CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 445/GT/2020

Coram:

Shri Jishnu Barua, Chairperson
Shri Arun Goyal, Member
Shri Pravas Kumar Singh, Member

Date of Order: 17th April, 2024

In the matter of:

Determination of tariff of Tanda Thermal Power Station (440 MW) for the period 2019-24.

AND

In the matter of

NTPC Limited,
Core-7, Scope Complex,
7, Institutional Area, Lodhi Road,
New Delhi – 110003 **…. Petitioner**

Vs

Uttar Pradesh Power Corporation Limited,
Shakti Bhawan, 14, Ashok Marg,
Lucknow – 226001, Uttar Pradesh. **……Respondent**

Parties Present:

Shri Venkatesh, Advocate, NTPC
Shri Nihal Bhardwaj, Advocate, NTPC
Shri Kartikay Trivedi, Advocate, NTPC
Shri Ashutosh K. Srivastava, Advocate, NTPC

ORDER

This Petition has been filed by the Petitioner, NTPC Limited, for approval of the tariff of Tanda Thermal Power Station (440 MW) (in short, "the generating station") for the period 2019-24, in accordance with the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (in short, "the 2019 Tariff Regulations"). The generating station, with a total capacity of 440 MW, comprises four units of 110 MW each. The dates of commissioning of the generating station are as under:

Unit(s)/Block(s)	Installed Capacity (MW)	Actual COD
Unit-I	110	21.3.1988
Unit-II	110	11.3.1989
Unit-III	110	28.3.1990
Unit-IV / Generating Station	110	20.2.1998
(Date of taken over by NTPC)		**(14.1.2000)**

2. The Commission vide its order dated 16.4.2024 in Petition No. 450/GT/2020, had determined the capital cost and annual fixed charges of the generating station after truing-up for the period 2014-19 as under:

Capital Cost allowed

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	115680.89	118956.04	119673.76	121240.72	122234.23
Add: Additional capital expenditure	3275.15	717.72	1566.96	993.51	1601.66
Closing Capital Cost	**118956.04**	**119673.76**	**121240.72**	**122234.23**	**123835.89**
Average Capital Cost	117318.47	119314.90	120457.24	121737.48	123035.06

Annual Fixed Charges allowed

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	3146.22	3382.17	3538.88	3686.60	3862.64
Interest on Loan	608.08	687.81	613.24	419.30	151.09
Return on Equity	6901.85	7053.30	7120.83	7196.51	7292.78
Interest on Working Capital	5759.88	5900.41	5946.79	6108.06	6167.14
O&M Expenses	15991.76	17978.61	18770.77	19602.04	20551.02
Total	**32407.79**	**35002.29**	**35990.51**	**37012.52**	**38024.67**

<u>Present Petition</u>

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

(a) Capital cost eligible for Return on Equity at a normal rate:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Capital Cost	124489.61	124496.84	124721.73	124721.73	124721.73
Add: Addition during the year	7.23	224.88	0.00	0.00	0.00
Less: De-capitalisation during the year	0.00	0.00	0.00	0.00	0.00
Less: Reversal during the year	0.00	0.00	0.00	0.00	0.00
Add: Discharges during the year	0.00	0.00	0.00	0.00	0.00
Closing Capital Cost	124496.84	124721.73	124721.73	124721.73	124721.73
Average Capital Cost	**124493.23**	**124609.28**	**124721.73**	**124721.73**	**124721.73**

(b) Capital cost eligible for Return on Equity at a weighted average rate of interest:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Opening Capital Cost	0.00	176.93	338.42	338.42	338.42
Add: Addition during the year	176.93	161.50	0.00	0.00	0.00
Less: Decapitalisation during the year	0.00	0.00	0.00	0.00	0.00
Less: Reversal during the year	0.00	0.00	0.00	0.00	0.00
Add: Discharges during the year	0.00	0.00	0.00	0.00	0.00
Closing Capital Cost	176.93	338.42	338.42	338.42	338.42
Average Capital Cost	**88.46**	**257.67**	**338.42**	**338.42**	**338.42**

Annual Fixed Charges claimed

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	4393.77	4447.37	4493.24	4493.24	4493.24
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	7017.35	7028.97	7037.74	7037.74	7037.75
Interest on Working Capital	3884.95	3936.11	3988.81	4044.21	4101.82
O&M Expenses	22276.38	23255.11	24298.02	25411.84	26604.21
Total	**37572.45**	**38667.56**	**39817.81**	**40987.03**	**42237.02**

4. The Petitioner has submitted the additional information vide its affidavits dated 28.6.2021 and 4.8.2022. The Respondent, UPPCL, vide affidavit dated 22.5.2020, has filed its reply, and the Petitioner, vide affidavit dated 15.12.2020, has filed its rejoinder to the said reply. The Petition was heard on 16.2.2023 and the Commission, after hearing the parties, reserved its order in the matter. However, since the order in the petition could not be issued prior to one Member of this Commission, who formed part of the coram, demitting office, the petition was re-heard on 31.1.2024, and orders were reserved. The Petitioner has also filed the

note of arguments made during the hearing. Taking into consideration the submissions of the parties and the documents available on record and on prudence check, we proceed with the determination of the tariff of the generating station for the period 2019-24, as stated in the subsequent paragraphs.

Capital Cost

5. Clause (1) of Regulation 19 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 of the determination of tariff for existing and new projects. Clause 3 of Regulation 19 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 modernization as admitted by this Commission in accordance with these regulations;*
>
> *(d) Capital expenditure on account of ash disposal and utilization including handling and transportation facility;*
>
> *(e) Capital expenditure incurred towards railway infrastructure and its augmentation for transportation of coal 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 the 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 are based on the opening capital cost of Rs.124489.61 lakh, allowed vide order dated 16.4.2024 in Petition No. 450/GT/2020. Accordingly, in terms of Regulation 19(3) of the 2019 Tariff Regulations, the closing capital cost of Rs. 123835.89 lakh, on a cash basis, has been considered as on 1.4.2019.

Additional Capital Expenditure

7. Regulation 9(2) of the 2019 Tariff Regulations provides that the application for determination of tariff shall be based on admitted capital cost, including additional capital expenditure already admitted and incurred up to 31.3.2019 (either based on actual or projected additional capital expenditure) and estimated additional capital expenditure for the respective years of the period 2019-24 along with the true-up for the period 2014-19 in accordance with the 2014 Tariff Regulations. Regulation 25 and Regulation 26 of the 2019 Tariff Regulations provide as under:

> *25. Additional Capitalization 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 the cut-off date, the additional capitalization may be admitted by the Commission, after making necessary adjustments in the gross fixed assets and the cumulative depreciation, subject to prudence check on the following grounds:*
>
> *(a) 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 Capitalization 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 Modernization (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-capitalization 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 decapitalization 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-capitalization takes place with corresponding adjustments in cumulative depreciation and cumulative repayment of loan, duly taking into consideration the year in which it was capitalized.

27. Additional Capitalization on account of Renovation and Modernization

(1) The generating company or the transmission licensee, as the case may be, intending to undertake renovation and modernization (R&M) of the generating station or unit thereof or transmission system or element thereof for the purpose of extension of life beyond the originally recognized useful life for the purpose of tariff, shall file a petition before the Commission for approval of the proposal with a Detailed Project Report giving complete scope, justification, cost-benefit analysis, estimated life extension from a reference date, financial package, phasing of expenditure, schedule of completion, reference price level, estimated completion cost including foreign exchange component, if any, and any other information considered to be relevant by the generating company or the transmission licensee:

Provided that the generating company making the applications for renovation and modernization (R&M) shall not be eligible for Special Allowance under Regulation 28 of these regulations;

Provided further that the generating company or the transmission licensee intending to undertake renovation and modernization (R&M) shall be required to obtain the consent of the beneficiaries or the long term customers, as the case may be, for such renovation and modernization (R&M) and submit the same along with the petition.

(2) Where the generating company or the transmission licensee, as the case may be, makes an application for approval of its proposal for renovation and modernization (R&M), approval may be granted after due consideration of reasonableness of the proposed cost estimates, financing plan, schedule of completion, interest during construction, use of efficient technology, cost-benefit analysis, expected duration of life extension, consent of the beneficiaries or long term customers, if obtained, and such other factors as may be considered relevant by the Commission.

(3) In case of gas/ liquid fuel based open/ combined cycle thermal generating station after 25 years of operation from date of commercial operation, any additional capital expenditure which has become necessary for renovation of gas turbines/steam turbine or additional capital expenditure necessary due to obsolescence or non-availability of spares for efficient operation of the stations shall be allowed:
Provided that any expenditure included in the renovation and modernization (R&M) on consumables and cost of components and spares which is generally covered in the O&M expenses during the major overhaul of gas turbine shall be suitably deducted from the expenditure to be allowed after prudence check.
(4) After completion of the renovation and modernization (R&M), the generating company or the transmission licensee, as the case may be, shall file a petition for determination of tariff. Expenditure incurred or projected to be incurred and admitted by the Commission after prudence check, and after deducting the accumulated depreciation already recovered from the admitted project cost, shall form the basis for determination of tariff."

8. The year-wise, projected additional capital expenditure claimed by the Petitioner in respect of the generating station for the period 2019-24 is as under:

(Rs. in lakh)

		ACE claimed (Projected)					Regulation
		2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**	
A.	**Works under Original scope, Change in Law etc. eligible for RoE at Normal Rate**						
1	Real Time Monitoring of AAQMS	7.23	-	-	-	-	26(1)(b)
2	Fire Fighting System for CHP area	-	224.88	-	-	-	26(1) (b) & (d)
	Total (A)	**7.23**	**224.88**	-	-	-	
B.	**Works beyond Original scope excluding add-cap due to Change in Law eligible for RoE at Weighted Average rate of Interest**						
3	Construction of 32 nos. Residential Building Type# D and 16 nos. of Type # C	83.07	-	-	-	-	27
4	Gen. Relay Panel for 110MW Unit#1&3	93.86	-	-	-	-	25(2)(C)
5	Air Washer System for Unit # 1 & 2	-	119.650	-	-	-	27
6	Rack & Pinion Lifts at crusher house	-	41.846	-	-	-	27
	Total (B)	**176.927**	**161.495**	-	-	-	
Total additional capitalisation claimed (A+B)		**184.159**	**386.380**	-	-	-	

9. We examine the claimed additional capital expenditure claimed by the Petitioner for the period 2019-24 as under:

A. <u>Works under Original scope, Change in Law etc. eligible for RoE at Normal Rate</u>

i) Real Time Monitoring of Ambient Air Quality Monitoring System:

10. The Petitioner has claimed additional capital expenditure of Rs. 7.23 lakh in 2019-20 under Regulation 26(1)(b) of the 2019 Tariff Regulations for Real Time Monitoring of Ambient Air Quality Monitoring System (AAQMS). In justification for the same, the Petitioner has submitted that the Central Pollution Control Board (CPCB) vide its directions dated 5.2.2014, had directed to install real time monitoring of AAQMS data at State Pollution Control Board (SPCB)/Pollution Control Committees (PCC) and CPCB server to track the emission. To comply with Statutory direction for transmission of Real Time data of AAQMS from the Tanda site to the CPCB server, etc., the associated system has been projected to be installed.

11. The matter has been considered. The Petitioner has furnished the CPCB letter dated 5.2.2014, directing the SPCBs/PCCs to direct highly polluting industries to install online effluent quality monitoring systems. Accordingly, for complying with the said direction, the Petitioner has incurred the additional capital expenditure. Hence, the claim of the Petitioner for Rs. 7.23 lakh in 2019-20 is **allowed** under Regulation 26(1)(b) of the 2019 Tariff Regulations.

B. <u>Works beyond Original scope excluding additional capitalisation due to change in law eligible for ROE at the weighted average rate of interest</u>

ii) Fire Fighting System for Coal Handling Plant (CHP) area:

12. The Petitioner has claimed additional capital expenditure of Rs. 224.88 lakh in 2020-21 for the Fire Fighting System for the CHP area under sub-clauses (b) and (d) of Regulation 26(1) of the 2019 Tariff Regulations. In justification for the same,

the Petitioner has submitted that the Fire Fighting System for the CHP area is essentially required to prevent any catastrophic damage in case fire breaks out in the CHP, as the existence of coal in the CHP area makes it vulnerable to fire hazard. As per the Central Electricity Authority (CEA) (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations 2010, an automatic medium velocity water spray system is to be provided for areas related to Coal conveyors, transfer points, crusher houses, etc. Accordingly, the work was projected during the period 2014-19 and the Commission has referred the matter to CEA and has given liberty to claim at the time of truing-up.

13. Respondent UPPCL, has prayed that the Petitioner be directed to submit the confirmation of TAC guidelines and details of the discount, if any, received or to disallow the claim. In response, the Petitioner has submitted that the installation of the said asset is as per the TAC guidelines, and the vendor vide its letter dated 6.7.2020, has confirmed the same.

14. In view of the above decision and considering the fact that the CEA Regulations mandate the requirement of the said work for higher security and safety of the plant, the projected additional capital expenditure claimed is allowed under Regulation 26(1)(d) of the 2019 Tariff Regulations. The Petitioner shall place on record the compliance with TAC guidelines and the discount received from the insurance companies at the time of truing up of tariff of the generating station. However, as the additional capital expenditure is being allowed beyond the cut-off date but not covered under the original scope work or change in law, Return on Equity has been considered at the Weighted Average Rate of Interest (WAROI) in terms of Regulation 30(2) of the 2019 Tariff Regulations.

(iii) Construction of 32 Nos. Residential Building Type-D and 16 Nos. of Type-C Quarters:

15. The Petitioner has claimed additional capital expenditure of Rs. 83.07 lakh in 2019-20 for the Construction of Residential Building Type-D (32 nos.) and Type-C (16 nos.) Quarters, under Regulation 27 of the 2019 Tariff Regulations. In justification for the same, the Petitioner has submitted that the construction of 32 nos. of residential building Type-D and 16 nos. of Type-C quarters were expected to be capitalized during the period 2014-19, and accordingly, the amount of Rs 787.30 lakh was projected by the Petitioner during the period 2014-19 and the same was allowed. The Petitioner has further submitted that major work was capitalized during the period 2017-19, i.e., Rs 383.86 lakh in 2017-18 and Rs 433.93 lakh in 2018-19, and the balance amount is likely to be capitalized during 2019-20.

16. The matter has been examined. It is noticed that the additional capital expenditure claimed under this head has already been approved vide order dated 21.3.2017 in Petition No. 336/GT/2014. Further, against the same, the Commission has allowed Rs.2.38 lakh in 2014-15, Rs.386.15 lakh in 2017-18 (including undischarged liability of Rs. 63.17 lakh), and Rs.433.93 lakh in 2018-19, vide its order dated 16.4.2024 in Petition No. 450/GT/2020. However, the Petitioner has claimed additional capital expenditure of Rs.83.07 lakh in 2019-20 towards the balance payment in respect of the above works/assets. Since the additional capital expenditure claimed under this head, had already been approved vide order dated 21.3.2017 in Petition No. 336/GT/2014, the claim of the Petitioner for additional capital expenditure is allowed.

iii) Generation Relay Panel 110 MW for Unit-1 and Unit-3

17. The Petitioner has claimed additional capital expenditure of Rs. 93.86 lakh in 2019-20 for the Replacement of the generation relay panel for Units 1&3 under Regulation 25(2)(c) of the 2019 Tariff Regulations. In justification for the same, the Petitioner has submitted that the existing Electrostatic Relays for Generator Protection System were in service for about 15 years, and due to obsolescence, the availability and reliability of the same was difficult. The Petitioner has further submitted that in order to enhance the reliability of the Protection system and for faster fault analysis, it had replaced the existing old relays with the most reliable numerical relays. It has further submitted that part work had been completed and capitalized during the period 2014-19, and the balance of work is expected to be completed in 2019-20.

18. The matter has been considered. It is observed that the Petitioner had made similar claims for the period 2014-19 in Petition No. 450/GT/2020, and the Commission vide its order dated 16.4.2024 has allowed the additional capital expenditure, considering the obsolescence in the technology of relays in the Generator Protection System. The Petitioner, in its additional submission dated 4.8.2022, has submitted that the old generator relay panel (GRP) at that time was based on the electromagnetic type relay-based system, and the electromagnetic-based GRP got outdated with the arrival of new versatile numerical relays. The Petitioner has further submitted that due to this, spare part availability became scarce, and maintenance of the system became a big concern, leading to the obsolescence of the electromagnetic relay-based GRP system. The Petitioner has also stated that in the 11th Technical Co-ordination Sub-Committee (TCC)/12th Northern Regional Power Committee (NRPC) Meeting held on 21st and 22nd April

2009, the agenda on replacement of obsolete electromagnetic type protection relays in the northern region with state-of-art numerical relays was deliberated and TCC decided that all the constituents would complete the process of installation of numerical relays by March 2010. It has stated that NRPC accepted the recommendations of TCC and decided that all the constituents would complete the process of installation of numerical relays in their systems by March 2010. However, the progress of replacement of obsolete electromagnetic-type protection relays in the northern region with state-of-art numerical relays did not progress as deliberated upon in the 12th NRPC meeting. Therefore, the matter was discussed in the 14th Protection Sub Committee Meeting (PSC) meeting, wherein it was suggested that since the cost of replacing all relays would involve huge investments, so numerical relays must be provided in new system elements and for old system elements, the relay would be replaced in a phased manner. The Petitioner has also stated that in the 20th TCC/22nd NRPC meeting, held on 28-29 July 2011, in order to quantify the balance work, it was decided that utilities would submit the details of existing and planned numerical relays for their system. The Petitioner has also submitted that the CEA standards for Technical Specification for Sub-critical Thermal Power Projects and CEA General Guidelines for 765/400/220/132kV substations and switchyard of Thermal/Hydro Power Projects also provide that the relays should be of numerical type. Therefore, based on the turn of the capital overhauling of units, the work of GRP replacement of Unit-1 was carried out in 2017-18, while for Unit-3, the same was planned to be carried out in 2019-20. Accordingly, the Petitioner has submitted that the additional capital expenditure, on account of the replacement of GRP of Unit-1, was claimed during the period 2014-19, and the work of Unit-3 has been claimed in the present petition.

19. In consideration of the submissions of the Petitioner, the claim of the Petitioner for projected additional capital expenditure of Rs. 93.86 lakh in 2019-20 is allowed under Regulation 25 (2) (c) of the 2019 Tariff Regulations. It is, however, noticed that the Petitioner has not provided the decapitalization value of the old replaced assets. Accordingly, we have considered the decapitalized value of Rs. 31.91 lakh (Assumed Deletion) for the purpose of tariff. The Petitioner is directed to furnish the gross value of old replaced assets at the time of truing-up of tariff.

iv) Air Washer System for Unit-1 and Unit-2:

20. The Petitioner has claimed the additional capital expenditure of Rs.119.65 lakh in 2020-21 for the Air Washer System for Units 1 & 2 under Regulation 27 of the 2019 Tariff Regulations. In justification for the same, the Petitioner has submitted that though the work was completed in 2012-13, the system could not be put into service due to vibration problems. It has further stated that the work was expected to be capitalized during the period 2014-19, and accordingly, Rs. 154 lakh was projected to be incurred for this work. The Petitioner has further submitted that M/s Blue Star had made efforts to resolve the vibration problem but could not succeed. Therefore, they agreed to the replacement of all the blowers. The Petitioner has also stated that the blowers have been replaced in two Units, and the vibration was found to be normal. Therefore, the work has been completed for two units and was capitalized during the period 2014-19, and for the balance of two units, the work is expected to be completed and be capitalized in 2020-21, in line with the work allowed for Units 3 & 4 during the period 2014-19.

21. The matter has been considered. It is observed that the Petitioner had made similar claims for Units 3 & 4 for the period 2014-19, and the same were allowed by

the Commission vide its order dated 21.3.2017 in Petition No. 336/GT/2014 on a projection basis. The similar claim was also allowed vide order dated 16.0.2024 in Petition No. 450/GT/2020, after the truing-up exercise. As the claim in the present petition is for the balance work in respect of the admitted item/asset, the projected additional capital expenditure of Rs.119.65 lakh is allowed in 2020-21. The Petitioner is, however, directed to submit the actual date of put to use of the said asset/item.

v) Rack & Pinion Lifts at crusher house:

22. The Petitioner has claimed additional capital expenditure of Rs. 41.85 lakh in 2020-21 for Rack and Pinion Lifts at the crusher house under Regulation 27 of the 2019 Tariff Regulations. In justification for the same, the Petitioner has submitted that both Crusher House buildings at the generating station are of height of around 30 meters and the use of stairs for the movement of men and materials to such height on a regular basis for the maintenance work, is a matter of concern for the safety of manpower handling the materials. The Petitioner has further submitted that the proposed Rack & Pinion lift will ensure the safety of the manpower handling the materials. Further, the safety provisions and guidelines mandated by (i) the National Building Code, 2005, (ii) the Factories Act, 1948, and (iii) The Occupational Safety, Health, and Working Conditions Code, 2020, notified by the Ministry of Law & Justice, Government of India (GoI) and the "National Policy on Safety, Health and Environment at Workplace" notified by the Ministry of Labour and Employment, GOI, will also be complied.

23. The Respondent UPPCL has prayed that the Petitioner may be directed to provide the requisite justification for incurring this expenditure, as the life of the

generating station is to expire in 2025. In response, the Petitioner has submitted that having considered the age of the plant, the Petitioner has selected to install the rack and pinion lift, wherein the capital expenditure to be incurred is much less as compared to the conventional service lifts.

24. The matter has been considered. The Petitioner has claimed the projected additional capital expenditure in order to ensure the safety of the manpower handling the materials at crusher houses, in the plant. The Petitioner, in its additional submissions dated 4.8.2022, has furnished a detailed justification for the installation of a lift at the crusher house in view of the various Acts and guidelines. Considering the justification furnished by the Petitioner and keeping in view that the additional capital expenditure claimed is on account of the safety of the manpower, which will facilitate the safe operation of the plant. Accordingly, the claim of the Petitioner is allowed under Regulation 26 1(d) of the 2019 Tariff Regulations.

25. Accordingly, the additional capital expenditure allowed for the period 2019-24 is summarized below:

(Rs. in lakh)

Sl. No.		2019-20	2020-21	2021-22	2022-23	2023-24
A.	**Works under Original scope, Change in law, etc., eligible for ROE at normal rate**					
1	Real Time Monitoring of AAQMS	7.23	0.00	0.00	0.00	0.00
	Total (A)	**7.23**	**0.00**	**0.00**	**0.00**	**0.00**
B.	**Works beyond Original scope, excluding additional capitalisation due to Change in Law, eligible for ROE at weighted average rate of Interest**					
2	Fire Fighting System for CHP area	0.00	224.88	0.00	0.00	0.00
3	Construction of 32 nos. Residential Building Type-D and 16 nos. of Type-C Quarters	83.07	0.00	0.00	0.00	0.00
4	Generator relay panels for 110MW Unit-1& Unit-3	93.86	0.00	0.00	0.00	0.00

5	Assumed deletion on account of Generator relay panel for 110 MW Unit-1& Unit-3	(-) 31.91	0.00	0.00	0.00	0.00
5	Air Washer System for Unit-1 & Unit-2	0.00	119.65	0.00	0.00	0.00
6	Rack & Pinion Lifts at crusher house	0.00	41.85	0.00	0.00	0.00
	Total (B)	**145.01**	**386.38**	**0.00**	**0.00**	**0.00**
Total Additional Capital Expenditure allowed (A+B)		**152.24**	**386.38**	**0.00**	**0.00**	**0.00**

Capital cost allowed for the period 2019-24

26. Based on the above, the capital cost allowed for the generating station for the period 2019-24 is as under:

(Rs. in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Opening Capital Cost	123835.89	123988.14	124374.52	124374.52	124374.52
Add: Additional Capital Expenditure	152.24	386.38	0.00	0.00	0.00
Closing Capital Cost	**123988.14**	**124374.52**	**124374.52**	**124374.52**	**124374.52**
Average Capital Cost	123912.02	124181.33	124374.52	124374.52	124374.52

Debt-Equity Ratio

27. Regulation 18 of the 2019 Tariff Regulations provides as under:

"18. Debt-Equity Ratio: (1) For a new project, 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 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 modernization expenditure for life extension shall be serviced in the manner specified in clause (1) of this Regulation."

28. The gross normative loan and equity of the generating station as on 31.3.2019, approved by the Commission vide its order dated 16.04.2024 in Petition No. 450/GT/2020 is Rs. 86685.12 lakh (i.e. 70% of the admitted capital cost as on 31.3.2019) and Rs. 37150.77 lakh (i.e. 30% of the admitted capital cost as on 31.3.2019), respectively. Further, the additional capital expenditure approved above has been allocated in a debt-equity ratio of 70:30, subject to truing up. Accordingly, the details of the debt-equity ratio in respect of the generating station as on 1.4.2019 and as on 31.3.2024, is as under:

	Capital cost as on 1.4.2019	**(%)**	**Additional capital expenditure**	**(%)**	**Capital cost as on 31.3.2024**	**(%)**
Debt	86685.12	70%	377.04	70%	87062.16	70%
Equity	37150.78	30%	161.58	30%	37312.36	30%
Total	**123835.90**	**100%**	**538.62**	**100%**	**124374.52**	**100%**

Return on Equity

29. Regulation 30 of the 2019 Tariff Regulations provides as under:

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

(2) Return on equity 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 the 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."

30. 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%.
(2) 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."

31. The Petitioner has claimed Return on Equity (ROE), considering the base rate of 15.50% and the effective tax rate of 17.472%, for the opening equity as on 1.4.2019 and the projected additional capital expenditure claimed under the original scope of work, change in law, etc., for the period 2019-24. The same has been considered for the purpose of tariff. Further, for the additional capital expenditure claimed beyond the original scope of work (excluding additional capital expenditure due to change in law), the Petitioner has claimed ROE after grossing-up the weighted average rate of interest (WAROI) claimed for the respective years of the period 2019-24, with the effective tax rate of 17.472%. The same has been considered for the purpose of tariff. Accordingly, the return on equity has been worked out as under:

Return on Equity at Normal Rate:

(Rs. in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Notional Equity- Opening	37150.77	37152.94	37152.94	37152.94	37152.94
Add: Addition of Equity due to additional capital expenditure	2.17	0.00	0.00	0.00	0.00

Normative Equity – Closing	**37152.94**	**37152.94**	**37152.94**	**37152.94**	**37152.94**
Average Normative Equity	37151.86	37152.94	37152.94	37152.94	37152.94
Return on Equity (Base Rate)	15.50%	15.50%	15.50%	15.50%	15.50%
Effective Tax Rate for respective years	17.472%	17.472%	17.472%	17.472%	17.472%
Rate of Return on Equity (Pre-tax)	18.782%	18.782%	18.782%	18.782%	18.782%
Return on Equity (Pre-tax) - (annualized)	**6977.86**	**6978.07**	**6978.07**	**6978.07**	**6978.07**

***Return on Equity at WAROI**:*

(Rs. in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Normative Equity – Opening	**0.00**	**43.50**	**159.42**	**159.42**	**159.42**
Addition of Equity due to additional capital expenditure	43.50	115.91	0.00	0.00	0.00
Normative Equity – Closing	**43.50**	**159.42**	**159.42**	**159.42**	**159.42**
Average Normative Equity	21.75	101.46	159.42	159.42	159.42
Return on Equity (Base Rate)	8.2549%	8.2597%	8.2649%	8.2697%	8.2738%
Effective Tax Rate for respective years	17.472%	17.472%	17.472%	17.472%	17.472%
Rate of Return on Equity (Pre-tax)	10.003%	10.008%	10.015%	10.020%	10.025%
Return on Equity (Pre-tax) - (annualized)	**2.18**	**10.15**	**15.97**	**15.97**	**15.98**

32. In view of the above, the total ROE allowed for the purpose of tariff for the period 2019-24 is as under:

(Rs. in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Return on Equity					
(a) at Normal Rate	6977.86	6978.07	6978.07	6978.07	6978.07
(b) at WAROI	2.18	10.15	15.97	15.97	15.98
Total Return on Equity (Pre-tax) - (annualised)	**6,980.04**	**6,988.22**	**6,994.03**	**6,994.04**	**6,994.05**

Interest on loan

33. Regulation 32 of the 2019 Tariff Regulations provides as under:

"32. Interest on loan capital: (1) The loans arrived at in the manner indicated in Regulation 18 of these regulations shall be considered 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 decapitalization 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."

34. Interest on the loan has been worked out as under:

i) Gross normative loan, cumulative repayment, and the net opening normative loan amounting to Rs. 86685.12 lakh, Rs. 85953.98 lakh, and Rs.731.14 lakh, respectively, as on 31.3.2019, as considered in an order dated 16.04.2024 in Petition No. 450/GT/2020, has been retained as on 1.4.2019;

ii) Weighted average rate of interest (WAROI), as claimed by the Petitioner, has been retained for the purpose of tariff;

iii) The repayments for the respective years of the period 2019-24 have been considered equal to the depreciation allowed for that year. Further, depreciation has been adjusted for de-capitalisation (including assumed deletion) considered for the purpose of tariff;

35. Accordingly, the interest on the loan has been worked out as under:

(Rs. in lakh)

		2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
A	Gross opening loan	86685.12	86791.69	87062.16	87062.16	87062.16
B	Cumulative repayment of loan up to the previous year	85953.98	86791.69	87062.16	87062.16	87062.16
C	Net Loan Opening (A-B)	731.14	0.00	0.00	0.00	0.00
D	Addition due to additional capital expenditure	106.57	270.47	0.00	0.00	0.00
E	Repayment of loan during the year	860.05	270.47	0.00	0.00	0.00
F	Repayment adjustment on account of de-capitalisation	22.34	0.00	0.00	0.00	0.00
G	Repayment adjustment on account of discharges/reversals corresponding to un-discharged liabilities deducted as on 1.4.2009	0.00	0.00	0.00	0.00	0.00
H	Net Repayment of loan	**837.71**	**270.47**	**0.00**	**0.00**	**0.00**

		2019-20	2020-21	2021-22	2022-23	2023-24
	during the year (E-F+G)					
I	Net Loan Closing (C+D-H)	0.00	0.00	0.00	0.00	0.00
J	Average Loan [(C+I)/2]	365.57	0.00	0.00	0.00	0.00
K	WAROI	8.2549%	8.2597%	8.2649%	8.2697%	8.2738%
L	**Interest on Loan (J x K)**	**30.18**	**0.00**	**0.00**	**0.00**	**0.00**

<u>Depreciation</u>

36. Regulation 33 of the 2019 Tariff Regulations provides as under:

> *"33. Depreciation: (1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:*
>
> *Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.*
>
> *(2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.*
>
> *(3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:*
>
> *Provided that the salvage value for IT equipment and software shall be considered as*
> *NIL and 100% value of the assets shall be considered depreciable;*
>
> *Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the generating station:*
>
> *Provided also that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff:*
>
> *Provided also that any depreciation disallowed on account of lower availability of the generating station or unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life or the extended life.*
>
> *(4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.*
>
> *(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the assets of the generating station and transmission system:*

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

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

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

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

37. Cumulative depreciation amounting to Rs. 86848.86 lakh, as on 31.3.2019, as considered in order dated 16.4.2024 in Petition No.450/GT/2020, has been considered as on 1.4.2019. Further, the value of freehold land, included in the average capital cost, has been adjusted to arrive at the depreciable value. Since, as on 1.4.2019, the useful life of the generating station is more than 12 years from the effective station COD, the depreciation has been spread over the remaining useful life of the asset for the period 2019-24. Depreciation is worked out as under:

(Rs. in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Average capital cost (A)	123912.02	124181.33	124374.52	124374.52	124374.52
Value of freehold land included above (B)	1674.71	1674.71	1674.71	1674.71	1674.71
Aggregated depreciable Value [C = (A-B) x 90%]	110013.57	110255.96	110429.83	110429.83	110429.83
Remaining depreciable value at the beginning of the year (D = C – 'K' of the previous year)	23164.71	19432.17	15549.22	11446.52	7343.83
Balance useful life at the beginning of the year (E)	5.79	4.79	3.79	2.79	1.79
Weighted average rate of depreciation (F)	3.2288%	3.2669%	3.2987%	3.2987%	3.2987%
Depreciation during the year (G = AxF)	**4000.81**	**4056.82**	**4102.70**	**4102.70**	**4102.70**
Cumulative depreciation at the end of the year, before adjustment of de-capitalisation adjustment (H = G + 'K' of the previous year)	90849.67	94880.61	98983.30	103086.00	107188.70
Cumulative depreciation adjustment on account of de-capitalisation (I)	25.89	0.00	0.00	0.00	0.00

	2019-20	2020-21	2021-22	2022-23	2023-24
Cumulative depreciation adjustment on a/c of un-discharged liabilities deducted as on 1.4.2009 (J)	0.00	0.00	0.00	0.00	0.00
Cumulative depreciation at the end of the year (K = H-I+J)	**90823.79**	**94880.61**	**98983.30**	**103086.00**	**107188.70**

O&M Expenses

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

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
O&M expenses under Regulation 35(1)					
Normative	20310.40	21023.30	21761.21	22525.03	23315.66
O&M expenses under Regulation 35(6)					
Water Charges	115.23	117.53	119.88	122.28	124.73
Security expenses	1850.75	2114.28	2416.92	2764.53	3163.82
Total O&M Expenses	**22276.38**	**23255.11**	**24298.02**	**25411.84**	**26604.21**

39. The Petitioner has submitted that the Commission has determined the O&M expenses of the generating station as Rs 46.16 lakh/MW, and no escalation has been provided during the period 2019-24. The Petitioner has further submitted that the units of the generating station being smaller in capacity, the rationalization of the Man/MW ratio in comparison to large size units and other O&M components may not be possible beyond a certain point. The Petitioner has also submitted that during the period 2014-19, the generating station had witnessed an escalation in its actual O&M expenses despite the various efforts (e.g., rationalisation of manpower, etc) undertaken by the Petitioner, including the R&M activities. The Petitioner has further stated that the Commission had allowed an escalation rate of 3.51% for projecting the O&M expenses norms for thermal generating stations for the period 2019-24 for other generating stations. In view of the above, the Petitioner has prayed to allow a 3.51% escalation per year for O&M expenses norms for the period

2019-24 for the generating station. The Respondent UPPCL has submitted that the prayer of the Petitioner is beyond the scope of the 2019 Tariff Regulations.

40. The matter has been considered. It is noted that Regulation 35(1)(2) of the 2019 Tariff Regulations specifies the O&M expenses norms for the generating station as Rs.46.16 lakh/MW during the period 2019-24. We are of the view that the norms for O&M expense, as specified under the Regulations, have been determined considering the past O&M expenses and after taking into consideration the suggestions and objections of all stakeholders, including the Petitioner. Moreover, the prayer of the Petitioner, if allowed, would amount to a review of the Regulations, which is not permissible. Accordingly, the prayer of the Petitioner to provide escalation on the O&M expense norms for the generating station for the period 2019-24 is not allowed.

41. In view of the above, the normative O&M expenses allowed are as under:

(Rs. in lakh)

2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
20310.40	20310.40	20310.40	20310.40	20310.40

Water Charges

42. Regulation 35 (1) (6) of the 2019 Tariff Regulations read with 2020 First Amendment in Tariff Regulations provide as under:

> *"(6)The Water Charges, Security Expenses and Capital Spares for thermal generating stations shall be allowed separately after prudence check:*
>
> *Provided that water charges shall be allowed based on water consumption depending upon type of plant and type of cooling water system, subject to prudence check and considering the norms of specific water consumption notified by the Ministry of Environment, Forest and Climate Change. 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 a part of additional capitalisation or consumption of stores and spares and renovation and modernization."

43. In terms of the above Regulation, water charges are to be allowed based on water consumption depending upon the type of plant, type of cooling water system, etc., subject to prudence check. In this regard, the Petitioner has submitted the following actual information for 2018-19 and mentioned that these water charges were escalated at 2% per annum during the period 2019-24:

	Remarks
Type of plant	Coal
Type of cooling water system	Closed Cycle
Consumption of water	358566000 Cubic feet / 11.37 cusec
Rate of water charges	Rs.12.48 per 1000 cubic feet
Rate of Royalty	Rs.6 lakh per cusec per year
Total Water Charges (for 2018-19)	Rs.112.97 lakh

44. Accordingly, the Petitioner has claimed the water charges for the period 2019-24 as under:

(Rs. in lakh)

2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
115.23	117.53	119.88	122.28	124.73

45. The matter has been considered. It is observed that the water charges for the period 2019-24 have been arrived at on the basis of the water charges claimed for 2018-19, with an annual escalation of 2.00%. It is also observed that the rate of water charges considered by the Petitioner for the period 2019-24, is the same as considered for the period 2014-19. However, we are not inclined to allow the annual escalation of 2%, as claimed by the Petitioner. Further, the Petitioner, vide its affidavit dated 28.6.2021, has provided the actual water charges incurred for the generating station in 2019-20 and 2020-21 as Rs.125.47 lakh and Rs 109.87 lakh, respectively. Accordingly, the same is allowed. However, for the period 2021-24, we consider and allow the actual water charges of Rs.109.89 lakh incurred in 2020-21.

Accordingly, the water charges claimed and allowed for the period 2019-24 is summarised below:

	2019-20	2020-21	2021-22	2022-23	2023-24
Water charges claimed	115.23	117.53	119.88	122.28	124.73
Water charges allowed	125.47	109.89	109.89	109.89	109.89

46. The water charges allowed, as above, are subject to truing-up. in terms of the provisions of Regulations.

Capital Spares

47. The Petitioner has not claimed capital spares, on a projection basis, during the period 2019-24 and has submitted that the same shall be claimed at the time of truing up of tariff, in terms of proviso to Regulation 35(1)(6) of the 2019 Tariff Regulations, based on the 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 truing-up of the tariff shall be considered on merits after prudence check.

Security Expenses

48. The Security expenses claimed by the Petitioner are as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
1850.75	2114.28	2416.92	2764.53	3163.82

49. The Petitioner has submitted that the above expenses have been claimed based on the estimated expenses for the period 2019-24 and shall be subject to retrospective adjustment, based on actuals, at the time of truing-up of tariff. Further, the Petitioner, vide affidavit dated 4.8.2022, has submitted that the actual security expenses for the years 2019-20 and 2020-21 are Rs.1261.65 lakh and Rs.1003.54 lakh respectively.

50. The matter has been considered. Since the Petitioner has submitted the actual security expenses incurred for the years 2019-20 and 2020-21, the same is

allowed. Also, the actual expenditure incurred for the year 2020-21 is allowed for the period 2019-24 on a projection basis, subject to true-up. The Petitioner has not furnished the assessment of security requirement, as required under the provisions of the 2019 Tariff Regulations. Accordingly, the Petitioner is directed to furnish the requisite details for carrying out the prudence check of the security expenses at the time of truing-up of tariff. Accordingly, the security expenses claimed and allowed for the generating station are as under:

(Rs. in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Security expenses claimed	1850.75	2114.28	2416.92	2764.53	3163.82
Security expenses allowed	1261.65	1003.54	1003.54	1003.54	1003.54

51. The total O&M expenses, including water charges and security expenses, as claimed and allowed to the generating station are summarised below:

(Rs. in lakh)

	2019-20	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Normative O&M expenses claimed under Regulation 35(1)(1) of the 2019 Tariff Regulations **(a)**	20310.40	21023.30	21761.21	22525.03	23315.66
Normative O&M expenses allowed under Regulation 35(1)(1) of the 2019 Tariff Regulations (b)	**20310.40**	**20310.40**	**20310.40**	**20310.40**	**20310.40**
Water Charges claimed under Regulation 35(1)(6) of the 2019 Tariff Regulations **(c)**	115.23	117.53	119.88	122.28	124.73
Water Charges allowed under Regulation 35(1)(6) of the 2019 Tariff Regulations (d)	**125.47**	**109.89**	**109.89**	**109.89**	**109.89**
Security Expenses claimed under Regulation 35(1)(6) of the 2019 Tariff Regulations **(e)**	1850.75	2114.28	2416.92	2764.53	3163.82
Security Expenses allowed under Regulation 35(1)(6) of the 2019 Tariff Regulations (f)	**1261.65**	**1003.54**	**1003.54**	**1003.54**	**1003.54**
Total O&M expenses claimed under Regulation 35 of the 2019 Tariff Regulations (a + c + e)	22276.38	23255.11	24298.02	25411.84	26604.21
Total O&M expenses allowed under Regulation 35 of the 2019 Tariff Regulations (b + d + f)	**21697.52**	**21423.83**	**21423.83**	**21423.83**	**21423.83**

Additional expenditure towards Fly Ash transportation

52. The Petitioner has claimed the recovery of THE additional expenditures of Rs.3220.00 lakh in 2019-20 and 2020-21, from the beneficiaries, on account of Fly Ash transportation charges, after adjusting the revenue earned from the sale of ash.

53. It is observed that in Petition 205/MP/2021 filed by the Petitioner, for recovery of the additional expenditure incurred due to Fly ash transportation charges, consequent to the MOEF &CC Notifications dated 3.11.2009 and 25.1.2016, on a recurring basis, the Commission vide its order dated 28.10.2022, had allowed the expenditure incurred for the years 2019-20, 2020-21 and 2021-22. The relevant portion of the order is as below:

> *"Petitioner has furnished the details of the distance to which fly ash has been transported from the generating station, schedule rates applicable for transportation of fly ash, as notified by the State Governments along with details, including Auditor certified accounts. These documents have been examined and accordingly, the total fly ash transportation expenditure allowed to the Petitioner generating station wise for the period 2019-22 is as per the table in para 38 above totalling to Rs.309704.03 lakh and the same shall be recovered from the beneficiaries of the respective generating stations in 6 (six) equal monthly instalments. However, the Petitioner is directed to submit details regarding award of transportation contracts, distance to which fly ash has been transported along with duly reconciled statements of expenditure incurred on ash transportation at the time of filing petitions for truing up of tariff for the 2019-24 tariff period of the generating stations."*

54. Since the claim of the Petitioner has already been dealt with in the aforesaid order, the claim of the Petitioner, as per actuals, has not been considered in this order. However, the Petitioner is directed to submit the details of the ash transportation expenses at the time of filing of truing up of tariff for the period 2019-24.

Emission Control Systems

55. The Petitioner has submitted that it is in the process of installing the Emission Control Systems (ECS) for this generating station in compliance with the Revised

Emission Standards as notified by MOEFCC vide notification dated 7.12.2015, as amended from time to time. The Petitioner has further submitted that completion of these schemes in compliance with the revised emission norms will affect the station APC, Heat Rate, O&M expenses, etc. In addition, the availability of the unit/ station would also be affected due to the shutdown of the units for installation of ECS. The Petitioner has submitted that it would be filing the details of the same in a separate petition in terms of Regulation 29(4) of 2019 Tariff Regulations, and the tariff of the instant Petition would undergo changes consequent to the order of the Commission in the said ECS petition.

56. The matter has been considered. It is noticed that as per Regulation 29 (4) of the 2019 Tariff Regulations, the Petitioner is required to file a separate Petition for the determination of tariff after the completion of the implementation of Revised Emission standards, as extracted below:

> *"(4) After completion of the implementation of revised emission standards, the generating company shall file a petition for determination of tariff. Any expenditure incurred or projected to be incurred and admitted by the Commission after prudence check based on reasonableness of the cost and impact on operational parameters shall form the basis of determination of tariff."*

57. Further, the Commission has issued the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (First Amendment) Regulations, 2020 (2020 Amendment Regulations) on 25.8.2020. Therefore, the supplementary charges for recovering the cost of ECS shall be determined in accordance with the said Regulations.

<u>Operational Norms</u>

58. The operational norms considered by the Petitioner are as under:

Normative Annual Plant Availability Factor (NAPAF) (%)	85
Heat Rate (kCal/kwh)	2750
Auxiliary Power Consumption (%)	11.50
Specific Oil Consumption (ml/kwh)	0.50

(a) Normative Annual Plant Availability Factor

59. Regulation 49(A)(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% "

60. As the Petitioner has considered the NAPAF of 85% for the period 2019-24, in terms of the above regulations, the claim is allowed.

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

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

"(ii) For following Thermal generating stations of NTPC Ltd:
Tanda TPS 2,750 kCal/kWh"

62. As the Petitioner has considered the Gross Station Heat Rate (GSHR) of 2750 kCal/kWh, in terms of the above regulations, the claim is allowed.

(c) Specific Oil Consumption

63. Regulation 49(D)(a) of 2019 Tariff Regulations, provides for the 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 line with the above said regulations, the same is allowed.

(d) Auxiliary Power Consumption

64. Regulation 49(E)(b) of 2019 Tariff Regulations provides as under:

"(b) For other Coal-based generating stations:
(ii) Tanda Thermal Power Station 11.50%"

65. As the auxiliary power consumption of 11.50% is applicable to the generating station, in terms of the above regulation, the claim of the Petitioner is allowed.

Interest on Working Capital

66. Regulation 34 (1) (a), 34(2) and 34(3) of the 2019 Tariff Regulations provides as under:

> *"34. Interest on Working Capital: (1) The working capital shall cover:*
> *(a) For Coal-based/lignite-fired thermal generating stations:*
> *(i) Cost of coal or lignite 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.*
> *(b) xxxx*
> *(c) xxxx*
> *(2) The cost of fuel in cases covered under sub-clauses (a) and (b) of clause (1) of this Regulation shall be based on the landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) by the generating station and gross calorific value of the fuel as per actual weighted average for the third quarter of preceding financial year in case of each financial year for which tariff is to be determined:*
> *Provided that in case of new generating station the cost of fuel for the first financial year shall be considered based on landed fuel cost (taking into account normative transit and handling losses in terms of Regulation 39 of these regulations) and gross calorific value of the fuel as per actual weighted average for three months as used for infirm power preceding date of commercial operation for which tariff is to be determined.*
> *(3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof as the case may be is declared under commercial operation whichever is later.*
> *Provided that in case of truing-up the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24.*
> *(4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency."*

67. The Petitioner has claimed interest on working capital as under:

Sl. No.		2019-20	2020-21	2021-22	2022-23	2023-24
1	Cost of Coal	11085.31	11085.31	11085.31	11085.31	11085.31
2	Cost of Secondary Fuel (2 months)	142.13	141.74	141.74	141.74	142.13
3	O&M Expenses	1856.36	1937.93	2024.84	2117.65	2217.02
4	Maintenance Spares	4455.28	4651.02	4859.60	5082.37	5320.84
5	Receivables	14701.19	14848.86	14990.67	15134.82	15274.70
6	Total Working Capital	32240.26	32664.85	33102.16	33561.89	34039.99
7	Rate of Interest (%)	12.05	12.05	12.05	12.05	12.05
8	Interest on Working Capital	**3884.95**	**3936.11**	**3988.81**	**4044.21**	**4101.82**

Fuel Cost and Energy Charges in Working Capital

68. Regulation 34(2) of the 2019 Tariff Regulations provides that the computation of the cost of fuel as part of Interest on Working Capital (IWC) is to be based on the landed price and GCV of fuel as per actuals for the third quarter of preceding financial year in case of each financial year for which tariff is to be determined. The Petitioner, in Form 15, has provided the landed price of coal and GCV for coal for October 2018, November 2018, and December 2018, which is the third quarter of the preceding financial year, for the determination of tariff w.e.f. 1.4.2019. However, in Form 15, the Petitioner had included the coal in stock in the coal supplied by the coal company. Upon clarification, the Petitioner submitted the revised Form 15 in its additional submission dated 28.6.2021. Regulation 43(2) of the 2019 Tariff Regulations provides as under:

> *"43. Computation and Payment of Energy Charge for Thermal Generating Stations:*
>
> *(2) Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined to three decimal places in accordance with the following formulae:*
>
> *(a) For coal based and lignite fired stations:*
>
> *ECR = {(SHR – SFC x CVSF) x LPPF / (CVPF+SFC x LPSFi + LC x LPL} x 100 / (100 – AUX)*
>
> *Where,*
>
> *AUX = Normative auxiliary energy consumption in percentage.*
>
> *CVPF = (a) Weighted Average Gross calorific value of coal as received, in kCal per kg for coal based stations less 85 Kcal/Kg on account of variation during storage at generating station;*
>
> *(b) Weighted Average Gross calorific value of primary fuel as received, in kCal per kg, per litre or per standard cubic meter, as applicable for lignite, gas and liquid fuel based stations;*

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

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

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

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

LC = Normative limestone consumption in kg per kWh;

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

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

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

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

69. The Petitioner has claimed the cost of fuel component in the working capital and Energy Charge Rate (ECR) based on the Operational norms, as per the 2019 Tariff Regulations, Price and GCV of coal and oil as considered by the Petitioner for October 2018 to December 2018, along with a margin of 85 kCal/kg in the GCV. Accordingly, the Petitioner has claimed ECR of Rs.2.820 per kWh and the following fuel cost components in the working capital for the period 2019-24:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Cost of Coal- 50 days for generation	11085.31	11085.31	11085.31	11085.31	11085.31
Cost of secondary fuel oil – 2 months	142.13	141.74	141.74	141.74	142.13

70. The weighted average price and GCV of coal and oil, as claimed and allowed for the period 2019-24, are as under, subject to submission of the supporting documents, i.e., third-party reports, bills paid to the coal company, credit note, break up of sampling, handling, and other charges, etc., for relevant months, at the time of truing-up of tariff for consideration, under the applicable Regulations:

	Claimed	Approved
Weighted average price of coal (Rs./MT)	3692.55	3676.26
Weighted average GCV of coal (kCal/kg) *	4103.99	4105.27
Weighted average price of oil (Rs./KL)	51915.12	51915.12
Weighted average GCV of oil (kCal/Ltr.)	9599.00	9599.00

** Weighted average GCV of coal as received net of 85 kCal/kg*

71. Accordingly, the fuel component in working capital, the energy charges, and ECR (claimed and allowed) are as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Cost of Coal- 20 days for stock	4413.18	4413.18	4413.18	4413.18	4413.18
Cost of Coal- 30 days for generation	6619.76	6619.76	6619.76	6619.76	6619.76
Cost of secondary fuel oil – 2 months	142.13	141.74	141.74	141.74	142.13
Energy charges for 45 days	10034.16	10034.16	10034.16	10034.16	10034.16
ECR (Rs. / kWh)	**2.807**	**2.807**	**2.807**	**2.807**	**2.807**

72. The Petitioner, on a month-to-month basis, shall compute and claim the energy charges from the beneficiaries, based on formulae given under Regulation 43 of the 2019 Tariff Regulations. Further, in terms of the 2019 Tariff Regulations, the Petitioner is directed to submit the year-wise Form-15, excluding the opening stock, along with CIMFR/third-party reports and the actual blending ratio. In addition, the Petitioner shall furnish the details regarding grade slippages, moisture content, adjustment made, reasons for the higher difference in GCV billed and GCV received of domestic coal, loss of GCV in imported coal, justification for claiming diesel charges for coal supplied through Railways, Other charges, etc., at the time of truing-up of tariff.

Working Capital for Maintenance Spares

73. The Petitioner, in Form O, has claimed the maintenance spares in the working capital as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
4455.28	4651.02	4859.60	5082.37	5320.84

74. Regulation 34(1)(a)(iv) of the 2019 Tariff Regulations provide for maintenance spares @ 20% of the O&M expenses. Accordingly, maintenance spares @ 20% of the O&M expenses allowed are as under:

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
4339.50	4284.77	4284.77	4284.77	4284.77

Working Capital for Receivables

75. Receivables equivalent to two months of capacity charges and energy charges have been worked out duly taking into account the mode of operation of the generating station on secondary fuel and allowed as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Variable Charges – 45 days (A)	10034.16	10034.16	10034.16	10034.16	10034.16
Fixed Charges – 45 days (B)	4493.42	4442.99	4419.73	4419.73	4466.82
Total (C = A+B)	**14527.58**	**14477.15**	**14453.89**	**14453.89**	**14500.98**

Working Capital for O&M Expenses (1 month)

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

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
1856.36	1937.93	2024.84	2117.65	2217.02

77. For consideration of the working capital, O&M expenses of 1 month are to be considered. The normative O&M expenses allowable as per Regulation 34(1) (a) (iv) of the 2019 Tariff Regulations, including water charges and security expenses, have been considered as a part of the working capital.

(Rs. in lakh)

2019-20	2020-21	2021-22	2022-23	2023-24
1808.13	1785.32	1785.32	1785.32	1785.32

78. In line with Regulation 34(3) of the 2019 Tariff Regulations, the rate of interest on working capital is considered as 12.05% (i.e., 1-year SBI MCLR of 8.55% as on 1.4.2019 + 350 bps) for 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, 10.50% (i.e., 1 year SBI MCLR of 7.00% as on 1.4.2021 / 1.4.2022 + 350 bps) for the period 2021-23 and 12.00% (i.e., 1 year SBI MCLR of 8.50% as on 1.4.2023 + 350 bps) for the year 2023-24. Accordingly, Interest on working capital has been computed and allowed as under:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Working capital for Cost of Coal towards Stock (20 days generation corresponding to NAPAF) (A)	4413.18	4413.18	4413.18	4413.18	4413.18
Working capital for Cost of Coal towards Generation (30 days generation corresponding to NAPAF) (B)	6619.76	6619.76	6619.76	6619.76	6619.76
Working capital for Cost of Secondary fuel oil (2 months generation corresponding to NAPAF) (C)	142.13	141.74	141.74	141.74	142.13
Working capital for Maintenance Spares (20% of O&M expenses) (D)	4339.50	4284.77	4284.77	4284.77	4284.77
Working capital for Receivables (45 days of sale of electricity at NAPAF) (E)	14527.58	14477.15	14453.89	14453.89	14500.98
Working capital for O&M expenses (1 month of O&M expenses) (F)	1808.13	1785.32	1785.32	1785.32	1785.32
Total Working Capital (G = A+B+C+D+E+F)	**31850.28**	**31721.92**	**31698.65**	**31698.66**	**31746.13**
Rate of Interest (H)	12.05%	11.25%	10.50%	10.50%	12.00%
Interest on Working Capital (I = G x H)	**3837.96**	**3568.72**	**3328.36**	**3328.36**	**3809.54**

Annual Fixed Charges for the period 2019-24

79. Accordingly, the annual fixed charges approved for the generating station for the period 2019-24 are summarised below:

(Rs. in lakh)

	2019-20	2020-21	2021-22	2022-23	2023-24
Depreciation	4,000.81	4,056.82	4,102.70	4,102.70	4,102.70
Interest on Loan	30.18	0.00	0.00	0.00	0.00
Return on Equity	6,980.04	6,988.22	6,994.03	6,994.04	6,994.05
Interest on Working Capital	3837.96	3568.72	3328.36	3328.36	3809.54
O&M Expenses	21,697.52	21,423.83	21,423.83	21,423.83	21,423.83
Total	**36,546.51**	**36,037.59**	**35,848.92**	**35,848.92**	**36,330.11**

Note: *(1) All figures are on an annualized basis. (2) 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.*

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

Filing Fees and Publication expenses

81. The Petitioner has sought the reimbursement of fees paid by it for filing of the petition for the period 2019-24 and for publication expenses. The Petitioner shall be entitled to reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

82. 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 to recovery of statutory taxes, levies, duties, cess etc., levied by the statutory authorities in accordance with the 2019 Tariff Regulations.

83. Petition No. 445/GT/2020 is disposed of in terms of the above.

Sd/-	Sd/-	Sd/-
(Pravas Kumar Singh)	**(Arun Goyal)**	**(Jishnu Barua)**
Member	**Member**	**Chairperson**