimed and justified, we cannot consider the said expenditure.

30. Further, the Petitioner has also claimed the said expenditure under the provisions of Regulation 26(1)(b) of the 2024 Tariff Regulations. It is noted that the Petitioner has placed on record the MOEF&CC notification dated 31.12.2021, which states that thermal generating stations may ensure 100% ash utilisation and enables them to generate additional revenue from sale of ash. However, the said Regulation

applies only where the additional capital expenditure is necessitated due to a change in law or for compliance with an existing statutory requirement. In the present case, the Petitioner has not demonstrated that the said work is mandated by any specific statutory provision or that the expenditure arises directly from a change in law.

31. While the MoEF&CC Notification dated 31.12.2021 mandates 100% utilisation of fly ash, the said notification does not specify the requirement of infrastructure as a mandatory mode of compliance. The generating company is responsible for meeting the utilisation target, while the choice of transportation arrangement remains flexible. In view of the above, the ash requirement infrastructure cannot be considered unavoidable or directly arising from the statutory requirement.

32. From the beneficiaries' perspective, it is noted that the cost of ash transportation is already recoverable from the beneficiaries as part of the approved tariff framework. Allowing additional capital facilities towards ash utilisation infrastructure would therefore result in further recovery of transportation-related costs from the beneficiaries. In view of the above, the Petitioner cannot pass on the additional facilities proposed to the beneficiaries. Accordingly, the additional capitalisation of Rs.875.00 lakh, Rs.3285.00 lakh and Rs.900.00 lakh for the years 2025-26, 2026-27 and 2027-28 respectively towards Ash Utilisation Infrastructure is **not allowed** under provisions of Regulations 26(1)(b) and 19(3)(d) of the 2024 Tariff Regulations as of now. However, liberty is granted to the Petitioner to submit, at the time of truing-up, an item-wise break-up of the expenditure proposed/incurred, clearly segregating (i) expenditure towards mandatory silo facilities, (ii) expenditure towards rail ash loading system and rail infrastructure, and (iii) other transportation-related infrastructure. The Petitioner shall also furnish details of the existing ash storage and transportation arrangements, ash utilisation achieved during the relevant period, comparative

transportation costs through the existing and proposed modes, and projected savings. The Petitioner shall further establish the necessity and cost-effectiveness of the proposed infrastructure vis-à-vis the statutory ash utilisation requirements, particularly considering that the generating station has already completed more than 38 years of its operational life.

33. The expenditure, as may be established at the time of truing-up, shall be considered under the appropriate provisions of the 2024 Tariff Regulations, subject to prudence check.

AWRS Augmentation

34. The Petitioner has claimed additional capital expenditure of Rs.1500.00 lakh, Rs.3000.00 lakh, and Rs.600.00 lakh for the years 2025-26, 2026-27, and 2027-28 respectively towards AWRS augmentation under Regulation 26(1)(b) read with 19(3)(d) of the 2024 Tariff Regulations. In justification, the Petitioner has submitted that, vide its order dated 18.1.2022, the NGT directed NTPC Singrauli to take measures to stop the discharge of ash pond overflow into the Rihand reservoir, and the projected expenditure is intended to ensure compliance with the NGT Order by preventing any discharge of ash water into external areas.

35. The Respondent, TPDDL, vide its reply, has submitted that the Petitioner has claimed Rs. 51.00 crore towards AWRS Augmentation under Regulation 26(1)(b) of the 2024 Tariff Regulations, citing compliance with the NGT Order dated 18.1.2022. However, it has not adequately substantiated the projected costs with detailed justification or supporting documents. Further, the works appear to be maintenance and modernisation beyond the plant's useful life and should therefore be met from special allowance. Despite the specific direction in the TV letter dated 4.7.2025 to justify why the claim was not made under Special Allowance, the Petitioner has failed

to provide a satisfactory explanation. Additionally, its reliance on the Judgment of APTEL dated 28.8.2023 is misplaced, as additional capital expenditure cannot be allowed for works that can be covered under special allowance. In the absence of clear justification, the claim is liable to be disallowed.

36. The Petitioner, vide its rejoinder, has clarified that the claim for AWRS Augmentation arises from compliance with the NGT Order dated 18.1.2022 and qualifies as a 'Change in Law' event. The Petitioner has further submitted that the expenditure is additional capitalisation beyond the original scope, involving the installation of new equipment and associated works, and will be subject to a prudence check at the time of truing up. Further, APTEL Judgment dated 2.9.2025 in Appeal No. 304 of 2016 states that special allowance is not a bar to claiming the additional capital expenditure, and therefore the contention regarding adjustment under special allowance is misconceived.

37. The matter has been examined. It is observed that the NGT, vide its order dated 18.1.2022, directed various thermal generating stations in the Singrauli and Sonebhadra regions of Madhya Pradesh and Uttar Pradesh to take necessary measures to stop discharge of ash pond overflow into the Rihand reservoir. We observe that the Petitioner has placed on record neither any technical study, system assessment report, evaluation, nor any operational data to establish that the existing AWRS arrangement is incapable of complying with the environmental norms or the directions of NGT. No material has been furnished to demonstrate that the existing system has failed, became obsolete, or is otherwise inadequate to prevent ash pond overflow into the Rihand reservoir. Mere reliance on the directions of the NGT, without demonstrating a direct link between such directions and the necessity of the proposed

capital expenditure, is insufficient for grant of relief under the Change in Law provisions.

38. Further, the Petitioner has also not demonstrated that the proposed augmentation has arisen solely and exclusively due to the subsequent directions issued by the NGT, as distinguished from routine operational improvement, efficiency enhancement, modernisation, or better environmental management practices ordinarily expected from the generating station. In the absence of such specific substantiation, we are unable to conclude that the proposed expenditure is directly attributable to a Change in Law event warranting capitalisation under Regulation 26(1)(b) of the 2024 Tariff Regulations.

39. Accordingly, the claim of the Petitioner towards AWRS augmentation is **not allowed** at this stage. However, liberty is granted to the Petitioner to approach the Commission at the time of truing-up with supporting documents and technical justification clearly establishing (i) the direct link between the proposed augmentation and the said directions; (ii) the inadequacy of the existing AWRS to comply with the directions of NGT; and (iii) that the expenditure has arisen solely on account of compliance with the Change in Law event and not as part of routine system improvement or operational optimisation.

Expenditure for enabling Biomass Cofiring

40. The Petitioner has claimed additional capital expenditure of Rs.500.00 lakh during 2025-26 towards enabling Biomass Cofiring, under Regulations 26(1)(b) and 26(1)(g) read with 19(3)(h) of the 2024 Tariff Regulations. In justification, the Petitioner has submitted that the Ministry of Power (MoP), through its revised Biomass Policy dated 8.10.2021, has mandated the co-firing of biomass pellets in coal-based

generating stations at a blending ratio of 5%. The Petitioner has provided a copy of the revised Biomass Policy dated 8.10.2021.

41. The Respondents, TPDDL and UPPCL, have submitted that the Petitioner has claimed expenses towards enabling biomass co-firing under Regulations 26(1)(b) and 26(1)(g) read with 19(3)(h) of the 2024 Tariff Regulations citing compliance with the MoP policy dated 8.10.2021 mandating 5% blending, however, the claim remains unsubstantiated in the absence of adequate cost justification, supporting documents, and any reasonable basis for the projected expenditure, despite specific directions in the TV letter dated 4.7.2025. The Petitioner has also failed to furnish a detailed techno-economic analysis covering the delivered cost of biomass, blending ratio, actual consumption, impact on heat rate, secondary oil support, emissions, overall energy charge, and the anticipated fuel savings or operational benefits. In these circumstances, the Petitioner ought to be directed to place complete supporting data and justification on record, and till such evidence is duly verified, the said claim should be kept under observation and, if at all, considered only at the stage of truing-up, subject to prudence check.

42. The Petitioner, vide its rejoinder, has clarified that the objections are misplaced and prematurely seek a truing-up level of scrutiny in the present proceedings. It has further submitted that the relevant policy qualifies as a ‘Change in Law’ event and that detailed scope of work and projected cost estimates, based on industry benchmarks and established practices, have already been furnished. The Petitioner has also submitted that the Respondent, TPDDL, has not specified any concrete deficiency in the disclosures or provided any material to dispute the cost methodology, and its objections are speculative in nature. The Petitioner further submits that the projected

costs are reasonable, subject to a prudence check, and that there is no basis to reject the claim.

43. The matter has been considered. In terms of remand order of APTEL dated 28.8.2023, the additional capital expenditure for the generating stations which has completed their useful life is strictly limited to the categories falling under, towards (i) Change in Law or compliance with any existing law, (ii) expenditure incurred towards higher security and safety of the plant as advised or directed by appropriate Government Agencies or statutory authorities responsible for national/internal security, and (iii) deferred works relating to ash pond or ash handling system within the original approved scope of work, are allowable for generating stations that have completed their useful life.

44. However, the remand pertains to the issues arising out of the 2014 Tariff Regulations and the said Regulations did not recognise capitalisation towards infrastructure required for implementation of biomass co-firing in thermal generating stations. However, the 2024 Tariff Regulations have now expressly recognised such expenditure, inter alia, under Regulation 19(3)(h) relating to capital expenditure on account of biomass handling equipment and facilities for co-firing, and Regulation 26(1)(g) relating to additional capitalisation necessitated for works required towards biomass handling system to enable biomass co-firing and towards enabling flexible operation of the generating station.

45. We are of the view that the expenditure claimed by the Petitioner is directly linked to compliance with policy directions issued by the MoP and CEA. Further, the requirement to establish infrastructure for biomass co-firing arose pursuant to subsequent policy and regulatory developments not envisaged under the 2014 Tariff Regulations. Therefore, such expenditure is in the nature of compliance with policy

directions and may also be construed as a Change in Law event. In view of the above, and considering that the 2024 Tariff Regulations specifically recognise capitalisation towards infrastructure for biomass handling system under Regulation 19(3)(h), and provide for additional capitalisation under Regulation 26(1)(g) on account of works necessitated for operational requirements of the generating station, the additional capital expenditure claimed by the Petitioner is **allowed** under Regulation 26(1)(g) of the 2024 Tariff Regulations.

Peripheral security surveillance system

46. The Petitioner has claimed additional capital expenditure of Rs. 200.00 lakh and Rs. 293.00 lakh for years 2025-26 and 2026-27 respectively, towards peripheral security surveillance system under Regulation 26(1)(d) of the 2024 Tariff Regulations. In justification, the Petitioner has submitted that the Central Industrial Security Force (CISF) under the Ministry of Home Affairs, vide letter dated 22.3.2023, mandated the augmentation of the peripheral security surveillance system at the instant station to monitor and control suspicious movements.

47. The Respondent, TPDDL, has submitted that the Petitioner has claimed expenses towards Peripheral Surveillance Security System under Regulation 26(1)(d) of the 2024 Tariff Regulations on the ground of higher security requirements, relying on a CISF letter dated 22.3.2023. However, the said letter is merely recommendatory and does not mandate the installation of such a system, rendering the reliance misplaced. Further, the Petitioner has failed to furnish adequate justification, supporting documents, or detailed cost basis for the projected expenditure. In the absence of any substantiating material, the claim under this head ought not to be allowed at this stage, and the Petitioner should first be directed to provide complete details and evidence, with any admissibility being subject to a prudence check.

48. The Petitioner, vide its rejoinder, has submitted that Regulation 26(1)(d) permits additional capitalisation for higher security and safety as advised by an appropriate Government instrumentality, and CISF, being a statutory force constituted under the CISF Act, 1968, qualifies as such an authority. It has further been submitted that the CISF letter specifically calls for priority compliance with pending security recommendations, and that even advisory directions fall within the scope of the Regulation. The Petitioner has also relied on the judgment of APTEL that recognises CCTV and surveillance systems as prudent security measures and has submitted that the Commission has consistently allowed similar CISF-recommended expenditures in past tariff orders, subject to a prudence check and truing-up.

49. The matter has been examined. It is observed that CISF, vide letter dated 22.3.2023, has recommended that CCTV cameras need to be installed along the perimeter wall and other important locations for surveillance of suspicious movements and activities. Considering that the expenditure claimed is on account of the need for higher security and safety of the plant, as directed by Government agencies/ statutory authorities, the same is **allowed** under Regulation 26(1)(d) of the 2024 Tariff Regulations. However, the Petitioner is directed to submit, at the time of truing-up of tariff, complete details of the scope of work, asset-wise cost break-up, and supporting documentary evidence including the recommendations/communications issued by the CISF, work orders, completion certificates and justification of the necessity of the expenditure.

50. Accordingly, the additional capital expenditure allowed for the period 2024-29 is summarised as under:

(Rs. in lakh)

Particulars	2024-25	2025-26	2067-27	2027-28	2028-29
Additional capital expenditure within scope	0.00	0.00	0.00	0.00	0.00
Additional capital expenditure beyond scope	1866.00	940.00	293.00	0.00	0.00

Particulars	2024-25	2025-26	2067-27	2027-28	2028-29
Total Additional capital expenditure allowed	**1866.00**	**940.00**	**293.00**	**0.00**	**0.00**

Capital cost allowed for the period 2024-29

51. Based on the above, the capital cost allowed for the generating station subject to truing up, is as under:

(Rs. in lakh)

	2024-25	2025-26	2026-27	2027-28	2028-29
(a) Allowed to be eligible for ROE at base rate of 15.50%:					
Opening capital cost	112660.54	112660.54	112660.54	112660.54	112660.54
Add: Additional capital expenditure	0.00	0.00	0.00	0.00	0.00
Closing capital cost	**112660.54**	**112660.54**	**112660.54**	**112660.54**	**112660.54**
Average capital cost	112660.54	112660.54	112660.54	112660.54	112660.54
(b) Allowed to be eligible for ROE at base rate of 1-year SBI MCLR + 350 bps					
Opening capital cost	24055.14	25921.14	26861.14	27154.14	27154.14
Add: Additional capital expenditure	1866.00	940.00	293.00	0.00	0.00
Closing capital cost	**25921.14**	**26861.14**	**27154.14**	**27154.14**	**27154.14**
Average capital cost	24988.14	26391.14	27007.64	27154.14	27154.14
(c) Total capital cost allowed					
Opening capital cost	136715.69	138581.69	139521.69	139814.69	139814.69
Add: Additional capital expenditure	1866.00	940.00	293.00	0.00	0.00
Closing capital cost	**138581.69**	**139521.69**	**139814.69**	**139814.69**	**139814.69**
Average capital cost	137648.69	139051.69	139668.19	139814.69	139814.69

Debt Equity Ratio

52. Regulation 18 of the 2024 Tariff Regulations provides as under:

> ***"18. Debt-Equity Ratio**: (1) For new projects, the debt-equity ratio of 70:30 as on date of commercial operation shall be considered. If the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:*
>
> *Provided that:*
>
> *i. where equity actually deployed is less than 30% of the capital cost actual equity shall be considered for determination of tariff:*
>
> *ii. the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:*
>
> *iii. any grant obtained for the execution of the project shall not be considered as a part of capital structure for the purpose of debt: equity ratio.*
>
> ***Explanation**-The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, only if such premium amount and internal resources are actually utilised for meeting the capital expenditure of the generating station or the transmission system.*
>
> *(2) The generating company or the transmission licensee, as the case may be, shall submit the resolution of the Board of the company or the approval of the competent authority in other cases regarding the infusion of funds from internal resources in*

support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.

(3) In the case of the generating station and the transmission system, including the communication system declared under commercial operation prior to 1.4.2024, the debt-equity ratio allowed by the Commission for the determination of tariff for the period ending 31.3.2024 shall be considered:

Provided that in the case of a generating station or a transmission system, including a communication system which has completed its useful life as on 1.4.2024 or is completing its useful life during the 2024-29 tariff period, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall not be taken into account for tariff computation;

Provided further that in case of projects owned by Damodar Valley Corporation, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 96 of these regulations.

(4) In the case of the generating station and the transmission system, including communication system declared under commercial operation prior to 1.4.2024, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2024, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2024 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation.

(6) Any expenditure incurred for the emission control system during the tariff period as may be admitted by the Commission as additional capital expenditure for determination of supplementary tariff, shall be serviced in the manner specified in clause (1) of this Regulation.

(7) Any expenditure incurred for the energy storage system during the tariff period, as may be admitted by the Commission as additional capital expenditure of the generating station or transmission system for the determination of supplementary tariff, shall be serviced in the manner specified in clause (1) of this Regulation."

53. Considering that the useful life of the generating station had already elapsed, the Commission vide its order dated 16.8.2026 in Petition No. 648/GT/2025 had determined the opening gross normative loan of Rs.61937.13 lakh and net equity of Rs.35790.45 lakh, as on 1.4.2019, after carrying out adjustment to equity in terms of Regulation 18(3) of the 2019 Tariff Regulations.

54. Accordingly, the gross normative loan and net equity as on 1.4.2024 amounting to Rs.76567.21 lakh and Rs.41014.71 lakh (Rs.33798.16 lakh being eligible for return on equity at base rate of 15.50% *plus* Rs.7216.54 lakh being eligible for return on

equity at base rate of 1-year SBI MCLR + 350 bps), respectively has been considered based on closing admitted normative loan and equity as on 31.3.2024.

55. Further, the additional capital expenditure approved above has been allocated to debt and equity in the ratio of 70:30.

Return on Equity

56. Regulations 30 and 31 of the 2024 Tariff Regulations provide as under:

*"**30. Return on Equity:***

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

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

(3) Return on equity for new project achieving COD on or after 01.04.2024 shall be computed at the base rate of 15.00% for the transmission system, including the communication system, at the base rate of 15.50% for Thermal generating station and run-of-river hydro generating station and at the base rate of 17.00% for storage type hydro generating stations, pumped storage hydro generating stations and run-of-river generating station with pondage;

Provided that return on equity in respect of additional capitalization beyond the original scope, including additional capitalization on account of the emission control system, Change in Law, and Force Majeure shall be computed at the base rate of one-year marginal cost of lending rate (MCLR) of the State Bank of India plus 350 basis points as on 1st April of the year, subject to a ceiling of 14%;

Provided further that:

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

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

(iii) in the case of a thermal generating station:

(a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate as specified under Regulation 45(9) of IEGC Regulations, 2023.

(b) an additional rate of return on equity of 0.125% shall be allowed for every incremental ramp rate of 0.50% per minute achieved over and above the ramp

rate specified by Central Electricity Authority, subject to the ceiling of additional rate of return on equity of 1.00%:

(c) measurement of ramp rate, for the purpose of this Regulation, is to be decided by the National Load Dispatch Centre by issuing suitable guidelines, in consultation with the stakeholders, for measurement by considering the energy measurement at a suitable interval.

(4) Return on equity for an integrated energy storage system installed as additional capitalization with the existing generating station or the transmission system, as the case may be, shall be computed at the base rate of 14.00%."

"31. Tax on Return on Equity:

(1) The rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. The effective tax rate shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the concerned generating company or the transmission licensee by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon.

Provided that in case a generating company or transmission licensee is paying Minimum Alternate Tax (MAT) under Section 115JB of the Income Tax Act, 1961, the effective tax rate shall be the MAT rate, including surcharge and cess;

Provided further that in case a generating company or transmission licensee has opted for Section 115BAA, the effective tax rate shall be the tax rate including surcharge and cess as specified under Section 115BAA of the Income Tax Act, 1961.

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

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

(3) The generating company or the transmission licensee, as the case may be, shall true up the effective tax rate for every financial year based on actual tax paid together with any additional tax demand, including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2024-29 on actual gross income of any financial year. Further, any penalty arising on account of delay in deposit or short deposit of tax amount shall not be considered while computing the actual tax paid for the generating company or the transmission licensee, as the case may be.

Provided that in case a generating company or transmission licensee is paying Minimum Alternate Tax (MAT) under Section 115JB, the generating company or the transmission licensee, as the case may be, shall true up the grossed-up rate of return on equity at the end of every financial year with the applicable MAT rate, including surcharge and cess.

Provided that in case a generating company or transmission licensee is paying tax under Section 115BAA, the generating company or the transmission licensee, as the case may be, shall true up the grossed-up rate of return on equity at the end of every financial year with the tax rate including surcharge and cess as specified under Section 115BAA.

Provided that any under-recovery or over recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long-term customers, as the case may be, on a year to year basis."

57. The Petitioner has claimed return on equity (ROE) at the base rate of 15.50% by grossing up with the effective tax rate of 17.472%, corresponding to applicable MAT rate (comprising 15% MAT, 12% Surcharge and 4% Health and Education Cess), in respect of its opening capital cost and additional capital expenditure claimed within the original scope of work. For other additional capital expenditures, the Petitioner has claimed ROE at the base rate of 1-year SBI MCLR + 350 bps, by grossing up with the aforesaid effective tax rate.

58. Accordingly, ROE at the base rate of 15.50% has been considered in respect of opening capital cost eligible for ROE at the base rate of 15.50% and additional capital expenditure allowed within the original scope of work. Further, for the balance opening capital cost and additional expenditure beyond the original scope of work, ROE has been allowed at 1-year SBI MCLR + 350 bps, in terms of the above provisions. In this regard, the following base rate of ROE has been considered for equity eligible for ROE at a base rate of MCLR + 350 bps, for the tariff period 2024-29, subject to truing up:

	2024-25	**2025-26**	**2026-27**	**2027-28**	**2028-29**
1-year SBI MCLR as on 1st April	8.65%	9.00%	8.70%	8.70%	8.70%
Add: 350 bps	3.50%	3.50%	3.50%	3.50%	3.50%
Rate of Interest considered for RoE beyond scope	**12.15%**	**12.50%**	**12.20%**	**12.20%**	**12.20%**

59. Since MAT is applicable to the Petitioner's Company, the effective tax rate of 17.472% has been considered for the purpose of grossing up. Accordingly, the admissible ROE has been worked out as under:

(a) ***Return on Equity at base rate of 15.50%*:**

(Rs. in lakh)

	2024-25	**2025-26**	**2026-27**	**2027-28**	**2028-29**
Notional Equity- Opening	33798.16	33798.16	33798.16	33798.16	33798.16

Add: Addition due to additional capital expenditure	0.00	0.00	0.00	0.00	0.00
Normative Equity - Closing	**33798.16**	**33798.16**	**33798.16**	**33798.16**	**33798.16**
Average Normative Equity	33798.16	33798.16	33798.16	33798.16	33798.16
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%
Effective Tax Rate for respective years	17.472%	17.472%	17.472%	17.472%	17.472%
Rate of Return on Equity (Pre-Tax)	18.782%	18.782%	18.782%	18.782%	18.782%
Return on Equity (Pre-Tax)- (annualised)	**6347.97**	**6347.97**	**6347.97**	**6347.97**	**6347.97**

(b) Return on Equity at base rate of 1-year SBI MCLR + 350 bps:

(Rs. in lakh)

	2024-25	**2025-26**	**2026-27**	**2027-28**	**2028-29**
Notional Equity- Opening	7216.54	7776.34	8058.34	8146.24	8146.24
Add: Addition due to additional capital expenditure	559.80	282.00	87.90	0.00	0.00
Normative Equity - Closing	**7776.34**	**8058.34**	**8146.24**	**8146.24**	**8146.24**
Average Normative Equity	7496.44	7917.34	8102.29	8146.24	8146.24
Return on Equity (Base Rate)	12.150%	12.500%	12.200%	12.200%	12.200%
Effective Tax Rate for respective years	17.472%	17.472%	17.472%	17.472%	17.472%
Rate of Return on Equity (Pre-Tax)	14.722%	15.146%	14.783%	14.783%	14.783%
Return on Equity (Pre-Tax)- (annualised)	**1103.63**	**1199.16**	**1197.76**	**1204.26**	**1204.26**

60. In view of the above, the total ROE allowed for the purpose of tariff for the tariff period 2024-29 is as under:

(Rs. in lakh)

	2024-25	**2025-26**	**2026-27**	**2027-28**	**2028-29**
RoE at base rate of 15.50%	6347.97	6347.97	6347.97	6347.97	6347.97
RoE at 1-year SBI MCLR+350bps	1103.63	1199.16	1197.76	1204.26	1204.26
Total Return on Equity	**7451.60**	**7547.13**	**7545.73**	**7552.23**	**7552.23**

Interest on loan

61. Regulation 32 of the 2024 Tariff Regulations provides as under:

> *"**32. Interest on loan capital:***
>
> *(1) The loans arrived at in the manner indicated in Regulation 18 of these Regulations shall be considered gross normative loans for the calculation of interest on loans.*
>
> *(2) The normative loan outstanding as on 1.4.2024 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2024 from the gross normative loan.*
>
> *(3) The repayment for each of the years of the Tariff period 2024-29 shall be deemed to be equal to the depreciation allowed for the corresponding year or period. In case of de-capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis, and the adjustment should not exceed cumulative depreciation recovered up to the date of de-capitalisation of such asset.*
>
> *(4) Notwithstanding any moratorium period availed of by the generating company or the transmission licensee, as the case may be, the repayment of the loan shall be considered from the first year of commercial operation of the project and shall be equal to the depreciation allowed for the year or part of the year.*

(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio or allocated loan portfolio;

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

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

Provided that the rate of interest on the loan for the installation of the emission control system Commissioned subsequent to date of commercial operation of the generating station or unit thereof, shall be the weighted average rate of interest of the actual loan portfolio of the emission control system, and in the absence of the actual loan portfolio, the weighted average rate of interest of the generating company as a whole shall be considered, subject to a ceiling of 14%;

Provided further that if the generating company or the transmission licensee, as the case may be, does not have any actual loan, then the rate of interest for a loan shall be considered as 1-year MCLR of the State Bank of India as applicable as on April 01, of the relevant financial year.

Provided also that if the generating company or the transmission licensee, as the case may be, has availed a part or entire loan, during construction period or operation period, from a related party at a rate of interest higher than the rate of interest charged by recognised financial or lending institutions not classified as related party, the rate of interest shall be —

(a) the weighted average rate of interest calculated based on the existing loan portfolio, excluding part of the loan availed from a related party; or

(b) lower of actual or 1-year SBI MCLR plus 205 basis points, where the entire loan is availed from a related party; and

(c) reduced by restructuring or re-financing the loan within a period of one year from the date of commercial operation for the new project or from the date of notification of this regulation for the existing project.

Clarification: (1) The meaning of related party will be considered as per sub-section 76 of Section 2 of the Companies Act, 2013. (2) The recognised financial or lending institutions means scheduled commercial banks, all-India financial institutions regulated by the Reserve Bank of India, and Government-owned Non-Banking Financial Companies.

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

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

61. Interest on loan has been worked out as under:

(a) The gross normative loan of Rs.76567.21 lakh and cumulative repayment of Rs.60959.08 lakh, as on 31.3.2024, as determined vide order dated 16.8.2026 in Petition No. 648/GT/2025, have been retained as opening gross normative loan and cumulative repayment, respectively, as on 1.4.2024.

(b) Addition to normative loan on account of additional capital expenditure and de-capitalisation approved above has been considered.

(c) The depreciation allowed during the respective years of the 2024-29 tariff period has been considered as repayment of normative loan.

(d) The weighted average rate of interest (WAROI) as claimed by the Petitioner has been considered, subject to truing up.

62. The necessary calculations for interest on loan, subject to truing up, are as under:

(Rs in lakh)

		2024-25	**2025-26**	**2026-27**	**2027-28**	**2028-29**
A	Gross opening loan	76567.21	77873.41	78531.41	78736.51	78736.51
B	Cumulative repayment of loan upto previous year	60959.08	62606.60	64328.19	66082.34	67844.22
C	**Net Loan Opening (A-B)**	**15608.12**	**15266.81**	**14203.21**	**12654.17**	**10892.29**
D	Addition due to additional capital expenditure	1306.20	658.00	205.10	0.00	0.00
E	Repayment of loan during the year	1647.52	1721.59	1754.15	1761.88	1761.88
F	Repayment adjustment on account of de-capitalization	0.00	0.00	0.00	0.00	0.00
G	Repayment adjustment on account of discharges out of un-discharged liabilities deducted as on 1.4.2009	0.00	0.00	0.00	0.00	0.00
H	**Net Repayment (E-F+G)**	**1647.52**	**1721.59**	**1754.15**	**1761.88**	**1761.88**
I	**Net Loan Closing (C+D-H)**	**15266.81**	**14203.21**	**12654.17**	**10892.29**	**9130.41**
J	Average Loan [(C+I)/2]	15437.46	14735.01	13428.69	11773.23	10011.35
K	WAROI	7.7705%	7.7404%	7.7038%	7.6533%	7.5827%
L	**Interest on Loan (J x K)**	**1199.57**	**1140.55**	**1034.52**	**901.03**	**759.13**

Depreciation

63. Regulation 33 of the 2024 Tariff Regulations provides as under:

"33. Depreciation:

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

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

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

operation of the asset for a part of the year, depreciation shall be charged on a pro rata basis.

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

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

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

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

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

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

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

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

Provided further that in the case of an existing hydro generating station, the generating company, with the consent of the beneficiaries, may charge depreciation at a rate lower than that specified in Appendix I and Appendix II to these Regulations to reduce front loading of tariff.

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

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 15 years from the effective date of commercial operation of the generating station or the transmission system, as the case may be, shall be spread over the balance useful life of the assets.

Provided further that in the case of a new hydro generating stations, the generating company, with the consent of the beneficiaries, may charge depreciation at a rate lower than that specified in Appendix II to these Regulations to reduce front loading of tariff.

(7) In the case of the existing projects, the balance depreciable value as on 1.4.2024 shall be worked out by deducting the cumulative depreciation as admitted to by the Commission up to 31.3.2024 from the gross depreciable value of the assets.

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

approve the depreciation by equally spreading the depreciable value over the balance Operational Life of the generating station or unit thereof or fifteen years, whichever is lower, and in case of the transmission system shall equally spread the depreciable value over the balance useful life of the Asset or 10 years whichever is higher.

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

(10) Where the emission control system is implemented within the original scope of the generating station and the date of commercial operation of the generating station or unit thereof and the date of operation of the emission control system are the same, depreciation of the generating station or unit thereof including the emission control system shall be computed in accordance with Clauses (1) to (9) of this Regulation.

(11) Depreciation of the emission control system of an existing generating station that is yet to complete its useful life or a new generating station or unit thereof where the date of operation of the emission control system is subsequent to the date of commercial operation of the generating station or unit thereof, shall be computed annually from the date of operation of such emission control system based on the straight line method at rates specified in Appendix- I to these regulations;

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the date of operation of such emission control system shall be spread over the balance period of thirteen years or balance operational life of generating station, whichever is lower;

Provided also that in case the date of operation of the emission control system is after the 20th year of commercial operation of the generating station or unit thereof, but before the completion of the useful life of the generating station, the depreciation on emission control system (ECS) shall be computed annually from the date of operation of such ECS based on the straight line method, with a salvage value of 10% and the depreciable value shall be recovered till the operational life of the generating station.

(12) In case the date of operation of the emission control system is subsequent to the date of completion of the useful life of generating station commercial operation of the generating station or unit thereof, depreciation of ECS shall be computed annually from the date of operation of such emission control system based on the straight line method, with a salvage value of 10% and recovered over ten years or a period mutually agreed by the generating company and the beneficiaries, whichever is higher.

(13) The depreciation of the integrated energy storage system installed with the generating station or the transmission system shall be recovered in the following manner:-

If the integrated energy storage is implemented within the original scope of the generating station or the transmission system, the depreciation of the generating station or unit thereof or the transmission system, including the integrated energy storage system, shall be computed in accordance with Clauses (1) to (9) of this Regulation.

If an existing generating station or transmission system in which the integrated energy storage system is installed is yet to complete its useful life, the depreciation shall be computed annually from the date of operation of the integrated energy storage

system based on the straight-line method at rates specified in Appendix-I to these regulations:

Provided that the unrecovered depreciation as on 31st March of the year closing after a period of 12 years from the date of operation of such integrated energy storage system shall be spread over the lower of the balance useful life of the integrated energy storage system or balance operational life of the generating station or the transmission system, as the case may be, which shall not be less than 10 years."

64. The Cumulative depreciation of Rs.101373.87 lakh (comprising Rs.95838.82 lakh in respect of existing assets, i.e., assets admitted upto 31.3.2019 and Rs.5535.05 lakh in respect of other assets), along with value of freehold land and cost of IT equipment & software pertaining to the existing assets amounting to Rs.1081.00 lakh and Rs.2099.41 lakh, respectively, as on 31.3.2024 as determined vide order dated 16.8.2026 in Petition No. 648/GT/2025, has been retained as on 1.4.2024.

65. Based on the admitted capital cost and cumulative depreciation as on 31.3.2024, we observe that the balance depreciable value of the existing assets is NIL. Accordingly, no depreciation has been allowed in respect of the existing assets during the tariff period 2024-29.

66. As regards the depreciation on the new assets capitalised under Additional Capital Expenditure, the Petitioner has claimed recovery of the entire depreciable value in the respective year of capitalisation itself, without considering the residual useful life of the generating station as assessed under its own RLA.

67. We have considered the submissions of the Petitioner. The Petitioner's claim for allowing the entire depreciation in the respective year of capitalisation cannot be acceded to. As discussed above, we are of the view that the generating station may continue to operate beyond the presently approved extended life, i.e., up to 2029. Accordingly, in such a scenario, depreciation on the assets capitalised during the present tariff period should be considered separately, taking into account the specific

facts and circumstances of the case, including the possibility of further extension of the generating station's operational life.

68. Accordingly, considering the facts and circumstances of the case and with a view to ensure the reasonable recovery of the capital expenditure admitted during the approved operational life of the generating station, we consider it appropriate to allow depreciation on the assets capitalised during the tariff period 2024-29 on a normative basis, at the rate of 5.28%. Such an approach would ensure stable and consistent recovery of depreciation, particularly given the possibility of further extension of the operational life of the generating station beyond 2029. However, in the event the useful life of the generating station is not extended beyond the presently approved period, and the generating station ceases operation thereafter, the depreciation allowed shall be subject to review and dealt with as per the applicable Regulations at the time of truing-up. Accordingly, depreciation has been computed and allowed as under:

(Rs. in lakh)

S. N.		2024-25	2025-26	2026-27	2027-28	2028-29
A	**For existing assets (i.e. assets admitted upto 31.3.2009)**					
a	Opening capital cost	106445.74	106445.74	106445.74	106445.74	106445.74
b	Additional capital expenditure	0.00	0.00	0.00	0.00	0.00
c	Closing capital cost (a+b)	106445.74	106445.74	106445.74	106445.74	106445.74
d	Average capital cost [(a+c)/2]	106445.74	106445.74	106445.74	106445.74	106445.74
e	Freehold land	1081.00	1081.00	1081.00	1081.00	1081.00
f	Value of IT assets	2099.41	2099.41	2099.41	2099.41	2099.41
g	Depreciation Value [(d-e-f) x 0.9+f]	95038.21	95038.21	95038.21	95038.21	95038.21
h	Cumulative depreciation at the beginning of the year (Previous year's 'n)	95838.82	95838.82	95838.82	95838.82	95838.82
i	Balance depreciation value (g-h)	0.00	0.00	0.00	0.00	0.00
j	Balance operational life at the beginning of the year	5.00	4.00	3.00	2.00	1.00
k	Depreciation Rate (l/d)	0.00%	0.00%	0.00%	0.00%	0.00%
l	**Depreciation of the year (i/j)**	0.00	0.00	0.00	0.00	0.00
m	Cu. Depreciation adjustment on account of de-capitalisation	0.00	0.00	0.00	0.00	0.00
n	Cu. Depreciation at the end of the year	95838.82	95838.82	95838.82	95838.82	95838.82
B	**For other assets (i.e. assets admitted on or after 1.4.2009)**					
o	Opening capital cost	30269.94	32135.94	33075.94	33368.94	33368.94
p	Additional capital expenditure	1866.00	940.00	293.00	0.00	0.00
q	Closing capital cost (o+p)	32135.94	33075.94	33368.94	33368.94	33368.94
r	Average capital cost [(o+q)/2]	31202.94	32605.94	33222.44	33368.94	33368.94
s	Freehold land	0.00	0.00	0.00	0.00	0.00
t	Value of IT assets	0.00	0.00	0.00	0.00	0.00

S. N.		2024-25	2025-26	2026-27	2027-28	2028-29
u	Depreciation Value [(r-s-t) x 0.9+t]	28082.65	29345.35	29900.20	30032.05	30032.05
v	Cumulative depreciation at the beginning of the year (Previous year's 'ab')	5535.05	7182.57	8904.16	10658.30	12420.18
w	Balance depreciation value (u-v)	22547.60	22162.78	20996.04	19373.75	17611.86
y	Depreciation Rate	5.28%	5.28%	5.28%	5.28%	5.28%
z	**Depreciation of the year (w x y)**	**1647.52**	**1721.59**	**1754.15**	**1761.88**	**1761.88**
aa	Cu. Depreciation adjustment on account of de-capitalisation	0.00	0.00	0.00	0.00	0.00
ab	Cu. Depreciation at the end of the year	7182.57	8904.16	10658.30	12420.18	14182.06
C	**For total admitted assets**					
ac	Opening capital cost (a+o)	136715.69	138581.69	139521.69	139814.69	139814.69
ad	Additional capital expenditure (b+p)	1866.00	940.00	293.00	0.00	0.00
ae	Closing capital cost (c+q)	138581.69	139521.69	139814.69	139814.69	139814.69
af	Average capital cost (d+r)	137648.69	139051.69	139668.19	139814.69	139814.69
ag	Freehold land (e+s)	1081.00	1081.00	1081.00	1081.00	1081.00
ah	Value of IT assets (f+t)	2099.41	2099.41	2099.41	2099.41	2099.41
ai	Depreciation Value (g+u)	123120.86	124383.56	124938.41	125070.26	125070.26
aj	Cumulative depreciation at the beginning of the year (h+v)	101373.87	103021.39	104742.98	106497.13	108259.01
ak	Balance depreciation value (i+w)	22547.60	22162.78	20996.04	19373.75	17611.86
al	**Depreciation of the year (l+z)**	**1647.52**	**1721.59**	**1754.15**	**1761.88**	**1761.88**
am	Cu. Depreciation adjustment on account of de-capitalisation (m+aa)	0.00	0.00	0.00	0.00	0.00
an	Cu. Depreciation at the end of the year (n+ab)	103021.39	104742.98	106497.13	108259.01	110020.89

Operation & Maintenance Expenses

69. Regulation 36(1)(1) of the 2024 Tariff Regulations provides for the following O&M expenses:

> *"36. Operation and Maintenance Expenses: (1) Thermal Generating Station: Normative Operation and Maintenance expenses of thermal generating stations shall be as follows:*
>
> *(1) Coal based and lignite fired (including those based on Circulating Fluidised Bed Combustion (CFBC) technology) generating stations, other than the generating stations or units referred to in clauses (2), (4) and (5) of this Regulation:*

(in Rs Lakh/MW)

Year	*200/210/250 MW Series*	*300/330/350 MW Series*	*500 MW Series*	*600 MW Series*	*800 MW Series and above*
2024-25	*40.92*	*34.04*	*27.17*	*25.78*	*23.20*
2025-26	*43.07*	*35.83*	*28.60*	*27.13*	*24.42*
2026-27	*45.33*	*37.71*	*30.10*	*28.56*	*25.70*
2027-28	*47.71*	*39.69*	*31.68*	*30.06*	*27.05*
2028-29	*50.21*	*41.78*	*33.34*	*31.64*	*28.47*

70. The O&M expenses claimed by the Petitioner are as under:

(Rs. in lakh)

.	2024-25	2025-26	2067-27	2027-28	2028-29
O&M Expenses under 36(1)(1)					

Normative O&M expenses	68090.00	71670.00	75430.00	79390.00	83550.00
O&M expenses under Regulation 36(1)(6)					
Water Charges	1050.00	1150.00	1250.00	1350.00	1450.00
Security Expenses	5900.00	6500.00	6900.00	7200.00	7500.00
Ash Transportation Expenses	45261.05	50000.00	50000.00	30000.00	30000.00
Total O&M Expenses	**120301.05**	**129320.00**	**133580.00**	**117940.00**	**122500.00**

71. The matter has been considered. The Normative O&M expenses claimed by the Petitioner in terms of Regulation 36(1)(1) of the 2024 Tariff Regulations are found to be in order and allowed. The Additional O&M Expenses claimed are dealt with in subsequent paragraphs.

Additional O&M Expenses

(a) Water Charges

72. The first proviso to Regulation 36(1)(6) of the 2024 Tariff Regulations provides for claims towards water charges, security expenses and capital spares as under:

> *"(6) The Water Charges, Security Expenses, Ash Transportation Expenses and Capital Spares for thermal generating stations shall be allowed separately after prudence check:*
>
> *Provided that water charges shall be allowed based on water consumption depending upon type of plant and type of cooling water system or water agreement with state govt./utilities, and the norms specified by the Ministry of Environment, Forest and Climate Change subject to prudence check. The details regarding the same shall be furnished along with the petition;"*

73. In terms of the above regulation, water charges are to be allowed based on water consumption depending upon type of plant, type of cooling water system or water agreement with state govt./utilities etc., subject to prudence check. The Petitioner has specified the following details with regard to water consumption for the generating station as under:

Description	**Remarks**
Type of Plant	Coal-based station
Type of cooling water system	Once Through Cooling

74. The Petitioner has claimed water charges on a projected basis and has estimated the requirement of water for the forthcoming control period, in line with its operational requirements, and submitted that the actual expenditure may vary from

the projected figures owing to changes in tariff notifications issued by the respective water supply authorities, revisions in statutory duties, and other unforeseen factors.

75. The Respondents, UPPCL, TPDPL, BRPL, and BYPL, vide their respective replies, have submitted that the Petitioner's claim towards water charges for the tariff period 2024-29 is unsubstantiated and is liable to be disallowed at this stage for want of mandatory particulars and supporting evidence. Regulation 36(1)(6) of the 2024 Tariff Regulations permits separate allowance of water charges; such allowance is expressly subject to a prudence check and requires detailed disclosure of water consumption based on the type of plant, type of cooling water system, applicable agreement with the State Government/utility, and compliance with the norms of the MoEF&CC. The Petitioner failed to furnish the requisite Form-19, comprising computation and justification, and did not provide sufficient details on projected consumption, applicable rates, or the basis of estimation.

76. It has further been submitted by the Respondents that there are material inconsistencies in the figures disclosed by the Petitioner. While the Petition reflects water charges of Rs.8.76 crore for FY 2023-24, the additional submissions dated 2.9.2025, filed by the Petitioner, reflect Rs. 9.55 crore for the same period, which forms the basis of projection for 2024-29. This discrepancy has not been reconciled. The Respondents further submitted that the Petitioner projected the amount without furnishing primary evidence, contractual revisions, tariff notifications, or consumption data to justify the increase.

77. The Petitioner, in its rejoinder, has clarified that the claim towards water charges has been duly supported with necessary details, including plant type, cooling water system, consumption norms and supporting documents furnished in the Petition and additional submissions. The computation is based on the latest available actual

allocation and payments for the period 2023-24 and follows the same methodology, including the agreed principles under the Agreement dated 3.4.1999 between the Petitioner, the Government of Uttar Pradesh and the Uttar Pradesh State Electricity Board (UPSEB). Further, the Petitioner has submitted that the water charges claimed are provisional estimates, strictly subject to prudence check, verification of actual consumption and reconciliation at the time of truing-up in terms of Regulation 36(1)(6) of the 2024 Tariff Regulations.

78. We have considered the matter. It is noted that the Petitioner has claimed water charges on a projection basis as per the estimated water requirement for the forthcoming control period. However, the Petitioner has not provided any basis for such estimation. Accordingly, we are inclined to allow the water charges based on the actual charges incurred for the period 2023-24 (Rs.876.46 lakh) and as allowed by the Commission in Petition No. 648/GT/2025 (Truing up of tariff for the period 2019-24), and escalating it further @5% annually for the period 2024-29. The Petitioner is, however, directed to submit the actual expenditure towards water charges along with details of the quantity consumed, contracted quantum, rate, etc. in line with Regulation 36(1)(6) of the 2024 Tariff Regulations at the time of truing up.

79. Based on the above discussions, the water charges allowed are as follows:

(Rs. in lakh)

2024-25	**2025-26**	**2067-27**	**2027-28**	**2028-29**
920.29	966.30	1014.62	1065.35	1118.61

(b) Security Expenses

80. The second proviso to Regulation 36(1)(6) of the 2024 Tariff Regulations provides as under:

> *"(6) The Water Charges, Security Expenses and Capital Spares for thermal generating stations shall be allowed separately after prudence check:*
> *xxx*

Provided further that the generating station shall submit the assessment of the security requirement and estimated expenses along with the petition seeking the determination of tariff;

81. The Petitioner has submitted that security expenses have been claimed based on the estimated expenses for the tariff period 2024-29 and shall be subject to retrospective adjustment based on actuals at the time of truing up.

82. The Respondents, TPDPL and UPPCL, have submitted that the Petitioner has claimed security expenses for the tariff period 2024-29 without furnishing the mandatory assessment of security requirement as required under the second proviso to Regulation 36(1)(6) of the 2024 Tariff Regulations, without any detailed justification regarding the deployment norms and competent authority approval. Further, the projected expenses are significantly higher than those approved for the tariff period 2019-24, without any cogent reason for the increase.

83. The Petitioner, in its rejoinder, has submitted that projections for the tariff period 2024-29 have been prudently based on the average cost of security deployment during the tariff period 2019-24, using historical data based on detailed security assessment justifications that have already been furnished under sealed cover. Further, the Petitioner has submitted that the projected escalation is driven by objective factors such as DA increases, salary revisions, CISF charges, recruitment against sanctioned strength, and enhanced deployment due to the sensitive location and expanded plant perimeter, and the claimed expenses are provisional in nature, subject to prudence check and reconciliation with audited actuals at the time of truing-up.

84. The matter has been considered. Since the Petitioner has not furnished the assessment of security requirement as required under the second proviso of Regulation 36(1)(6) of the 2024 Tariff Regulations, therefore, for the present Petition, we provisionally allow the security expenses for the tariff period 2024-29 with 5%

escalation per year, on the actual expenses incurred for the year 2023-24 (Rs.5409.35 lakh). The Petitioner shall, at the time of truing up, furnish the actual security expenses incurred along with proper justification and assessment in terms of Regulation 36(1)(6) of the 2024 Tariff Regulations. Based on the above discussions, security expenses allowed are as follows:

(Rs. in lakh)

2024-25	2025-26	2067-27	2027-28	2028-29
5679.82	5963.81	6262.00	6575.10	6903.86

(c) Capital Spares

85. The last proviso to Regulation 36(1)(6) of the 2024 Tariff Regulations provides as under:

> *"(6) The Water Charges, Security Expenses and Capital Spares for thermal generating stations shall be allowed separately after prudence check:*
> *xxx*
> *xxx*
> *Provided also that the generating station shall submit the details of year-wise actual capital spares consumed individually costing above Rs. 10 lakh at the time of truing up with appropriate justification for incurring the same and substantiating that the same is not funded through compensatory allowance as per Regulation 17 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 or Special Allowance or claimed as a part of additional capitalisation or consumption of stores and spares and renovation and modernization."*

86. The Petitioner has submitted that the capital spares shall be claimed at the time of truing up of the tariff, in terms of the proviso to Regulation 36(1)(6) of the 2024 Tariff Regulations, based on actual consumption of spares. Accordingly, this order has not considered the same. The claim of the Petitioner, if any, at the time of truing up shall be considered on merits, after a prudence check.

(d) Ash Transportation Expenses

87. The Petitioner has claimed Ash Transportation expenses based on estimated expenses for the tariff period 2024-29. The Petitioner has stated that these expenses, based on estimated expenses for the period 2024-29, shall be subject to retrospective adjustment based on actuals at the time of truing up. The Petitioner has submitted that

since ash transportation charges are recurring in nature and the Petitioner has been incurring the same at the generating station in the current tariff period also, grave prejudice would be caused to the beneficiaries in case the Commission does not permit/allow the Petitioner to recover fly ash transportation charges on the issuance of this tariff order, because in that case the beneficiaries would be foisted with additional liability of interest payment. The Petitioner has thus prayed to allow the recovery of ash transportation charges on a monthly basis, subject to truing up at the end of the 2024-29 period.

88. The Petitioner has also submitted that it has filed Petition No. 227/MP/2024 seeking recovery of fly ash transportation charges, which, as on date, is pending disposal before the Commission. Reliance has also been placed by the Petitioner on the order of the Commission dated 28.10.2022 in Petition No. 205/MP/2021 wherein the Commission has considered the difficulties being faced by the Petitioner and allowed the billing and recovery of the said expenses on a monthly basis for the period 2019-24.

89. The Respondents, TPDPL, BRPL, and BYPL, vide their respective replies, have submitted that the Petitioner's claim for recovery of ash transportation charges through monthly billing is premature and contrary to the framework under the 2024 Tariff Regulations, which specifically requires that such claims be examined under Regulation 36(1)(6) on the basis of a detailed prudence check. The earlier Order dated 28.10.2022 in Petition No. 205/MP/2021, relied upon by the Petitioner, is distinguishable, and the issue is already *sub judice* in Petition No. 227/MP/2024. Further, the Petitioner failed to disclose essential plant-wise data and revenue earned from sale of fly ash; any recovery of gross transportation costs without adjusting corresponding revenue would result in unjust enrichment.

90. The Petitioner, in its rejoinder, has submitted that Petition No. 227/MP/2024 merely seeks exercise of regulatory powers to permit monthly recovery of ash transportation charges for the period 2024-29 pending tariff determination, and that the issue of monthly billing is no longer *res integra, as* the Commission vide its order dated 28.10.2022 in Petition No. 205/MP/2021, had already allowed such recovery for the tariff period 2019-24. Further, the Petitioner has submitted that this pertains only to the mode of recovery, whereas the substantive claim for ash transportation charges in the present petition is strictly under Regulation 36(1)(6) of the 2024 Tariff Regulations.

91. The matter has been considered. The Commission has amended Regulation 36(1)(6) of the 2024 Tariff Regulations vide notification dated 20.3.2026, providing for recovery of ash transportation expenses on a monthly basis prospectively, subject to the conditions specified therein. Accordingly, the claim for recovery of ash transportation expenses for the 2024-25 and 2025-26, shall be dealt with in Petition No. 227/MP/2024, which is pending disposal before the Commission. For the period from 1.4.2026 onwards, the Petitioner shall be entitled to recover the ash transportation expenses on a monthly basis in accordance with the amended Regulation 36(1)(6), subject to the conditions specified therein and adjustment at the time of truing-up, as applicable.

92. Accordingly, the total O&M expenses allowed to the generating station for the tariff period 2024-29 are summarised as under:

(Rs. in lakh)

	2024-25	**2025-26**	**2067-27**	**2027-28**	**2028-29**
Normative O&M Expenses	68090.00	71670.00	75430.00	79390.00	83550.00
Water Charges allowed*	920.29	966.30	1014.62	1065.35	1118.61
Security Expenses allowed*	5679.82	5963.81	6262.00	6575.10	6903.86
Ash transportation allowed*	0.00	0.00	0.00	0.00	0.00
Capital Spares allowed	0.00	0.00	0.00	0.00	0.00
Total O&M Expenses	**74690.11**	**78600.11**	**82706.62**	**87030.45**	**91572.47**

** Water charges, security expenses and ash transportation expenses shall be recovered separately in terms of the notification dated 20.3.2026, Second Amendment to 2024 Tariff Regulations. Presently, the water charges and security expenses allowed hereinabove are taken into consideration for calculation of IOWC for the tariff period 2024-29, and, shall be trued up in accordance with the law.*

Operational Norms

93. The Petitioner has considered the following norms of operation:

Normative Annual Plant Availability Factor (NAPAF) (%)	83
Heat Rate (kCal/kwh)	2395
Auxiliary Power Consumption (%)	6.88
Specific Oil Consumption (ml/kwh)	0.50

(a) Normative Annual Plant Availability Factor (NAPAF)

94. In terms of Regulation 70(A)(a) of the 2024 Tariff Regulations, the Petitioner has considered the Normative Annual Plant Availability Factor of 83% during the period 2024-29, and hence the same is allowed.

(b) Gross Station Heat Rate (kCal/kWh)

95. Regulation 70(C)(a)(i) of the 2024 Tariff Regulations provides as under:

> *"For existing Coal – based Thermal Generating Stations, other than those covered under clause (ii) and (iii) below:*
>
> | ***200-300 MW Sets*** | ***500 MW Sets(Sub-critical)*** |
> |---|---|
> | *2415 kCal/kWh* | *2375 kCal/kWh* |
>
> *Note 1*
> *In respect of 500 MW and above units where the boiler feed pumps are electrically operated, the gross station heat rate shall be 40 kCal/kWh lower than the gross station heat rate specified above.*
>
> *Note 2*
> *For the generating stations having combination of 200/210/250 MW and above sets and 500 MW and above sets, the normative gross station heat rate shall be the weighted average gross station heat rate of the combinations."*

96. In terms of Regulation 70(C)(a)(i) Note 2 of the 2024 Tariff Regulations, the Petitioner has considered the Gross Station Heat Rate (GSHR) of 2395 kCal/kWh during the tariff period 2024-29.

97. The generating station has electrically driven boiler pumps in five units (5x200 MW) and steam-driven boiler pumps in two units (2x500). Accordingly, in line with

Note 2 of Regulation 70(C)(a)(i) of the 2024 Tariff Regulations, the GSHR of 2395 kCal/kWh, as claimed, is allowed.

(c) Secondary Fuel Oil Consumption

98. In terms of Regulation 70(D)(a) of the 2024 Tariff Regulations, the Petitioner has considered secondary fuel oil consumption of 0.5 ml/kWh during the tariff period 2024-29 and hence, the same is allowed.

(d) Auxiliary Power Consumption

99. Regulation 70(E)(a) of the 2024 Tariff Regulations provides as under:

"(a) For Coal-based generating stations except at (b) below:

S.No.	***Generating Station***	***With Natural Draft cooling tower or without cooling tower***
(i)	*200 – 300 MW series*	*8.50%*
(ii)	*300/330/350/500 MW and above*	
	Steam-driven boiler feed pumps	*5.25%*
	Electricity-driven boiler feed pumps	*8.00%*
(iii)	*600 MW and above*	
	Steam-driven boiler feed pumps	*5.25%*
	Electricity-driven boiler feed pumps	*8.00%*

Provided that for thermal generating stations with induced draft cooling towers and where ball and tube type coal mill is used, the norms shall be further increased by 0.5% and 0.8%, respectively:

Provided further that Additional Auxiliary Energy Consumption as follows shall be allowed for plants with Dry Cooling Systems:

Type of Dry Cooling System	***(% of gross generation)***
Direct cooling air cooled condensers with mechanical draft fans	*1.0%*
Indirect cooling system employing jet condensers with pressure recovery turbine and natural draft tower	*0.5%*

Note: Auxiliary energy consumption for units with a capacity of less than 200 MW shall be dealt with on a case-to-case basis.

100. As the generating station with a capacity of 2000 MW, having two Steam-driven Boiler Feed Pumps and five electrically motor-driven boiler pumps, the generating station qualifies for a normative Auxiliary Power Consumption of 6.875% (5.25% for Units having Steam-driven BFP & 8.50% for electrically motor-driven boiler pumps).

Accordingly, the Petitioner's normative Auxiliary Power Consumption of 6.875% is allowed.

Interest on Working Capital

101. Regulation 34 of the 2024 Tariff Regulations provides as under:

> *"**34. Interest on Working Capital**: (1) The working capital shall cover:*
>
> *(a) For Coal-based/lignite-fired thermal generating stations:*
>
> *(i) Cost of coal or lignite, if applicable, for 10 days for pit-head generating stations and 20 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity, whichever is lower;*
>
> *(ii) Limestone towards stock for 15 days corresponding to the normative annual plant availability.*
>
> *(iii) Advance payment for 30 days towards cost of coal or lignite and limestone for generation corresponding to the normative annual plant availability factor;*
>
> *(iv) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor and in case of use of more than one secondary fuel oil cost of fuel oil stock for the main secondary fuel oil;*
>
> *(v) Maintenance spares @ 20% of operation and maintenance expenses including water charges and security expenses;*
>
> *(vi) Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on the normative annual plant availability factor; and*
>
> *(vii) Operation and maintenance expenses including water charges and security expenses for one month.*
>
> *XXX XXX XXX*
>
> *(2) The cost of fuel in cases covered under sub-clauses (a) and (c) of clause (1) of this Regulation shall be based on the landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 59 of these regulations) by the generating station and gross calorific value of the fuel as per actual weighted average for the preceding financial year in case of each financial year for which tariff is to be determined:*
>
> *Provided that in the case of a new generating station, the cost of fuel for the first financial year shall be considered based on landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 59 of these regulations) and gross calorific value of the fuel as per actual weighted average for three months, as used for infirm power, preceding date of commercial operation for which tariff is to be determined.*
>
> *(3) Rate of interest on working capital shall be on a normative basis and shall be considered at the Reference Rate of Interest as on 1.4.2024 or as on 1st April of the year during the tariff period 2024- 29 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:*
>
> *Provided that in case of truing-up, the rate of interest on working capital shall be considered at Reference Rate of Interest as on 1st April of each of the financial year during the tariff period 2024-29.*

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

(a) Fuel Cost and Energy Charges in Working Capital

102. Regulation 34(2) of the 2024 Tariff Regulations provides that for the purpose of computation of the cost of fuel as a component of Interest on Working Capital (IWC), the landed price and Gross Calorific Value (GCV) of fuel are to be considered based on actuals, i.e., as per the actual weighted average for the preceding financial year, in case of each financial year for which tariff is to be determined. Further, Regulation 64(3) of the 2024 Tariff Regulations provides as under:

"(3) Energy charge rate (ECR) and Supplementary Energy charge rate in Rupees per kWh on ex-power plant basis shall be determined to three decimal places in accordance with the following formulae:

(a)ECR for coal based and lignite fired stations:

ECR = {(SHR – SFC x CVSF) x LPPF / CVPF + SFC x LPSFi + LC x LPL} x 100 / (100 – AUX)

xxxx

Where,

AUX = Normative auxiliary energy consumption in percentage.

CVPF = (a) Weighted Average Gross calorific value of coal as received, in kCal per kg for coal based stations less 85 Kcal/Kg on account of variation during storage at generating station;

(b) Weighted Average Gross calorific value of primary fuel as received, in kCal per kg, per litre or per standard cubic meter, as applicable for lignite, gas and liquid fuel based stations;

(d) In case of blending of fuel from different sources, the weighted average Gross calorific value of primary fuel shall be arrived in proportion to blending ratio:

CVSF = Calorific value of secondary fuel, in kCal per ml;

ECR = Energy charge rate, in Rupees per kWh sent out;

SHR = Gross station heat rate, in kCal per kWh;

LC = Normative limestone consumption in kg per kWh;

LPL = Weighted average landed cost of limestone in Rupees per kg;

LPPF = Weighted average landed fuel cost of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month. (In case of blending of fuel from different sources, the weighted average landed fuel cost of primary fuel shall be arrived in proportion to blending ratio);

SFC= Normative specific fuel oil consumption, in ml per kWh;

LPSFi= Weighted Average Landed Fuel Cost of Secondary Fuel in Rs./ ml during the month:

Provided that energy charge rate for a gas or liquid fuel based station shall be adjusted for open cycle operation based on certification of Member Secretary of respective Regional Power Committee during the month."

In case of part or full use of an alternative source of fuel supply by coal based thermal generating stations other than as agreed by the generating company and beneficiaries in their power purchase agreement for the supply of contracted power on account of a shortage of fuel or optimization of economical operation through blending, the use of an alternative source of fuel supply shall be permitted to generating station:

Provided that the weighted average price of alternative source of fuel shall not exceed 30% of base price of fuel computed as per clause (6) of this Regulation and in such case, prior permission from beneficiaries shall not be a pre-condition, unless otherwise agreed specifically in the power purchase agreement:

Provided further that where the energy charge rate based on weighted average price of fuel upon use of alternative source of fuel supply exceeds 30% of base energy charge rate as approved by the Commission for that year or exceeds 20% of energy charge rate for the previous month, whichever is lower shall be considered and, in that event, prior consultation with beneficiary shall be made at least three days in advance."

103. The Petitioner has claimed the GCV and price of the coal based on the monthly data for the year 2023-24 for the purpose of calculating the ECR for the tariff period 2024-29.

104. Accordingly, the Petitioner has claimed an ECR of Rs.1.5505 per kWh, and the fuel component claimed in working capital for the period 2024-29 is as under:

(Rs. in lakh)

	2024-25	**2025-26**	**2067-27**	**2027-28**	**2028-29**
Cost for coal for 40 days	22390.98	22390.98	22390.98	22390.98	22390.98
Cost of secondary fuel oil for 2 months	940.10	940.10	940.10	942.68	940.10

105. The Petitioner has submitted Form-15 by considering Actual transit and handling losses, and has also considered the opening value of stock and coal supplied for the months from April, 2023 to March, 2024. Also, for computing weighted average GCV and landed fuel cost, the Petitioner used the simple average formula to average the data for 12 months.

106. The matter has been considered. The observations stated above have been duly dealt with, in accordance with the 2024 Tariff Regulations, and the necessary adjustments have been made. However, the Petitioner is directed to submit duly linked

Form-15 and Form-15A, as prescribed under the 2024 Tariff Regulations, at the time of truing up of tariff. Accordingly, the weighted average price and GCV of coal and oil claimed and allowed for the period 2024-29 are as under:

(Rs. in lakh)

	Claimed	**Allowed**
Weighted average price of coal (Rs. /MT)	2235.74	2238.29
Weighted average GCV of coal (kCal/kg)	3803.75	3805.70
Weighted average price of oil (Rs. /KL)	77579.11	77579.11
Weighted average GCV of oil (kCal/Ltr.)	9038.46	9038.46

** Weighted Average Gross calorific value of coal as received, in kCal per kg for coal based stations as shown above has been adjusted by 85 Kcal/Kg on account of variation during storage at generating station, for the purpose of computation of ECR and interest on working capital.*

107. Accordingly, the fuel component in working capital and the ECR claimed and allowed for the period 2024-29 is as under:

(Rs. in lakh)

	Claimed	**Allowed**
Cost of coal for 40 days corresponding to NAPAF	22390.98	22405.11
Cost of secondary fuel oil for 2 months corresponding to NAPAF	940.10	940.10
ECR (Rs./kWh)	1.550	1.551

108. The difference in the ECR claimed by the Petitioner and allowed by the Commission, as above, is due to the fact that the Petitioner has computed GCV and cost of coal by way of simple average of the GCV and price for the year 2023-24, whereas the Commission has considered the weighted average GCV and price of fuel with the total coal received during the month as the corresponding weight. Further, the Petitioner has considered the actual transit and handling losses for the quantity of coal supplied by the coal Company. However, the Commission follows a uniform approach of calculating normative transit and handling losses for Pit-head stations at 0.20%.

109. The Petitioner shall, on a month-to-month basis, compute and claim energy charges from the beneficiaries based on the formulae in Regulation 64(3) of the 2024 Tariff Regulations.

(b) Working Capital for Maintenance Spares

110. The Petitioner has claimed the maintenance spares in the working capital as under:

(Rs. in lakh)

2024-25	2025-26	2067-27	2027-28	2028-29
24060.21	25864.00	26716.00	23588.00	24500.00

111. Regulation 34(1)(a)(v) of the 2024 Tariff Regulations provides for maintenance spares @ 20% of the O&M expenses (including water charges and security expenses). Accordingly, maintenance spares @ 20% of the O&M expenses (including the water charges and security expenses) are allowed, and are as under:

(Rs. in lakh)

2024-25	2025-26	2067-27	2027-28	2028-29
14938.02	15720.02	16541.32	17406.09	18314.49

(c) Working Capital for Receivables

112. In terms of Regulation 34(1)(a)(vi) of the 2024 Tariff Regulations, the receivables equivalent to 45 days of capacity charges and energy charges are worked out and allowed as under:

(Rs. in lakh)

	2024-25	2025-26	2067-27	2027-28	2028-29
Variable Charges - for 45 days	25894.64	25894.64	25894.64	25894.64	25894.64
Fixed Charges - for 45 days	11682.35	12238.59	12729.03	13236.71	13843.31
Total	**37576.99**	**38133.23**	**38623.68**	**39131.35**	**39737.95**

(d) Working Capital for O&M Expense (1 month)

113. The Petitioner has claimed the O&M expenses for 1 month in the working capital as under:

(Rs. in lakh)

2024-25	2025-26	2067-27	2027-28	2028-29
10025.09	10776.67	11131.67	9828.33	10208.33

114. Regulation 34(1)(a)(vii) of the 2024 Tariff Regulations provides for O&M expenses equivalent to 1 month of the O&M expenses (including water charges and security expenses). Accordingly, O&M expenses equivalent to 1 month of the O&M

expenses (including water charges and security expenses) are allowed and are as under:

(Rs. in lakh)

2024-25	2025-26	2067-27	2027-28	2028-29
6224.18	6550.01	6892.22	7252.54	7631.04

(e) Rate of interest on working capital

115. In terms of Regulation 34(3) of the 2024 Tariff Regulations, the rate of interest on working capital is to be considered at the Reference Rate of Interest, i.e., 1-year SBI MCLR as on 1st April of the relevant year, plus 325 bps. Since the tariff of the generating station is being determined during FY 2026-27, 1-year SBI MCLR as on 1.4.2024, 1.4.2025 and 1.4.2026 is available. Accordingly, with a view to safeguarding the Petitioner and the beneficiaries against the additional interest burden due to excess/ under recovery of tariff, the following rate of interest on working capital has been considered for the tariff period 2024-29, subject to truing up:

	2024-25	2025-26	2026-27	2027-28	2028-29
1-year SBI MCLR as on 1st April	8.65%	9.00%	8.70%	8.70%	8.70%
Add: 350 bps	3.25%	3.25%	3.25%	3.25%	3.25%
Rate of interest considered for interest on working capital	**11.90%**	**12.25%**	**11.95%**	**11.95%**	**11.95%**

116. Accordingly, the interest on working capital, subject to truing up, is computed and allowed as under:

(Rs. in lakh)

	2024-25	2025-26	2067-27	2027-28	2028-29
Working Capital for Cost of Coal towards Stock - (10 days generation corresponding to NAPAF)	5601.28	5601.28	5601.28	5601.28	5601.28
Working Capital for Cost of Coal towards Generation – (30 days generation corresponding to NAPAF)	16803.83	16803.83	16803.83	16803.83	16803.83
Working Capital for Cost of Secondary fuel oil - (2 months generation corresponding to NAPAF)	940.10	940.10	940.10	942.68	940.10
Working Capital for Maintenance Spares @ 20% of O&M expenses	14938.02	15720.02	16541.32	17406.09	18314.49
Working Capital for Receivables – (45 days of sale of electricity at NAPAF	37576.99	38133.23	38623.68	39131.35	39737.95
Working Capital for O&M expenses - 1 month	6224.18	6550.01	6892.22	7252.54	7631.04
Total Working Capital	**82084.40**	**83748.48**	**85402.43**	**87137.77**	**89028.70**
Rate of Interest	11.90%	12.25%	11.95%	11.95%	11.95%
Interest on Working Capital	**9768.04**	**10259.19**	**10205.59**	**10412.96**	**10638.93**

Special Allowance

117. Regulation 28 of the 2024 Tariff Regulation for special allowances provides as under:

> ***"28. Special Allowance for Coal-based/Lignite fired Thermal Generating station:*** *(1) In the case of coal-based/ lignite fired thermal generating stations, the generating company, instead of availing renovation and modernization (R&M), may opt to avail of a 'special allowance' in accordance with the norms specified in this Regulation, as compensation for meeting the requirement of expenses towards any additional capital expenditure covered in Regulations 24, 25, 26 and 27 except for capital expenditure arising out of change in law, award of arbitration or for compliance of the directions or order of any statutory authority, or order or decree of any court of law, and force majeure after completion of 25 years from the date of Commercial operation of the generating station or a unit thereof and in such an event, an upward revision of the capital cost shall not be allowed and the applicable operational norms shall not be relaxed but the Special Allowance shall be included in the annual fixed cost:*
>
> *Provided that such option shall not be available for a generating station or unit thereof for which renovation and modernization has been undertaken and the expenditure has been admitted by the Commission before the commencement of these regulations, or for a generating station or unit which is in a depleted condition or operating under relaxed operational and performance norms;*
>
> *Provided further that special allowance shall also be available for a generating station which has availed the Special Allowance during the tariff period 2009-14 or 2014-19 or 2019-24 as applicable from the date of completion of the useful life.*
>
> *(2) The Special Allowance admissible to a generating station shall be @ Rs 10.75 lakh per MW per year for the tariff period.*
>
> *(3) In the event of a generating station availing of Special Allowance, the expenditure incurred upon or utilized from Special Allowance shall be maintained separately by the generating station, and details of the same shall be made available to the Commission as and when directed.*
>
> *(4) The Special Allowance allowed under this Regulation shall be transferred to a separate fund for utilization towards Renovation & Modernisation and additional capitalisation as per clause (1) above, and the expenditure incurred or utilized from the special allowance shall be made available to the Commission as and when directed."*

118. The Special allowance claimed by the Petitioner in terms of the above regulation is allowed as under:

(Rs.in lakh)

Units	Capacity in MW	COD of Unit	Date of completion of useful life	2019-20	2020-21	2021-22	2022-23	2023-24
Unit-I	200	1-6-1982	31-5-2007	2150.00	2150.00	2150.00	2150.00	2150.00
Unit-II	200	1-2-1983	31-1-2008	2150.00	2150.00	2150.00	2150.00	2150.00
Unit-III	200	1-7-1983	30-6-2008	2150.00	2150.00	2150.00	2150.00	2150.00
Unit-IV	200	1-1-1984	31-12-2008	2150.00	2150.00	2150.00	2150.00	2150.00
Unit-V	200	1-6-1984	31-5-2009	2150.00	2150.00	2150.00	2150.00	2150.00
Unit-VI	500	1-7-1987	30-6-2012	5375.00	5375.00	5375.00	5375.00	5375.00

Unit-VII	500	1-5-1988	30-4-2013	5375.00	5375.00	5375.00	5375.00	5375.00
Total Special allowance allowed				**21500.00**	**21500.00**	**21500.00**	**21500.00**	**21500.00**

Annual Fixed Charges approved for the period 2024-29

119. Accordingly, the annual fixed charges approved for the generating station for the tariff period 2024-29 are summarised as under:

(Rs. in lakh)

	2024-25	**2025-26**	**2026-27**	**2027-28**	**2028-29**
Depreciation	1647.52	1721.59	1754.15	1761.88	1761.88
Interest on Loan	1199.57	1140.55	1034.52	901.03	759.13
Return on Equity	7451.60	7547.13	7545.73	7552.23	7552.23
Interest on Working Capital	9768.04	10259.19	10205.59	10412.96	10638.93
O&M Expenses	68090.00	71670.00	75430.00	79390.00	83550.00
Special Allowance	21500.00	21500.00	21500.00	21500.00	21500.00
Total	**109656.72**	**113838.46**	**117469.98**	**121518.11**	**125762.17**

Note: (1) All figures are on an annualised basis. (2) All figures under each head have been rounded. The figure in the total column in each year is also rounded. As such, the sum of individual items may not be equal to the arithmetic total of the column. (3) The O&M Expenses indicated above are the normative O&M expenses and do not include the water charges, security expenses and ash transportation expenses which shall be recovered separately in terms of notification dated 20.3.2026.

Recovery of Water Charges, Security Expenses and Ash Transportation Expenses

120. The Commission, vide Notification dated 20.3.2026, has notified (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2026, which provide amendments to the first, second, and fourth provisos to Regulation 36(1)(6) of the 2024 Tariff Regulations. The relevant extract of Regulation 36(1)(6) of the 2024 Tariff Regulations, as amended, is as under:

> *"(6) The Water Charges, Security Expenses, Ash Transportation Expenses and Capital Spares for thermal generating stations shall be allowed separately after prudence check:*
>
> *Provided that water charges shall be allowed to be recovered on monthly basis from the beneficiaries on submission of Auditor certificate, based on water consumption depending upon type of plant and type of cooling water system or water agreement with state govt./utilities, and the norms specified by the Ministry of Environment, Forest and Climate Change subject to prudence check. The details regarding the same shall be furnished along with the petition;*

Provided further that the generating station shall be allowed to recover security expenses on monthly basis on submission of the Auditor certificate and, shall submit the assessment of the security requirement and estimated expenses along with the petition seeking the determination of tariff;

xxx

Provided further that the Ash Transportation Expenses incurred by the thermal generating stations toward supply of ash, for the purpose of infrastructure or works owned by the Central Government, State Government or their entities, limited to construction of road, flyover embankments, shoreline protection structures in coastal districts, dams, or filling of the mine void, shall be allowed to be recovered from the beneficiaries on a monthly basis after adjustment of revenue generated, subject to the following conditions:-

a) submission of the Auditor Certificate towards monthly expenditure towards ash transportation expenses, and a certificate of delivery from the users of ash;

b) award of ash transportation contract through transparent competitive bidding;

c) the monthly ash transportation expenses allowed shall be subject to true-up at the end of the tariff period;

d) surplus revenue after adjustment of ash transportation expenses shall be treated as Non-tariff income; and

e) the disposal of ash by coal and lignite based thermal generating station shall be as per the guidelines dated 30th January, 2026 issued by the Ministry of Power, as amended from time to time;

f) the mechanism of monthly recovery specified in this clause shall not apply for the supply of ash for the purposes not specified in this clause such as filling of low lying area, cement industries and for eco-friendly purposes in line with notification dated 31st December, 2021, as amended time to time, of Ministry of Environment, Forest and Climate Change, but same shall be considered, on case to case basis, in accordance with the applicable regulations."

121. It is evident from the above that, under the amended provisions, the water charges and security expenses are to be recovered by the generating station on a monthly basis from the beneficiaries on submission of the Auditor certificate. Also, the ash transportation expenses incurred for the supply of ash for the purposes specified in the fourth proviso are to be recovered on a monthly basis after adjustment of the revenue generated, subject to the conditions stipulated therein. Thus, the Petitioner must recover these expenses separately based on actual expenditure incurred, and

not through the annual fixed charges determined in this order. Accordingly, to avoid double recovery, the water charges, security expenses and ash transportation expense worked out in paragraphs 79, 84 and 91 above have not been included in the O&M expenses forming part of the annual fixed charges as allowed in para 119 above. Considering the date of the notification of the Amendment, i.e. 20.3.2026, the financial years 2024-25 and 2025-26 have already lapsed, and the Petitioner has incurred the actual expenditure on security and water charges for the said period.

122. As regards the mechanism for recovery of water charges and security expenses, prior to the notification of the Second Amendment Regulations, i.e. for 2024-25 and 2025-26, the Petitioner has recovered a partial amount under the tariff charge to beneficiaries; any differential amount is to be adjusted for the years 2024-25 and 2025-26, on submission of the Auditor's certificate, subject to a prudence check at the time of truing up. Further, to ensure a smooth transition, the Petitioner is allowed to recover water charges and security expenses on a monthly basis from the beneficiaries from 1.4.2026 onwards, in line with the said notification dated 20.3.2026.

123. As regards the ash transportation expenses, the Petitioner has filed Petition No. 227/MP/2024 seeking reimbursement of ash transportation expenses. Accordingly, the Petitioner's claim for ash transportation expenses for the period from 1.4.2024 to 31.3.2026 shall be dealt with in the said Petition. Further, for the period from 1.4.2026 onwards, the Petitioner may recover transportation expenses on a monthly basis from the beneficiaries, in line with the notification dated 20.3.2026; the same will be subject to verification at the time of truing up.

Application Fee and Publication expenses

124. The Petitioner has sought reimbursement of the fee it paid for filing the Petition for the period 2024-29 and for publication expenses. The Petitioner shall be entitled to

reimbursement of the filing fees and publication expenses in connection with the present Petition, directly from the beneficiaries on a pro-rata basis in accordance with Regulation 94(2) of the 2024 Tariff Regulations.

125. Similarly, RLDC Fees & Charges paid by the Petitioner under the Central Electricity Regulatory Commission (Fees and Charges of Regional Load Dispatch Centre and other related matters) Regulations, 2009, shall be recovered from the beneficiaries. In addition, the Petitioner is entitled to recovery of statutory taxes, levies, duties, cess etc., levied by the statutory authorities in accordance with the 2024 Tariff Regulations.

Summary

126. Accordingly, the annual fixed charges claimed and allowed for the period 2024-29 are summarised as under:

(Rs. In lakh)

	2024-25	**2025-26**	**2026-27**	**2027-28**	**2028-29**
Annual fixed charges claimed	189820.86	175882.30	182403.40	161532.76	164985.60
Annual Fixed Charges allowed	**109656.72**	**113838.46**	**117469.98**	**121518.11**	**125762.17**

127. In addition, the Petitioner shall recover the water charges, security expenses and ash transportation expenses in terms of the notification dated 20.3.2026 as discussed in paras 122 and 123 above. Further, the annual fixed charges approved as above, are subject to truing up in terms of Regulation 13 of the 2024 Tariff Regulations.

128. Petition No. 647/GT/2025 is disposed of accordingly.

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