CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

<u>Petition No. 431/GT/2020</u>

Coram:
Shri I. S. Jha, Member
Shri Arun Goyal, Member
Shri Pravas Kumar Singh, Member

Date of Order: **7th October, 2022**

In the matter of:

Petition for approval of tariff of the Feroze Gandhi Unchahar Thermal Power Station Stage-I (420 MW) for the period from 1.4.2019 to 31.3.2024

And

In the matter of:

NTPC Limited,
NTPC Bhawan,
Core-7, Scope Complex,
7, Institutional Area, Lodhi Road,
New Delhi – 110003. **.....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,
   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,
   Haryana – 134 109.

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

8. Himachal Pradesh State Electricity Board Limited,
   Kumar Housing Complex Building-II,
   Vidyut Bhawan, Shimla – 171 004.

9. Power Development Department,
   Government. of J&K, Civil Secretariat,
   Srinagar.

10. Electricity Department,
    Union Territory of Chandigarh,
    Addl. Office Building, Sector-9D,
    Chandigarh.

11. Uttarakhand Power Corporation Limited,
    Urja Bhavan, Kanwali Road,
    Dehradun – 248 001. **...Respondents**

Parties Present:

Ms. Swapna Seshadri, Advocate, NTPC
Ms. Ritu Apurva, Advocate, NTPC
Ms. Ashabari Basu Thakur, Advocate, NTPC
Shri Mansoor Ali Shoket, Advocate, TPDDL
Shri Nitin Kala, Advocate, TPDDL
Shri Kunal Singh, Advocate, TPDDL
Shri Vishal Sagar, Advocate, TPDDL
Ms. Megha Bajpeyi, BRPL
Shri Aditya Ajay, Advocate, BRPL & BYPL
Shri Rahul Kinra, Advocate, BRPL & BYPL
Shri Hemant Khera, Advocate, BRPL & BYPL

ORDER

This petition has been filed by the Petitioner, NTPC Limited for approval of tariff of Feroze Gandhi Unchahar Thermal Power Station Stage-I (420 MW) (hereinafter referred to as 'the generating station') for the 2019-24 tariff period, in accordance with

Regulation 9(2) of the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2019 (hereinafter referred to as 'the 2019 Tariff Regulations').

2. The generating station with a capacity of 420 MW comprises of two units of 210 MW each. The dates of commercial operation of Unit-I is 21.11.1988 and Unit-II is 22.3.1989. The Commission vide its order dated 1.10.2022 in Petition No. 302/GT/2020 had determined the tariff of the generating station for the 2014-19 tariff period after truing up exercise. The capital cost and annual fixed charges allowed by order dated 1.10.2022 is as under:

Capital Cost allowed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	96843.70	96689.24	96682.43	96587.95	96538.99
Add: Additional capital expenditure	(-) 154.47	(-) 6.81	(-) 94.48	(-) 48.96	(-) 273.66
Closing Capital cost	**96689.24**	**96682.43**	**96587.95**	**96538.99**	**96265.33**
Average Capital cost	96766.47	96685.83	96635.19	96563.47	96402.16

Annual Fixed Charges allowed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	545.87	562.78	559.79	570.40	429.36
Interest on Loan	58.30	23.95	2.27	0.00	0.00
Return on Equity	9397.22	9434.13	9428.47	9421.40	9430.81
Interest on Working Capital	4266.64	4335.30	4339.60	4467.74	4506.44
O&M Expenses	10379.93	11401.28	11557.96	12304.43	12975.76
Special Allowance	3150.00	3350.02	3562.76	3788.98	4029.58
Total	**27797.96**	**29107.44**	**29450.85**	**30552.96**	**31371.94**

Present Petition

3. The Petitioner has filed the present petition for determination of tariff of the generating station for the 2019-24 tariff period, in accordance with Regulation 9(2) of the 2019 Tariff Regulations and has claimed the capital cost and annual fixed charges as under:

Capital Cost claimed

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Opening capital cost	97052.39	97052.39	97052.39	97052.39	97052.39
Add: Addition during the year/period	0.00	0.00	0.00	0.00	0.00
Closing Capital Cost	97052.39	97052.39	97052.39	97052.39	97052.39
Average Capital Cost	97052.39	97052.39	97052.39	97052.39	97052.39

Note: Entire capital cost claimed in the Petition is eligible for return on equity at normal rate.

Annual Fixed Charges claimed

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	137.08	0.00	0.00	0.00	**0.00**
Interest on Loan	0.00	0.00	0.00	0.00	**0.00**
Return on Equity	5468.51	5468.51	5468.51	5468.51	**5468.51**
Interest on Working Capital	3561.25	3589.43	3619.86	3652.10	**3684.52**
O&M Expenses	14997.07	15586.15	16197.95	16846.09	**17519.06**
Special Allowance	3990.00	3990.00	3990.00	3990.00	**3990.00**
Total	**28153.93**	**28634.10**	**29276.33**	**29956.70**	**30662.10**

4. The Respondent, UPPCL has filed its reply vide affidavits dated 10.7.2020 and 27.8.2021 and the Petitioner has filed rejoinder to the said replies, vide affidavits dated 26.5.2021 and 29.10.2021, respectively. The Respondent, TPDDL has filed its reply vide affidavits dated 30.6.2021 and 7.7.2022 and the Petitioner has filed its rejoinder to the said replies, vide affidavits dated 29.10.2021 and 8.7.2022. The Respondents BRPL and BYPL have filed a common reply vide affidavit dated 30.3.2022 and the Petitioner has filed its rejoinder to the said replies vide affidavit dated 22.4.2022. The Petitioner has also filed additional information/ submission vide affidavits dated 11.5.2021, 23.6.2021, 15.3.2022 and 11.4.2022 after serving copies to the Respondents. The Petition was heard through video conferencing on 25.1.2022 and 15.3.2022 along with Petition No. 302/GT/2020 and the Commission vide Record of Proceedings (ROP) dated 15.3.2022, directed the Petitioner to submit certain additional information. In compliance to the direction of the Commission, the Petitioner vide affidavit dated 8.4.2022, has filed the additional information after serving copies to the Respondents.

Since order in the petition could not be passed prior to the Chairperson demitting office, this Petition was re-heard on 14.7.2022, through video conferencing and the Commission, after permitting the parties to complete pleadings in the matter, reserved its order in the matter. Accordingly, based on the submissions of the parties and the documents available on record and on prudence check, we proceed to determine the tariff of the generating station, for the 2019-24 tariff period, as stated in the subsequent paragraphs.

Capital Cost

5. Regulation 19(1) of the 2019 Tariff Regulations provides that the capital cost as determined by the Commission after prudence check, in accordance with this regulation, shall form the basis for determination of tariff of existing and new projects. Regulation 19(3) of the 2019 Tariff Regulations provides as under:

> *"(3) The Capital cost of an existing project shall include the following:*
>
> *(a) Capital cost admitted by the Commission prior to 1.4.2019 duly trued up by excluding liability, if any, as on 1.4.2019;*
>
> *(b) Additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with these regulations;*
>
> *(c) Capital expenditure on account of renovation and modernisation as admitted by this Commission in accordance with these regulations;*
>
> *(c) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
>
> *(d) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal upto the receiving end of generating station but does not include the transportation cost and any other appurtenant cost paid to the railway; and*
>
> *(f) Capital cost incurred or projected to be incurred by a thermal generating station, on account of implementation of the norms under Perform, Achieve and Trade (PAT) scheme of Government of India shall be considered by the Commission subject to sharing of benefits accrued under the PAT scheme with the beneficiaries.*

6. The annual fixed charges claimed by the Petitioner, is based on the opening capital cost of Rs.97052.39 lakh, as on 1.4.2019, as against the capital cost of Rs.96265.33 lakh, on cash basis allowed as on 31.3.2019, vide order dated 1.10.2022

in Petition No. 302/GT/ 2020. Accordingly, in terms of Regulation 19(3) of the 2019 Tariff Regulations, the capital cost of Rs.96265.33 lakh, on cash basis, has been considered as on 1.4.2019, for determination of tariff for the 2019-24 tariff period.

Additional Capital Expenditure

7. Regulation 25 and Regulation 26 of the 2019 Tariff Regulations, provides 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 on the following counts within the original scope of work and after the cut-off date may be admitted by the Commission, subject to prudence check:

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

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

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

(d) Liability for works executed prior to the cut-off date;

(e) Force Majeure events;

(f) Liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments; and

(g) Raising of ash dyke as a part of ash disposal system.

(2) In case of replacement of assets deployed under the original scope of the existing project after cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:

(a) The useful life of the assets 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 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.

26. Additional Capitalisation beyond the original scope

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

(a) Liabilities to meet 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 in additional 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 sewage treatment plant in thermal generating station.

(2) 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."

8. The Petitioner has not claimed any additional capital expenditure during the 2019-24 tariff period. Accordingly, no additional capital expenditure has been considered for the 2019-24 tariff period.

Capital cost allowed for the 2019-24 tariff period

9. Based on above, the capital cost allowed for the purpose of tariff is as under:

(Rs. in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Opening capital cost	96265.33	96265.33	96265.33	96265.33	96265.33
Add: Additional capital expenditure	0.00	0.00	0.00	0.00	0.00
Closing capital cost	**96265.33**	**96265.33**	**96265.33**	**96265.33**	**96265.33**
Average capital cost	96265.33	96265.33	96265.33	96265.33	96265.33

Debt-Equity Ratio

10. Regulation 18 of the 2019 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 approval of the competent authority in other cases regarding infusion of funds from internal resources in support of the utilization made or proposed to be made to meet the capital expenditure of the generating station or the transmission system including communication system, as the case may be.

(3) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, debt: equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2019 shall be considered:

Provided that in case of a generating station or a transmission system including communication system which has completed its useful life as on or after 1.4.2019, if the equity actually deployed as on 1.4.2019 is more than 30% of the capital cost, equity in excess of 30% shall not be taken into account for tariff computation;

Provided further that in case of projects owned by Damodar Valley Corporation, the debt: equity ratio shall be governed as per sub-clause (ii) of clause (2) of Regulation 72 of these regulations.

(4) In case of the generating station and the transmission system including communication system declared under commercial operation prior to 1.4.2019, but where debt: equity ratio has not been determined by the Commission for determination of tariff for the period ending 31.3.2019, the Commission shall approve the debt: equity ratio in accordance with clause (1) of this Regulation.

(5) Any expenditure incurred or projected to be incurred on or after 1.4.2019 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation."

11. The Petitioner has considered the gross normative loan of Rs.49030.60 lakh and equity of Rs.29115.72 lakh (net of equity adjustment of Rs.18906.07 lakh in terms of first proviso to Regulation 18(3) as on 1.4.2019). The gross normative loan and equity of the generating station, as on 31.3.2019, approved in order dated 1.10.2022 in Petition No. 302/GT/2020 is Rs.48602.17 lakh (i.e. 50.49% of the admitted capital cost as on 31.3.2019) and Rs.47663.17 lakh (i.e. 49.51% of the admitted capital cost as on

31.3.2019), respectively. Further, as on 1.4.2019 useful life of the generating station is already elapsed. Accordingly, in terms of Regulation 18(3) of the 2019 Tariff Regulations, the gross normative loan and equity to be considered as on 1.4.2019, works out as Rs.48602.17 lakh and Rs.47663.17 lakh, respectively. However, considering the first proviso to Regulation 18(3) of the said regulations, the net equity works out as Rs.28879.60 lakh. Accordingly, the gross normative loan of Rs.48602.17 lakh and net equity of Rs.28879.60 lakh has been considered for the purpose of tariff as on 1.4.2019.

	Capital cost as on 1.4.2019 (Rs. in lakh)	**(%)**	**Additional capital expenditure (Rs. in lakh)**	**(%)**	**De-capitalization (Rs. in lakh)**	**(%)**	**Total cost as on 31.3.2024 (Rs. in lakh)**	**(%)**
Debt	48602.17	50.49%	0.00	70.00%	0.00	50.00%	48602.17	50.49%
Equity	* 47663.17	49.51%	0.00	30.00%	0.00	50.00%	* 47663.17	49.51%
Total	**** 96265.33**	**100.00**	**0.00**	**100.00**	**0.00**	**100.00**	**** 96265.33**	**100.00**

** In line with the first proviso to Regulation 18(3) of the 2019 Tariff Regulations the admissible net equity has been restricted to Rs.28879.60 lakh i.e. 30% of the capital cost for the purpose of tariff.*
*** Variation due to rounding off.*

Return on Equity

12. Regulation 30 of the 2019 Tariff Regulations provide as follows:

"30. Return on Equity:

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

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

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to Change in Law shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;

Provided further that:

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

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

(iii) in case of a thermal generating station with effect from 1.4.2020:

(a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;

(b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute subject to ceiling of additional rate of return on equity of 1.00%:

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

13. Regulation 31 of the 2019 Tariff Regulations provides as under:

"31. Tax on Return on Equity:

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

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

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

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

Illustration-

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

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

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

(a) Estimated Gross Income from generation or transmission business for FY 2019-20 is Rs 1000 crore;

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

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

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

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

14. The Petitioner has claimed tariff considering the base rate of 15.50% and effective tax rate of 17.472% (i.e. MAT Rate of 15% + Surcharge of 12% + HEC of 4%) for the 2019-24 tariff period. Since, entire equity of the generating station is eligible for return on equity at normal rate of return on equity, in terms of above regulation, the rate of return on equity, as claimed by the Petitioner, has been considered for the purpose of tariff. Accordingly, return on equity, has been worked out as under:

(Rs. in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Gross Notional Equity	47663.17	47663.17	47663.17	47663.17	47663.17
Less: Adjustment to equity in terms of the first proviso to Regulation 18(3)	18783.57	18783.57	18783.57	18783.57	18783.57
Normative Equity – Opening	28879.60	28879.60	28879.60	28879.60	28879.60
Addition of Equity due to additional capital expenditure	0.00	0.00	0.00	0.00	0.00
Normative Equity – Closing	28879.60	28879.60	28879.60	28879.60	28879.60
Average Normative Equity	28879.60	28879.60	28879.60	28879.60	28879.60
Return on Equity (Base Rate)	15.500%	15.500%	15.500%	15.500%	15.500%
Effective Tax Rate	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) - (annualized)	**5424.17**	**5424.17**	**5424.17**	**5424.17**	**5424.17**

Interest on Loan

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

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

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

(3) The repayment for each of the year of the tariff period 2019-24 shall be deemed to be equal to the depreciation allowed for the corresponding year/period. In case of de-

capitalization of assets, the repayment shall be adjusted by taking into account cumulative repayment on a pro rata basis and the adjustment should not exceed cumulative depreciation recovered upto the date of de-capitalization of such asset.

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

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

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

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

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

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

16. No interest on loan has been claimed by the Petitioner during the 2019-24 tariff period. Considering the gross normative loan and cumulative repayment of Rs.48602.17 lakh, as on 1.4.2019 (considered as on 31.3.2019, in order dated 1.10.2022 in Petition No. 302/GT/2020), along with 'nil' addition to normative loan on account of additional capital expenditure during the 2019-24 tariff period, the interest on loan to be allowed for the purpose of 2019-24 tariff period works out as 'nil'.

Depreciation

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

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

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

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

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

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

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

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

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

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

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

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

In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2019 from the gross depreciable value of the assets.

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

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-capitalized asset during its useful services."

18. The cumulative depreciation amounting to Rs.86194.28 lakh, the value of freehold land amounting to Rs.357.08 lakh and balance useful life of 'nil', as on 31.3.2019, as considered in order dated 1.10.2022 in Petition No. 302/GT/2020, has

been considered for the purpose of tariff. Further, the value of IT equipment and Software, amounting to Rs.636.81 lakh as on 1.4.2019, corresponding to the admitted capital cost, has been considered. Since, the elapsed life of the generating station as on 1.4.2019 is more than 12 years from the effective station COD of 20.1.1989, the depreciation has been calculated by spreading over the remaining depreciable value over the balance useful life of the generating station. The balance depreciable value before providing depreciation for the year 2019-20, works out to Rs.186.83 lakh. Accordingly, depreciation is worked out and allowed as under:

(Rs. in lakh)

		2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
A	Average capital cost	96265.33	96265.33	96265.33	96265.33	96265.33
B	Value of freehold land included in 'A'	357.08	357.08	357.08	357.08	357.08
C	Value of IT and software included in 'A'	636.81	636.81	636.81	636.81	636.81
D	Depreciable Value [(A-B-C) x 90% + C]	86381.11	86381.11	86381.11	86381.11	86381.11
E	Remaining depreciable value at the beginning of the year ('D' *minus* cumulative depreciation up to previous year)	186.83	0.00	0.00	0.00	0.00
F	Balance useful life at the beginning of the year	0.00	0.00	0.00	0.00	0.00
G	Weighted average rate of depreciation (H/A)	0.1941%	0.0000%	0.0000%	0.0000%	0.0000%
H	**Depreciation during the year (E/F)**	**186.83**	**0.00**	**0.00**	**0.00**	**0.00**
I	Cumulative depreciation at the end of the year (Cumulative depreciation up to previous year + H)	86381.11	86381.11	86381.11	86381.11	86381.11

<u>O&M Expenses</u>

19. Regulation 35(1)(1) of the 2019 Tariff Regulations provides as follows:

"(35)(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: