

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 431/GT/2020

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

	<i>(Rs. in lakh)</i>				
	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

	<i>(Rs. in lakh)</i>				
	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:

$\text{Rate of pre-tax return on equity} = \text{Base rate} / (1-t)$

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:

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

(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:

<i>(Rs. in lakh)</i>						
		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

O&M Expenses

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:



<i>(in Rs lakh/MW)</i>					
Year	200/210/ 250 MW Series	300/ 330/ 350 MW Series	500 MW Series	600 MW Series	800 MW Series and above
FY 2019-20	32.96	27.74	22.51	20.26	18.23
FY 2020-21	34.12	28.71	23.30	20.97	18.87
FY 2021-22	35.31	29.72	24.12	21.71	19.54
FY 2022-23	36.56	30.76	24.97	22.47	20.22
FY 2023-24	37.84	31.84	25.84	23.26	20.93

Provided that where the date of commercial operation of any additional unit(s) of a generating station after first four units occurs on or after 1.4.2019, the O&M expenses of such additional unit(s) shall be admissible at 90% of the operation and maintenance expenses as specified above;

xxx

Provided also that operation and maintenance expenses of generating station having unit size of less than 200 MW not covered above shall be determined on case to case basis.”

20. The Petitioner has claimed normative O&M expenses in Form 3A as under:

<i>(Rs. in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
13843.20	14330.40	14830.20	15355.20	15892.80

21. The normative O&M expenses as claimed by the Petitioner in terms of the aforesaid regulations, has been considered, for the purpose of tariff.

Water Charges

22. Regulation 35(1)(6) of the 2019 Tariff Regulations provides as under:

“35(1)(6) The Water, Security Expenses and Capital Spares for thermal generating stations shall be allowed separately and after prudence check:

Provided that water charges shall be allowed based on water consumption depending upon type of plant, type of cooling water system etc., subject to prudence check. The details regarding the same shall be furnished along with the petition:

Provided further that the generating station shall submit the assessment of the security requirement and estimated expenses;

Provided also that the generating station shall submit the details of year-wise actual capital spares consumed 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 part of additional capitalization or consumption of stores and spares and renovation and modernization.”

23. The actual water charges allowed vide order dated 1.10.2022 in Petition No. 302/GT/2020 for the 2014-19 tariff period is as follows:

<i>(Rs.in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
217.60	233.85	217.96	250.43	160.61

24. In terms of the first proviso to Regulations 35(1)(6) of the 2019 Tariff Regulations, water charges shall be allowed separately, based on water consumption depending upon type of plant, type of cooling water system etc., subject to prudence check. The details furnished by the Petitioner in respect of actual water charges for 2018-19 are as under:

Description	Remarks
Type of plant	Coal Based
Type of cooling water system	Closed Cycle
Allocation of Water	462998590 Cubic feet
Consumption of Water	Rs.12.48 per 1000 cubic feet
Rate of Water charges	Rs.6 lakh per cusec per year
Total Water Charges	Rs.160.61 lakh

25. The Petitioner has claimed the water charges as under:

<i>(Rs. in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
124.35	124.35	124.35	124.35	124.35

26. The Petitioner in its additional submission dated 23.6.2021, has submitted the actual water charges incurred as Rs. 145.43 lakh in 2019-20 and the same is allowed. Further, the water charges for the period 2020-24 has been allowed, after escalating the actual water charges incurred for 2019-20 by 5%. However, the Petitioner shall, at the time of truing up of tariff, furnish the detail of actual water consumption (in cubic meters) and rate (Rs/cubic meter). Considering the past consumption petitioner is directed to optimize their contracted quantity in future. The water charges have been



allowed after prudence check of the actual charges paid, for the 2019-24 tariff period, as summarized below:

<i>(Rs.in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
145.43	152.70	160.34	168.35	176.77

Security Charges

27. The Petitioner has claimed total security expenses of Rs.6272.80 lakh (i.e. Rs.1029.53 lakh in 2019-20, Rs.1131.41 lakh in 2020-21, Rs.1243.41 lakh in 2021-22, Rs.1366.54 lakh in 2022-23 and Rs.1501.92 lakh in 2023-24) for the 2019-24 tariff period, in terms of the second proviso to Regulation 35(1)(6) of the 2019 Tariff Regulations. It has, however, not furnished any justification and the assessment of security, for the expenses claimed. It is further observed that the Petitioner vide additional submission dated 23.6.2021, has submitted actual security expenses of Rs.909.02 lakh in 2019-20 and Rs 953.28 lakh in 2020-21. The actual security expenses as claimed by the Petitioner is allowed for 2019-20 and 2020-21. Further, the security expenses for the period 2021-24 has been allowed, after escalating the actual security expenses incurred for 2020-21 by 5%. However, 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 35(1)(6) of the 2019 Tariff Regulations. Accordingly, the Security charges allowed for the 2019-24 tariff period are summarized as follows:

<i>(Rs.in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
909.02	953.28	1000.94	1050.99	1103.54

Capital spares

28. The Petitioner has not claimed any capital spares, on projection basis, during the 2019-24 tariff period and has submitted that the same shall be claimed at the time of truing up of tariff, in terms of the last proviso to Regulation 35(1)(6) of the 2019 Tariff

Regulations, based on actual consumption of spares. Accordingly, the same has not been considered in this order. The claim of the Petitioner, if any, at the time of true up, of tariff, shall be considered on merits, after prudence check.

29. Accordingly, the total O&M expenses, including Water Charges and Security Charges, claimed by the Petitioner and allowed for the 2019-24 tariff period is summarized as under:

		(Rs. in lakh)				
		2019-20	2020-21	2021-22	2022-23	2023-24
Installed Capacity (MW) (A)		420.00	420.00	420.00	420.00	420.00
O&M Expenses under Reg.35(1) in Rs. lakh / MW (B)	Claimed	32.96	34.12	35.31	36.56	37.84
	Allowed	32.96	34.12	35.31	36.56	37.84
Total O&M Expenses (in Rs. lakh) (C) = (A)*(B)	Claimed	13843.20	14330.40	14830.20	15355.20	15892.80
	Allowed	13843.20	14330.40	14830.20	15355.20	15892.80
Water Charges (in Rs. lakh) (D)	Claimed	124.35	124.35	124.35	124.35	124.35
	Allowed	145.43	152.70	160.34	168.35	176.77
Security Expenses (in Rs. lakh) (E)	Claimed	1029.53	1131.41	1243.41	1366.54	1501.92
	Allowed	909.02	953.28	1000.94	1050.99	1103.54
Total O&M Expenses as allowed (including Water Charges and Capital Spares Consumed) (F) = (C+D+E)	Claimed	14997.07	15586.15	16197.95	16846.09	17519.06
	Allowed	14897.65	15436.38	15991.48	16574.54	17173.11

Fly Ash Transportation charges

30. The Petitioner in additional submission dated 11.5.2021 has prayed to allow actual fly ash transportation charges of Rs.20.29 lakh in 2019-20 and Rs.39.26 lakh in 2020-21, based on the actual expenses incurred. Further, the Petitioner has submitted that it will be incurring ash transportation expenditure in its generating station for the 2019-24 tariff period. In case the same is allowed to be recovered at the end of the 2019-24 tariff period, there will be additional liability on the beneficiaries on account of the interest payment for the period till the time the true-up petition for the 2019-24 tariff period is decided. The Petitioner has submitted that to avoid the interest payment liability of the beneficiaries, the Petitioner may be allowed to recover/ pass on the ash



transportation charges after adjusting the revenue earned from sale of ash at the end of each quarter of financial year subject to true-up at the end of the period.

31. The matter has been considered. It is noticed that the Petitioner has filed Petition No. 205/MP/2021 with regard to reimbursement of fly ash transportation charges in respect of its generating stations for 2019-24 tariff period. Hence, the same has not been considered in this order. Therefore, the claim for reimbursement of fly ash transportation charges shall be governed by the decision of the Commission in Petition No. 205/MP/2021, which has been reserved for orders.

Special Allowance

32. Regulation 28 of the 2019 Tariff Regulations provides for Special Allowance for coal-based/lignite fired thermal generating stations as under:

“(1) In case of coal-based/lignite fired thermal generating station, the generating company, instead of availing renovation and modernization (R&M) may opt to avail a ‘special allowance’ in accordance with the norms specified in this Regulation, as compensation for meeting the requirement of expenses including renovation and modernization beyond the useful life of the generating station or a unit thereof and in such an event, 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 commencement of these regulations, or for a generating station or unit which is in a depleted condition or operating under relaxed operational 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 as applicable from the date of completion of useful life.

(2) The Special Allowance admissible to a generating station shall be @ Rs. 9.5 lakh per MW per year for the tariff period 2019-24.

(3) In the event of a generating station availing Special Allowance, the expenditure incurred upon or utilized from Special Allowance shall be maintained separately by the generating station and details of same shall be made available to the Commission as and when directed.

The Special Allowance allowed under this Regulation shall be transferred to a separate fund for utilization towards Renovation & Modernization activities, for which detailed methodology shall be issued separately.”



33. In terms of Regulation 28 of the 2019 Tariff Regulations, Special Allowance claimed by the Petitioner is as under:

<i>(Rs. in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
3990.00	3990.00	3990.00	3990.00	3990.00

34. In terms of Regulation 28 of the 2019 Tariff Regulations, Special Allowance has been worked out and allowed as under:

<i>(Rs. in lakh)</i>							
Unit	Capacity (MW)	COD	Special Allowance				
			2019-20	2020-21	2021-22	2022-23	2023-24
I	210	21.11.1988	1995.00	1995.00	1995.00	1995.00	1995.00
II	210	22.3.1989	1995.00	1995.00	1995.00	1995.00	1995.00
Total			3990.00	3990.00	3990.00	3990.00	3990.00

Operational Norms

35. The operational norms considered by the Petitioner in Form-3 of the petition is as follows:

Normative Annual Plant Availability Factor (NAPAF)	85%
Gross Station Heat Rate (kCal/kWh)	2430.00
Auxiliary Power Consumption (%)	9.00
Specific Oil Consumption (ml/kWh)	0.50

(a) Normative Annual Plant Availability Factor

36. Regulation 49(A) of the 2019 Tariff Regulations provides as under:

“(A) Normative Annual Plant Availability Factor (NAPAF)

(a) For all thermal generating stations, except those covered under clauses (b), (c), (d), & (e) - 85%;

xxx.”

37. The Petitioner has considered NAPAF of 85% during the 2019-24 tariff period as per Regulation 49(A)(a) of the 2019 Tariff Regulations and hence, the same is allowed.

(b) Station Heat Rate

38. Regulation 49(C)(a)(i) of the 2019 Tariff Regulations provides as under:



“(i) For existing Coal-based Thermal Generating Stations, other than those covered under clauses (ii) and (iii) below:

200/210/250 MW Sets	500 MW Sets (Sub-critical)
2430 kCal/kWh	2390 kCal/kWh

xxx”

39. The Petitioner has considered the Gross Station Heat Rate of 2430 kCal/ kWh in terms of Regulation 49(C)(a)(i) of the 2019 Tariff Regulations and therefore, the same has been considered for the purpose of tariff.

(c) Auxiliary Power Consumption:

40. Regulation 49(E)(a) of the 2019 Tariff Regulations provides for Auxiliary Power Consumption as under:

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

Sl. No.	Generating Station	With Natural Draft cooling tower or without cooling tower
(i)	200 MW series	8.50%
(ii)	300 MW and above	
	Steam driven boiler feed pumps	5.75%
	Electrically driven boiler feed pumps	8.00%

Provided that for thermal generating stations with induced draft cooling towers and where 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: The auxiliary energy consumption for the unit capacity of less than 200 MW sets shall be dealt on case to case basis.”

41. The generating station is a 420 MW plant with natural draft cooling tower. Therefore, the Auxiliary Power Consumption of 9.00% as claimed by the Petitioner, is in terms of Regulation 49(E)(a) of the 2019 Tariff Regulations and therefore allowed.



(d) Secondary Fuel Oil Consumption

42. Regulation 49(D)(a) of the 2019 Tariff Regulations, provides for Secondary fuel oil consumption of 0.50 ml/kWh, for coal-based generating stations. As the Secondary fuel oil consumption considered by the Petitioner is in terms of the aforesaid regulations, the same is allowed.

43. Based on the above, the operational norms considered for determination of energy charges for the generating station for the 2019-24 tariff period are as under:

Normative Annual Plant Availability Factor (NAPAF) (%)	85.00
Heat Rate (kCal/kWh)	2430.00
Auxiliary Power Consumption (%)	9.00
Specific Oil Consumption (ml/kWh)	0.50

Interest on Working Capital

44. Regulation 34(1) of the 2019 Tariff Regulations provides as follows:

“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 and limestone towards stock 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) Advance payment for 30 days towards cost of coal or lignite and limestone for generation corresponding to the normative annual plant availability factor;

(iii) 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;

(iv) Maintenance spares @ 20% of operation and maintenance expenses including water charges and security expenses;

(v) Receivables equivalent to 45 days of capacity charge and energy charge for sale of electricity calculated on the normative annual plant availability factor; and

(vi) Operation and maintenance expenses including water charges and security expenses for one month.”

Fuel Cost for computation of working capital

45. The Petitioner has claimed the Energy Charge Rate (ECR) of Rs.3.012 per kWh and fuel component in working capital as follows:

	<i>(Rs. in lakh)</i>				
	2019-20	2020-21	2021-22	2022-23	2023-24
Cost of coal for 50 days	11621.03	11621.03	11621.03	11621.03	11621.03
Cost of Secondary fuel oil 2 months	146.10	145.70	145.70	145.70	146.10

46. The Petitioner has claimed the fuel component cost in working capital and ECR based on:

- a) Operational norms as per the 2019 Tariff Regulations.
- b) Price and “as received” GCV of coal procured for the three months of October 2018, November 2018, and December 2018, and
- c) Price and GCV of secondary fuel oil for the three months of October 2018, November 2018, and December 2018.

47. It is observed that the Petitioner vide additional affidavit dated 26.5.2021 has submitted the revised Form-15, indicating the opening stock of coal and coal received during the months of October 2018, November 2018 and December 2018, separately. On perusal of the data furnished by the Petitioner, it is observed that the Petitioner, while computing the landed cost of fuel, has considered the opening stock of coal for the months of October 2018, November 2018 and December 2018 (closing stock of the coal for the previous months). However, in terms of the Regulation 39 of the 2019 Tariff Regulations, the computation of ECR and associated fuel components in interest on working capital, is based on the landed price and GCV of fuel, which means that the fuel received during the specified three months (October 2018, November 2018 and December 2018) is only to be considered, without opening stock. The normative cost of coal for stock of 50 days and Normative Transit and Handling loss of 0.80% has been considered for the calculation of working capital requirements. Accordingly, after excluding the opening stock value, we have worked out the weighted average landed cost and weighted average GCV of coal for working out the fuel component in working capital for the months of October 2018, November 2018 and December 2018. The Fuel components in working capital are allowed as under:



(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Cost of Coal towards Stock - 20 days generation corresponding to NAPAF days	4634.19	4634.19	4634.19	4634.19	4634.19
Cost of Coal towards Generation - 30 days generation corresponding to NAPAF	6951.28	6951.28	6951.28	6951.28	6951.28
Cost of Secondary fuel oil - 2 months generation corresponding to NAPAF	126.33	125.99	125.99	125.99	126.33

Energy Charge Rate (ECR)

48. The Petitioner has claimed ECR (ex-bus) of Rs.3.012 per kWh, based on the weighted average price, GCV of coal & oil procured and burnt for the preceding months of October 2018, November 2018 and December 2018. The Respondent, UPPCL has made the following contentions:

- i. Petitioner has stated that in respect of quantity of coal supplied by the Coal company and amount charged by Coal company, opening balances have been considered.
- ii. To direct the Petitioner to determine energy charges as per provisions of Regulation 34(2) of the 2019 Tariff Regulations and to ignore opening balances for computation of energy charges.

49. In response, the Petitioner has submitted that it has prepared and computed energy charges for the purpose of computation of Interest on Working Capital as per Form-15 at Annexure-I to the 2019 Tariff Regulations.

50. The submissions have been considered. The ECR, as worked out, based on the operational norms specified under the 2019 Regulations and on “as received” GCV of coal for the preceding three months i.e., from October 2018 to December 2018, has been considered for allowing two months of energy charge in working capital as follows:

Description	Unit	2019-24
Capacity	MW	420.00
Gross Station Heat Rate	kCal/kWh	2430.00
Auxiliary Energy Consumption	%	9.00
Weighted average GCV of oil	kCal/lit	9611.33
Weighted average GCV of coal	kCal/kg	3870.33



Description	Unit	2019-24
Weighted average price of oil	Rs/KL	48342.97
Weighted average price of Coal	Rs/MT	4315.85
Rate of energy charge ex-bus	Rs/kWh	2.998

Working capital for O&M Expenses

51. O&M expenses for 1 month claimed by the Petitioner for the purpose of working capital (including water charges and security expenses) are as follows:

<i>(Rs. in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
1249.76	1298.85	1349.83	1403.84	1459.92

52. Regulation 34(1)(a)(vi) of the 2019 Tariff Regulations provides for one month of O&M expenses including water charges and security expenses as working capital component for O&M Expenses. Accordingly, the O&M expenses component of working capital is allowed as follows:

<i>(Rs. in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
1241.47	1286.37	1332.62	1381.21	1431.09

Working capital for Maintenance Spares

53. Regulation 34(1)(a)(iv) of the 2019 Tariff Regulations provides for Maintenance spares @ 20% of the O&M expenses including water charges and security expenses. Accordingly, maintenance spares have been allowed as under:

<i>(Rs. in lakh)</i>				
2019-20	2020-21	2021-22	2022-23	2023-24
2979.53	3087.28	3198.30	3314.91	3434.62

54. The difference between the O&M expenses for 1 month' and Maintenance spares claimed by the Petitioner as against those allowed, as above, is only on account of variation in the water charges and security expenses claimed by the Petitioner and those allowed in this order.

Working capital for Receivables

55. Regulation 34(1)(a)(v) of the 2019 Tariff Regulations provides for Receivables for 45 days. Accordingly, after taking into account the mode of operation of the generating station on secondary fuel, the Receivable component of working capital is allowed as follows:

	<i>(Rs. in lakh)</i>				
	2019-20	2020-21	2021-22	2022-23	2023-24
Energy charge for 45 days sale of electricity calculated on NAPAF	10518.77	10518.77	10518.77	10518.77	10518.77
Fixed charge for 45 days sale of electricity calculated on NAPAF	2957.26	2982.20	3025.88	3100.88	3169.07
Total	13476.03	13500.97	13544.66	13619.65	13687.85

56. As per Regulation 34(2) of the 2019 Tariff Regulations, the cost of coal shall be based on landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of the 2019 Tariff Regulations) and gross calorific value of fuel is as per actual weighted average for the third quarter of preceding financial year. Hence, the Petitioner is directed to furnish the details of quantity of coal as per Regulation 34(2) of the 2019 Tariff Regulations at the time of truing up of tariff. The Petitioner is also directed to submit the details strictly as provided in Forms/ Annexures attached to the 2019 Tariff Regulations.

57. The Petitioner on a month to month basis, shall compute and claim the energy charges from the beneficiaries, based on the formulae given under Regulation 43 of the 2019 Tariff Regulations.

Rate of Interest on working capital

58. In line with the Regulation 34(3) of the 2019 Tariff Regulations, the rate of interest on working capital, subject to truing up, is considered as 12.05% (i.e. 1-year SBI MCLR of 8.55% as on 1.4.2019 + 350 bps) for the year 2019-20, 11.25% (i.e. 1-year SBI MCLR



of 7.75% as on 1.4.2020 + 350 bps) for the year 2020-21 and 10.50% (i.e. 1- year SBI MCLR of 7.00% as on 1.4.2021 + 350 bps) for the period 2021-24. Accordingly, Interest on working capital has been computed as under:

	(Rs. in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Working Capital for Cost of Coal/ Lignite for Stock (20 days generation corresponding to NAPAF) (A)	4634.19	4634.19	4634.19	4634.19	4634.19
Working Capital for Cost of Coal/ Lignite (30 days generation corresponding to NAPAF) (B)	6951.28	6951.28	6951.28	6951.28	6951.28
Working capital for Cost of Oil (2 Months generation corresponding to NAPAF) (C)	126.33	125.99	125.99	125.99	126.33
Working Capital for Maintenance Spares (20% of Annual O&M Expenses) (D)	2979.53	3087.28	3198.30	3314.91	3434.62
Working Capital for Receivables (45 Days of Sale of electricity at NAPAF) (E)	13476.03	13500.97	13544.66	13619.65	13687.85
Working Capital for O&M expenses (1 month of O&M Expenses) (F)	1241.47	1286.37	1332.62	1381.21	1431.09
Total Working Capital (I) = (A+B+C+D+E+F)	29408.83	29586.07	29787.03	30027.22	30265.36
Rate of Interest (G)	12.050%	11.250%	10.500%	10.500%	10.500%
Total Interest on Working capital (H) = (I)*(G)	3543.76	3328.43	3127.64	3152.86	3177.86

Annual Fixed Charges

59. Accordingly, the annual fixed charges approved for the 2019-24 tariff period in respect of the generating station is summarized as under:

	(Rs. in lakh)				
	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	186.83	0.00	0.00	0.00	0.00
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	5424.17	5424.17	5424.17	5424.17	5424.17
Interest on Working Capital	3543.76	3328.43	3127.64	3152.86	3177.86
O&M Expenses	14897.65	15436.38	15991.48	16574.54	17173.11
Special Allowance	3990.00	3990.00	3990.00	3990.00	3990.00
Total	28042.41	28178.98	28533.28	29141.57	29765.14

Note: All figures are on annualized basis. All figures under each head have been rounded. The figure in 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



Application Filing fees and Publication charges

60. The Petitioner has sought reimbursement of the fees paid by it for filing of the tariff petition and for publication expenses and has submitted that the reimbursement of the same are in accordance with Regulation 70(1) of the 2019 Tariff Regulations. In terms of Regulation 70(1) of the 2019 Tariff Regulations, the Petitioner is entitled for reimbursement of the filing fees and publication expenses in connection with the filing of this petition, directly from the beneficiaries, on pro-rata basis. Accordingly, we allow the reimbursement of the expenditure in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

61. Similarly, RLDC Fees & Charges paid by the Petitioner in terms of the Central Electricity Regulatory Commission (Fees and Charges of Regional Load Dispatch Centre and other related matters) Regulations, 2019, shall be recovered from the beneficiaries. In addition, the Petitioner is entitled recovery of statutory taxes, levies, duties, cess etc. levied by the statutory authorities in accordance with the 2019 Tariff Regulations.

62. The annual fixed charges approved as above, is subject to truing-up in terms of Regulation 13 of the 2019 Tariff Regulations.

63. Petition No. 431/GT/2020 is disposed of in terms of the above.

Sd/-
(Pravas Kumar Singh)
Member

Sd/-
(Arun Goyal)
Member

Sd/-
(I.S. Jha)
Member