CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 698/GT/2020

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

Date of Order: 17th April, 2023

In the matter of:

Petition for revision of tariff of Farakka Super Thermal Power Station, Stage-I & II (1600 MW) for the period 2014-19 period, after truing up exercise.

And

In the matter of:

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

Vs

1. West Bengal State Electricity Distribution Company Limited,
   Vidyut Bhawan, Block-DJ,
   Sector-II, Salt Lake City
   Kolkata – 700 091

2. Bihar State Power Holding Company Limited,
   Vidyut Bhawan, Bailey Road
   Patna – 800 001

3. Jharkhand Vidyut Vikas Nigam Limited,
   Engineering Bhawan,
   HEC, Dhurwa, Ranchi – 834004

4. GRIDCO Limited,
   24, Janpath, Bhubaneswar – 751007

5. Haryana Power Purchase Centre,
   Shakti Bhawan, Sector-6,
   Panchukla, Haryana - 134109

6. Power Department,
   Govt. of Sikkim, Kazi Road,
   Gangtok, Sikkim-737101

7. Tamil Nadu Generation and Distribution Corporation Limited,
NPKRP Maaligai, 800, Anna Salai
Chennai – 600002

8. Punjab State Power Corporation Limited,
The Mall, Patiala -147001

9. Uttar Pradesh Power Corporation Limited,
Shakti Bhawan, 14, Ashok Marg
Lucknow – 226001

10. Power Development Department (J&K),
Govt. of J&K Secretariat, Srinagar

11. Assam Power Distribution Company Limited,
Bijulee Bhawan, Paltan Bazar,
Guwahati – 782001

12. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place
New Delhi-110019

13. BSES Yamuna Power Limited,
Shakti Kiran Bldg., Karkardooma
Delhi

14. Tata Power Delhi Distribution Company Limited,
33 kV Sub-station Building, Hudson Lane, Kingsway Camp
Delhi-110009

15. Jaipur Vidyut Vitran Nigam Limited,
Vidyut Bhawan Janpath,
Jaipur-302 005

16. Ajmer Vidyut Vitran Nigam Limited,
Old Power House, Hathi Bhafta,
Jaipur Road, Ajmer-305 001

17. Jodhpur Vidyut Vitran Nigam Limited,
New Power House, Industrial Area,
Jodhpur-342 003 **...Respondents**

Parties present:

Ms. Swapna Seshadri, Advocate, NTPC
Ms. Nilankita Banerjee, NTPC
Shri Prashant Chaturvedi, NTPC
Shri V. V Sivakumar, NTPC
Shri Buddy Ranganathan, Advocate, BRPL & BYPL
Shri Aditya Ajay, Advocate, BRPL & BYPL
Shri Rahul Kinra, Advocate, BRPL & BYPL

Shri Aashwyn Singh, Advocate, BRPL& BYPL
Shri Anupam Verma, BRPL& BYPL
Shri Sameer Singh, BYPL
Shri Raj Kumar Mehta, Advocate, GRIDCO
Ms. Himanshi Andley, Advocate, GRIDCO
Shri M. Sahoo, GRIDCO Limited
Shri Mahfooz Alam, GRIDCO Limited
Shri Shashwat Kumar, Advocate, BSPHCL
Shri Rahul Chouhan, Advocate, BSPHCL
Shri Amitanshu Saxena, Advocate, BSPHCL
Shri Vishal Sagar, Advocate, TPDDL
Shri Tanmay Jain, Advocate, TPDDL
Shri S. Vallinagagam, Advocate, TANGEDCO
Shri R. Alamely, TANGEDCO
Shri I. Sudhakar, TANGEDCO

ORDER

This petition has been filed by the Petitioner, NTPC Limited, for truing up of tariff of Farakka Super Thermal Power Station, Stages-I & II (1600 MW) (in short 'the generating station') for the period 2014-19, in terms of Regulation 8 (1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 hereinafter referred to as "the 2014 Tariff Regulations"). The generating station with a capacity of 1600 MW comprises of three units of 200 MW each and two units of 500 MW each. The dates of commercial operation of the units of the generating station are as under:

	Capacity (MW)	Actual COD
Unit-I	200	1.11.1986
Unit-II	200	1.10.1987
Unit-III	200	1.9.1988
Unit-IV	500	1.7.1996
Unit-V	500	1.4.1995

2. The Commission vide its order dated 10.3.2017 in Petition No. 316/GT/2014, had determined the capital cost and the annual fixed charges tariff of the generating station for the period 2014-19 as under:

Capital Cost allowed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	319679.86	319679.86	319679.86	319679.86	319679.86

	2014-15	2015-16	2016-17	2017-18	2018-19
Add: Projected Additional Capital Expenditure allowed	0.00	0.00	0.00	0.00	0.00
Closing Capital Cost	**319679.86**	**319679.86**	**319679.86**	**319679.86**	**319679.86**

Annual Fixed Charges allowed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	7940.80	7940.80	7940.80	7940.80	3414.54
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	30724.50	30873.34	30873.34	30873.34	30873.34
Interest on Working Capital	11565.69	11701.74	11813.98	12158.83	12197.34
O&M Expenses	31144.73	33054.73	35084.73	37244.73	39540.73
Compensation Allowance	500.00	750.00	750.00	1000.00	1000.00
Special allowance	4157.03	4421.00	4701.73	5000.29	5317.81
Total	**86032.75**	**88741.62**	**91164.59**	**94218.00**	**92343.77**

3. Regulation 8(1) of the 2014 Tariff Regulations provides as under:

> ***"****8. Truing up*
> *(1) The Commission shall carry out truing up exercise along with the tariff petition filed for the next tariff period, with respect to the capital expenditure including additional capital expenditure incurred up to 31.3.2019, as admitted by the Commission after prudence check at the time of truing up:*
>
> *Provided that the generating company or the transmission licensee, as the case may be, shall make an application for interim truing up of capital expenditure including additional capital expenditure in FY 2016-17."*

4. The capital cost and annual fixed charges claimed by the Petitioner, as per affidavit dated 8.8.2022, for the period 2014-19 are as under:

Capital cost claimed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	319679.86	319719.22	319728.14	320102.28	320317.87
Add: Actual Additional Capital Expenditure claimed	39.36	8.92	374.15	215.58	7648.75
Closing Capital Cost	**319719.22**	**319728.14**	**320102.28**	**320317.87**	**327966.62**
Average Capital cost	319699.54	319723.68	319915.21	320210.08	324142.24

Annual Fixed Charges claimed

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	7947.69	7954.72	8027.46	8252.46	7099.83
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	30727.22	30877.50	30888.82	30906.25	31220.88
Interest on Working Capital	14782.84	14938.16	15292.55	15800.52	16042.81
O&M Expenses	32253.26	34276.53	35202.91	37672.80	40831.22

	2014-15	2015-16	2016-17	2017-18	2018-19
Compensation Allowance	500.00	750.00	750.00	1000.00	1000.00
Special allowance	4157.03	4421.00	4701.73	5000.29	5317.81
Sub-total (A)	**90368.03**	**93217.91**	**94863.47**	**98632.33**	**101512.56**
Additional O&M Expenditure					
Impact of Pay Revision	0.00	113.74	5162.22	5780.47	6696.49
Impact of GST	0.00	0.00	0.00	386.36	520.87
Total Additional O&M Expenditure	**0.00**	**113.74**	**5162.22**	**6166.83**	**7217.36**
Total Annual Fixed Charges claimed	**90368.03**	**93331.65**	**100025.69**	**104799.16**	**108729.92**

5. The Respondent, UPPCL has filed its replies vide affidavits dated 30.12.2020 and 14.7.2021. The Respondent TANGEDCO and the Respondent TPDDL have filed their replies, vide affidavits dated 11.1.2021 and 15.7.2021 respectively. The Respondent GRIDCO and the Respondent BSPHCL have also filed their replies vide affidavits dated 19.7.2021 and 30.7.2021 respectively. In response, the Petitioner has filed its rejoinder affidavits on 28.6.2021 and 29.10.2021, 22.6.2021, 29.10.2021, 29.10.2021 and 1.11.2021 to the replies of the Respondents UPPCL, TANGEDCO, TPDDL, GRIDCO and BSPHCL, respectively. The Petitioner has also filed certain additional information vide affidavits dated 28.6.2021, 16.7.2021 and 8.7.2022, after serving copies on the Respondents. The petition was heard through video conferencing on 28.7.2022 and the Commission, on request, permitted the Petitioner to amend the petition/tariff filing forms. In response, the Petitioner vide affidavit dated 8.8.2022, has filed the amended petition/ tariff forms, after serving copies on the Respondents. Thereafter, the matter was heard on 6.9.2022 and the Commission directed the Petitioner to submit certain additional information. In response, the Petitioner has filed its additional information vide affidavit dated 27.9.2022, after serving copy to the Respondents. Subsequently, this Petition was heard along with Petition No.429/GT/2020 (tariff of the generating station for the period 2019-24) on 2.11.2022, and the Commission after hearing the parties, reserved its order in these petitions. Taking into consideration the submissions of the parties and the documents available on record, we proceed to examine the claims of the Petitioner,

in this petition, on prudence check, as stated in the subsequent paragraphs.

Capital Cost

6. Regulation 9(3) of the 2014 Tariff Regulations provides as under:

> *"9. Capital Cost:*
>
> *(3) The Capital cost of an existing project shall include the following:*
>
> *(a) the capital cost admitted by the Commission prior to 1.4.2014 duly trued up by excluding liability, if any, as on 1.4.2014;*
>
> *(b) additional capitalization and de-capitalization for the respective year of tariff as determined in accordance with Regulation 14; and*
>
> *(a) expenditure on account of renovation and modernisation as admitted by this Commission in accordance with Regulation 15."*

7. The Commission vide its order dated 6.2.2017 in Petition No. 274/GT/2014 had allowed the closing capital cost of Rs.319679.86 lakh, on cash basis, as on 31.3.2014. The same has been considered as the opening capital cost as on 1.4.2014 for the purpose of truing-up of tariff for the 2014-19 tariff period, in accordance with Regulation 9(3) of the 2014 Tariff Regulations.

Additional Capital Expenditure

8. Regulations 14(3) of the 2014 Tariff Regulations provides as under:

> *"14.(3) 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 after the cut-off date, may be admitted by the Commission, subject to prudence check:*
>
> *(i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law;*
> *(ii) Change in law or compliance of any existing law;*
> *(iii) Any expenses to be incurred on account of need for higher security and safety of the plant as advised or directed by appropriate Government Agencies or statutory authorities responsible for national security/internal security;*
> *(iv) Deferred works relating to ash pond or ash handling system in the original scope of work;*
> *(v) Any liability for works executed prior to the cut-off date, after prudence check of the details of such undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments etc.;*
> *(vi) Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;*
> *(vii) Any additional capital expenditure which has become necessary for efficient operation of generating station other than coal/lignite based stations or transmission system as the case may be. The claim shall be substantiated with the technical justification duly supported by the documentary evidence like test results carried out by an independent agency in case of deterioration of assets, report of an independent agency in case of damage caused by natural calamities, obsolescence of technology,*

up-gradation of capacity for the technical reason such as increase in fault level;

9. Regulation 15 of 2014 Tariff Regulations provides as under:

"15. Renovation and Modernisation: (1) The generating company or the transmission licensee, as the case may be, for meeting the expenditure on renovation and modernization (R&M) for the purpose of extension of life beyond the originally recognised useful life for the purpose of tariff of the generating station or a unit thereof or the transmission system or an element thereof, shall make an application 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."

10. Regulation 16 of 2014 Tariff Regulations provides for a special allowance for coal based/ lignite fired thermal generating station as under:

"16. Special Allowance for Coal-based/Lignite fired Thermal Generating station:

(1)In case of coal-based/lignite fired thermal generating station, the generating company, instead of availing 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 modernisation beyond the useful life of the generating station or a unit thereof, and in such an event, 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 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 and performance norms.
xx.
(3) In the event of granting special allowance by the Commission, the expenditure incurred 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 to furnish details of such expenditure."

11. The Petitioner, in Form-9A, has submitted the actual additional capital expenditure (on cash basis), as stated below:

(Rs. in lakh)

Sl. No.	**Head of Work /Equipment**	**Additional capitalization claimed (on cash basis)**					
		2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**Total**
1	Fire Detection System for CHP	0.00	0.00	179.80	0.58	0.00	180.38
2	Continuous Emission Monitoring System (CEMS)	0.00	0.00	177.75	8.59	0.00	186.33
3	Effluent Quality Monitoring System (EQMS)	0.00	0.00	34.79	0.00	0.00	34.79
4	Procurement of 400 KV circuit breakers	0.00	0.00	0.00	338.27	0.00	338.27
5	Installation of energy efficient lighting & fixtures	0.00	0.00	0.00	149.99	0.00	149.99
6	4 X 10 KW Solar PV Grid	0.00	0.00	0.00	0.00	26.64	26.64

Sl. No.	Head of Work /Equipment	Additional capitalization claimed (on cash basis)					
		2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**Total**
7	BOBR Complete Wagons	47.32	0.00	0.00	0.00	1019.38	1066.70
8	Solar Power Generating Unit	4.36	0.00	0.00	0.00	0.26	4.61
9	Upgradation of DDCMIS for Stage-II	0.00	0.00	0.00	0.00	6552.99	6552.99
	Subtotal	**51.67**	**0.00**	**392.33**	**497.43**	**7599.27**	**8540.70**
2	Decapitalization of Spares (part of capital cost)	(-) 64.03	(-) 11.94	(-) 21.96	(-) 281.84	(-) 61.60	(-) 441.36
	Sub-total Additional Capital Expenditure	**(-) 12.35**	**(-) 11.94**	**370.37**	**215.58**	**7537.66**	**8099.33**
3	Discharge of Liabilities	51.71	20.86	3.77	0.00	111.09	187.43
Total Additional Capital Expenditure Claimed		**39.36**	**8.92**	**374.15**	**215.58**	**7648.75**	**8286.76**

12. We now examine the actual additional capital expenditure claimed by the Petitioner.

13. The Petitioner has claimed the total actual additional capital expenditure of Rs.8540.70 lakh towards Fire Detection System for CHP, Continuous Emission Monitoring System, Effluent Quality Monitoring System, Procurement of 400 KV circuit breakers, Installation of energy efficient lighting & fixtures, 4 X 10 KW Solar PV Grid, BOBR Complete Wagons, Solar Power Generating Unit and Upgradation of DDCMIS for Stage-II.

14. As regards the Fire Detection system for CHP, the Respondents BSPHCL, GRIDCO and TANGEDCO and UPPCL have submitted that the Petitioner has not placed on record the confirmation that the expenditure on augmentation of Fire Fighting System/Protection System is after following the TAC guidelines and the details of discount, if any, received from the Insurance Companies. Accordingly, the Respondents have submitted that the claim is liable to be rejected. In response, the Petitioner has submitted that the said claim falls under Regulation 14(3)(ii) and 14(3)(iii) of the 2014 Tariff Regulations, as the assessment of availability, reliability and design adequacy of "Fire detection and Protection System" of all coal based thermal stations of the Petitioner, was carried out in line with Regulation 12(5) of Central Electricity Authority (Technical Standards for construction of Electrical Plants and Electric Lines)

Regulations, 2010 ('CEA Regulations, 2010'). It has further submitted that major works identified and carried out is in order to comply with the said Regulations for fire detection and protection system. The works involved were the installation of MVW (Medium Velocity Water) spray system for the various coal conveyers and transfer points of Stage-I and Stage-II CHP and crusher house of CHP Stage-I, installation of MVW spray system for the various cable galleries of Stage-I & II, installation of MVW spray system for Stacker Reclaimers of CHP Stage-I & II, installation of Analogue addressable type fire detection and alarm system for various areas of CHP Stage-I & II and cable galleries and installation of Fire Order in hydrant for inclined conveyer galleries. It has also submitted that the 'augmentation of Fire Protection System' of Coal Handling Plant (CHP) and Stacker Reclaimer area, in line with CEA Regulations, 2010 is essentially required to prevent any catastrophic damage in case fire breaks out in CHP, as the existence of coal in CHP area makes it vulnerable to fire hazards and mobile fire protection equipment may not be able to control the spread of fire. Accordingly, the Petitioner has submitted that the claim under the said Regulations is thus, based on 'change in law' event and hence the projected additional capital expenditure was allowed under Regulation 14(3)(ii) and 14(3) (iii) of 2014 Tariff Regulations in Petition No. 316/GT/2014. The Petitioner has stated that the Commission in its order dated 10.3.2017 in the Petition No. 316/GT/2014, had not rejected the claim of the Petitioner, but chose to consult the CEA in regard to whether the CEA Regulations 2010 and 2011 are applicable to the existing generating stations and if so, whether the implementation of the augmentation of fire-fighting system should be considered as 'change in law' and is required for safety and security of the plant in terms of Regulation 14(3)(ii) and 14(3)(iii) of the 2014 Tariff Regulations.

15. As regards TAC Guidelines, the Petitioner has submitted that the augmentation of

firefighting system/protection system is in compliance to the TAC guidelines documents. The Petitioner has also confirmed that no discount has been received from the Insurance Company.

16. As regards additional capital expenditure claimed towards CEMS and EQMS, the Respondents BSPHCL, GRIDCO and TANGEDCO have submitted that the Petitioner may be directed to meet the expenditure from Special Allowance. The Respondents have further submitted that the due date of expiry of useful life of the generating station was 30.6.2021, and therefore, the claims of the Petitioner at the fag end of useful life of the generating station cannot be allowed. In response, the Petitioner has submitted that the additional capital expenditure for installation of CEMS and EQMS, is statutory in nature and thus mandatory and therefore, the said claim falls under Regulation 14(3)(ii) of the 2014 Tariff Regulations and cannot be met from Compensation Allowance as per Regulation 17 of the 2014 Tariff Regulations, which clarifies the nature of additional capitalisation expenditure, which is to be kept out of Compensation Allowance.

17. As regards the Procurement of 400 kV Circuit Breaker, the Respondents BSPHCL, GRIDCO and UPPCL have submitted that the claim of the Petitioner does not come under the scope and purview of Regulation 14(3)(iii) of the 2014 Tariff Regulations, since there is no ‘advice’ or ‘direction’ from the appropriate Governmental agencies or Statutory authorities, for replacement of Old Circuit Breaker. They have further submitted that the life of AC and DC Sub-Stations is 25 years, as per Regulation 3(67)(c) of the 2014 Tariff Regulations and hence, the life span of the Sub-station and its associated equipment’s like Transformer, Circuit Breaker, CT, PT, VT, LA etc., should, therefore, be maintained for 25 years and the cost burden due to such failure/ inefficiency of the Petitioner, should not be passed on to the beneficiaries, and ultimately the consumers. In response, the Petitioner has clarified that the last proviso to

Regulation 14 (3) of the 2014 Tariff Regulations, is required to be interpreted in an objective and purposeful manner, considering the scheme of the 2014 Tariff Regulations. The Petitioner has also submitted that sub clauses (i) to (x) of Regulation 14(3) of the 2014 Tariff Regulations specifically provides for consideration of additional capitalization expenditure after the cut-off date and there is no provision in the said Regulations, which envisages or otherwise requires a generator to cover such expenditure under Regulations 16 (Special Allowance) or Regulation 17 (Compensation Allowance) of the 2014 Tariff Regulations.

18. As regards Solar PV Grid, Solar Power generating unit and Up-gradation of DDCMIS, the Respondents BSPHCL and GRIDCO have submitted that these claims are not covered under the 2014 Tariff Regulations and are, therefore, liable to be rejected. The Respondents have further submitted that as the date of expiry of useful life of the generating station is 30.6.2021, the above claim of the Petitioner at the fag end of useful life cannot be allowed. In response, the Petitioner has submitted that the installation of Roof top solar at the generating station, would reduce greenhouse gases and thereby reduce emissions and further, the benefits in the shape of reduced APC would be reaped by the beneficiaries.

19. As regards LED Lighting, the Respondents BSPHCL, GRIDCO, TANGEDCO have submitted that the expenditure towards replacement of Incandescent Bulbs with LED Lights fall within the scope of O&M expenses and cannot be considered as capital expenditure. They have also submitted that the Petitioner will save on O&M expenses with the above replacement so as to avail savings thereof and besides this, the auxiliary consumption would also be reduced appreciably, and the Petitioner would avail 60% of saving due to such reduction. The Respondent UPPCL has submitted that replacements of 'old bulbs' with 'LED bulbs' was mandated with the objective of '50-

90% reduction in electricity consumption'. It has also submitted that LED installed in Plant and Office Building would result in reduction of auxiliary consumption and the LED installed in staff colony and outside main plant premises would have to be met from O&M expenses. It has also pointed out that from the submissions of the Petitioner, it is not clear as to whether the expenditure is for plant or for staff colony also. In response, the Petitioner has clarified that the Hon'ble Prime Minister of India, on 5.1.2015, had launched National LED Programme with an objective to reduce energy consumption by using energy efficient lighting and in In line with the objective, Unnat Jyoti by Affordable LEDs for All (UJALA) and Street Lighting National Programme (SLNP) is being implemented by Energy Efficiency Services Ltd. (EESL). It has also stated that as per MOP, GoI letter dated 2.8.2017, the Petitioner was mandated to replace all old bulbs with LED bulbs in all NTPC buildings, including compound/ street lighting, occupied by the Petitioner. It has submitted that the above directions of GOI dated 2.8.2017, amounts to a 'change in law' as it has a force of law.

20. As regards BOBR complete Wagons, the Respondents BSPHCL and GRIDCO have submitted that the date of expiry of useful life of the generating station was 30.6.2021 and therefore, the above claim of the Petitioner at the fag end of useful life of the generating station is liable to be rejected. The Respondent UPPCL has submitted that the procured wagons are to be used for transportation of coal from Lalmatia mines, which shall result in reduction in the landed cost of coal and the benefit of the same shall reflect in the lowering of the energy charges. The Respondent while pointing out that the energy charges for determination of interest on working capital (IWC) shall be based on the energy charges prevailing in Q4 of 2013-14, has submitted that the Petitioner may be directed to submit as to how the benefit of the expenditure shall accrue to beneficiaries during the period 2014-19. The Respondent has further submitted that the Petitioner may be directed to state as to why the expenditure on

BOBR wagons of Rs.1019.38 lakh could not be met from the Compensation allowance /Special allowance, allowable to the Petitioner. In response, the Petitioner has clarified that the Respondents are objecting to the capitalization of this amount relying on the order dated 10.3.2017 passed in Petition No. 316/GT/2014. It has pointed out that in the said case, there was no clarity on extension of useful life of the generating station. However, with respect to generating station, the said units are operating at high PLF and supplying power to the beneficiaries even for the period 2019-24. The Petitioner has submitted that the Respondent UPPCL cannot mix the issue of IWC which has been provided in the 2014 Tariff Regulations to be on the normative basis and for the said purpose takes into account the energy charges prevailing for the last quarter of 2013-14 as the basis for determination of IWC. The Petitioner has also submitted that the additional capital expenditure on the above asset, would lead to a reduction in the actual ECR / energy charges being paid by the beneficiaries and cannot be confused with the issue of IWC. It has also submitted that the intention of providing Special allowance or Compensation allowance in the 2014 Tariff Regulations is not to replace the additional capitalisation for all times to come.

21. The submissions of the parties, have been considered. The admissibility of the claimed additional capital expenditure in terms of the provisions of the 2014 Tariff Regulations is examined below:

(Rs in lakh)

Sl. No.	Assets/Works	Claimed	Allowed	Reasoning
	2014-15			
1	Solar Power Generation unit	4.36	0.00	The additional capital expenditure claimed by the Petitioner under Regulation 14(3)(ii) of the 2014 Tariff Regulations, was dis-allowed by order dated 7.11.2021 in Petition No. 288/GT/2020 and by order dated 13.5.2022 in Petition No. 301/GT/2020 on the ground that the Petitioner has not justified the claim

Sl. No.	Assets/Works	Claimed	Allowed	Reasoning
				with any technical justification, duly supported by documentary evidence like test results carried out by an independent agency. It was also not clear as to what benefits/ advantages, the beneficiaries would derive on account of installation of the said asset. In the above background, the claim of the Petitioner is **not allowed**.
2	BOBR Complete Wagons/ Electro Pneumatic Operated Wagon	47.32	47.32	The Petitioner has claimed additional capital expenditure under Regulation 14(3)(x) of the 2014 Tariff Regulations. In justification of the same, it has submitted that the sanctioned strength of MGR Wagons is 276 nos., but as on date there are only 219 MGR wagons, for coal transportation from Lalmatia mines through deployment of 4 rakes in MGR circuit. It has also submitted that in view of the enhanced coal off take program from linked mines of Lalmatia from 2014-15 onwards, for optimization of coal cost vis-à-vis cost of generation, in line with Regulations, the 5th rake was operated at the earliest to maximize coal off take from Lalmatia. It is observed from the Form 15 that the generating station is required to procure imported coal for meeting its generation requirements. As such, the new rake for increasing off take from the linked mines would definitely reduce the ECR of the generating station and would benefit the beneficiaries of the generating station. Accordingly, Commission finds it prudent to allow the expenditure on procurement of BOBR wagons. Further, considering the fact that Compensation allowance allowed to the generating station does not cover such expenditure on procurement of new BOBR wagons, Commission in relaxation of second proviso to Regulation 14(3) of the 2014 Tariff Regulations which requires any capital expenditure other than that of the nature specified in clauses (i) to (iv)

Sl. No.	Assets/Works	Claimed	Allowed	Reasoning
				of Regulation 14(3) to be met from Compensation allowance, allows the claimed expenditure under Regulation 14(3)(x).
	Total amount claimed	**51.67**		
	Total amount allowed		**47.32**	
	2016-17			
1	Fire Detection System for CHP	179.80	179.80	The additional capital expenditure claimed by the Petitioner under Regulation 14(3)(ii) and Regulation 14(3)(iii) of the 2014 Tariff Regulations, was allowed by order dated 7.11.2021 in Petition No. 288/GT/2020 on the ground that the expenditure for the asset is for statutory compliance. In this background, the claim of the Petitioner is **allowed**.
2	Continuous Emission Monitoring System	177.75	177.75	As the additional capital expenditure incurred is for compliance to the orders of CPCB dated 5.2.2014 and the Environment (Protection) Amendment Rules, 2015 (MoEFCC Notification) dated 7.12.2015, the claim of the Petitioner is **allowed** under Regulation 14(3)(ii) of the 2014 Tariff Regulations.
3	Effluent Quality Monitoring System	34.79	34.79	
	Total amount claimed	**392.33**		
	Total amount allowed		**392.33**	
	2017-18			
1	Continuous Emission Monitoring System (CEMS)	8.59	8.59	The asset has been **allowed**, as discussed under Sl No. 2 in 2016-17 above
2	Fire Detection System for CHP	0.58	0.58	The asset has been **allowed**, as discussed under Sl No. 1 in 2016-17 above
3	Procurement of 400 KV circuit breakers	338.27	0.00	The Petitioner has claimed the additional capital expenditure under Regulation 14(3)(iii) of the 2014 Tariff Regulation on the ground of obsolescence. Regulation 14(3)(iii) of the 2014 Tariff Regulations allows expenditure for higher security and safety of the plant. As such, Regulation 14(3)(iii) of the 2014 Tariff Regulations is not applicable for procurement of circuit breaker. As per second proviso to Regulation 14(3) of the 2014 Tariff Regulations, it is very clear that any capital expenditure other than that

Sl. No.	Assets/Works	Claimed	Allowed	Reasoning
				of the nature specified in clauses (i) to (iv) of the Regulation 14(3) of the 2014 Tariff Regulations, in case of coal/lignite-based station, shall be met out of compensation allowance. As the Petitioner has been allowed Compensation allowance of Rs.4000 lakh during the period 2014-19, the claim towards Procurement of 400 KV circuit breakers is **not allowed.**
4	Installation of energy efficient lighting & fixtures	149.99	0.00	The additional capital expenditure claimed by the Petitioner under Regulation 14(3)(ii) of the 2014 Tariff Regulations, was dis-allowed by order dated 7.11.2021 in Petition No. 288/GT/2020 and by order dated 13.5.2022 in Petition No. 301/GT/2020. In line with the said decisions, the claim of the Petitioner is **not allowed**.
	Total amount claimed	**497.43**		
	Total amount allowed		**9.17**	
	2018-19			
1	4 X 10 KW Solar PV Grid	26.64	0.00	These assets are **not allowed**, as discussed under Sl No.1 in 2014-15 above
2	Solar Power Generating Unit	0.26	0.00	
3	BOBR Complete Wagons	1019.38	1019.38	This asset is **allowed**, as discussed under Sl.No. 2 in 2014-15 above.
4	Upgradation of DDCMIS for Stage-II	6552.99	6552.99	The Petitioner has claimed the additional capital expenditure under Regulation 14(3)(iii) and Regulation 54 of the 2014 Tariff Regulation on the ground of obsolescence. In this regard, Commission is of the opinion that role of updated DDCMIS in efficient, reliable and safe operation of the plant needs no debate and as such, the corresponding expenditure on replacement of obsolete DDCMIS has been consistently allowed by the Commission to various generating stations of the Petitioner as well as other generating companies. In the instant case also, the Petitioner has submitted the supporting documents towards obsolescence. However, the Regulation 14(3)(iii) under which the expenditure has

Sl. No.	Assets/Works	Claimed	Allowed	Reasoning
				been claimed is not directly applicable as it requires advise or direction from the appropriate Government Agency or statutory authority which is not available in this case. Accordingly, Commission in consideration of the necessity of the expenditure incurred for safe operation of the plant, allows the expenditure under Regulation 14(3)(iii) as additional capital expenditure by invoking its power to relax under Regulation 54 to relax the requirement of advice or direction from appropriate Government Agency or statutory authority.
	Total amount claimed	**7599.27**		
	Total amount allowed		**7572.37**	

22. Accordingly, the additional capital expenditure allowed, on cash basis, before consideration of decapitalisation of spares, discharged labilities and disallowed exclusions, is as under:

Sl. No	Head of Work /Equipment	Additional Capital Expenditure allowed on cash basis					
		2014-15	2015-16	2016-17	2017-18	2018-19	Total
1	Fire Detection System for CHP	0.00	0.00	179.80	0.58	0.00	180.38
2	Continuous Emission Monitoring System	0.00	0.00	177.75	8.59	0.00	186.33
3	Effluent Quality Monitoring System	0.00	0.00	34.79	0.00	0.00	34.79
4	Procurement of 400 KV circuit breakers	0.00	0.00	0.00	0.00	0.00	0.00
5	Installation of energy efficient lighting & fixtures	0.00	0.00	0.00	0.00	0.00	0.00
6	4 X 10 KW Solar PV Grid	0.00	0.00	0.00	0.00	0.00	0.00
7	BOBR Complete Wagons	47.32	0.00	0.00	0.00	1019.38	1066.70
8	Solar Power Generating Unit	0.00	0.00	0.00	0.00	0.00	0.00
9	Upgradation of DDCMIS for Stage II	0.00	0.00	0.00	0.00	6552.99	6552.99
	Total additional capital expenditure allowed	**47.32**	**0.00**	**392.33**	**9.17**	**7572.37**	**8021.19**

Assumed Deletion

23. As per consistent methodology adopted by the Commission, the expenditure on replacement of assets, if found justified, is allowed for the purpose of tariff provided that

the capitalization of the said asset, is followed by de-capitalization of the gross value of the old asset. However, in certain cases, where the de-capitalization is proposed to be effected during the future years to the year of capitalization of the new asset, the de-capitalization of the old asset for the purpose of tariff, is shifted to the very same year in which the capitalization of the new asset is allowed. Such de-capitalization which is not a book entry in the year of capitalization is termed as "Assumed Deletion". Therefore, the methodology of arriving at the fair value of the de-capitalized asset, i.e., escalation rate of 5% per annum from the COD has been considered in order to arrive at the gross value of old asset in comparison to the cost of new asset. In the present petition, year of COD of the generating station was in 1996-97. We have considered the value of asset under consideration as on COD as 100% and escalated it @5% per annum till the year during which additional capital expenditure is claimed against replacement of the same. The amount claimed for additional capital expenditure against the asset is multiplied by the derived ratio from above two values i.e., value in year of COD divided by value in capitalized year.

24. The Petitioner, in this petition, has claimed Upgradation of DDCMIS on the basis of obsolescence , but has not furnished the de-capitalized value of the old assets. Accordingly, the decapitalized value of the assets/ works has been calculated in terms of the above-mentioned methodology. Accordingly, the 'assumed deletions' allowed for the purpose of tariff are as follows:

(Rs. In lakh)

	Year of claim	Additional capital expenditure allowed (on accrual basis)	Assumed deletion
DDCMIS	2018-19	6801.40	(-)2325.06

De-capitalisation of Spares (Part of capital cost)

25. The Petitioner has claimed the following de-capitalization of spares, which form part of the capital cost and the same is allowed under Regulation 14(4) of the 2014 Tariff

Regulations.

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
(-) 64.03	(-) 11.94	(-) 21.96	(-) 281.84	(-) 61.60

Discharge of liabilities

26. The Petitioner has claimed the discharge of liabilities as under:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
51.71	20.86	3.77	0.00	111.09

27. The Petitioner, in Form-18, has furnished details of un-discharged liabilities of Rs.1021.35 lakh corresponding to the allowed assets, as on 1.4.2014, as against the un-discharged liabilities of Rs.1277.09 lakh, corresponding to the allowed assets/works as on 31.3.2014, as considered in order dated 10.3.2017 in Petition No. 316/GT/2014. The Petitioner has submitted that the variance of Rs.255.74 lakh, in the details of un-discharged liabilities, as on 1.4.2014, is on account of inclusion of liabilities corresponding to the disallowed items in un-discharged liabilities balance of Rs.1277.09 lakh, as considered in order dated 10.3.2017. Accordingly, the un-discharged liabilities of Rs.1021.35 lakh as claimed by the Petitioner, as on 1.4.2014, has been considered for the purpose of tariff.

28. In view of above, the discharge of liabilities allowed as part of allowed additional capital expenditure are as under:

(Rs. in lakh)

2014-15	2015-16	2016-17	2017-18	2018-19
51.71	20.86	2.08	0.00	0.00

29. Further, the flow of un-discharged liability, corresponding to allowed assets/works, during the period 2014-19 is as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Opening liabilities	1021.35	969.64	948.78	982.45	982.45
Add: Liabilities added during the year	0.00	0.00	35.75	0.00	298.66
Less: Discharge of liabilities	51.71	20.86	2.08	0.00	0.00
Less: Reversal of liabilities	0.00	0.00	0.00	0.00	14.00

Closing liabilities	969.64	948.78	982.45	982.45	*1267.11

** The balance un-discharged liabilities out of liabilities deducted as on 1.4.2009 is 932.70 lakh as on 31.3.2019 and the corresponding balance cumulative depreciation and cumulative repayment to be adjusted as on 31.3.2019 is Rs.576.93 lakh and Rs.391.16 lakh, respectively.*

30. The Petitioner has furnished the reconciliation statement of the actual additional capital expenditure period, with books, the summary of which are as under:

(Rs. in lakh)

	Ref	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Block	A	595738.80	621637.65	633123.74	646325.93	655443.04
Closing Gross Block	B	621637.65	632067.36	648162.49	659579.42	675923.44
Total additions as per books	C=B-A	25898.85	10429.71	15038.76	13253.49	20480.40
Ind-AS adjustment	D	0.00	0.00	(-) 1836.57	(-) 4136.37	(-) 5982.24
Net additions, as per IGAAP	E=C+D	25898.85	10429.71	13202.19	9117.11	14498.16
Additions pertaining to other stages	F	19617.09	4016.32	2585.47	4972.36	954.38
Net additions, as per IGAAP, corresponding to Farakka-I&II	G=E-F	6281.76	6413.39	10616.73	4144.76	13543.78
Exclusions claimed	H	6291.91	6425.33	10210.60	3818.08	5704.67
Additional capital expenditure claimed (on accrual basis)	I=G-H	(-) 10.15	(-) 11.94	406.13	326.67	7839.10
Un-discharged liabilities included above	J	2.21	0.00	35.75	111.09	301.44
Additional capital expenditure claimed (on cash basis)	K=I-J	(-) 12.35	(-) 11.94	370.37	215.58	7537.66
Discharges during the year	L	51.71	20.86	3.77	0.00	111.09
Net Additional Capital Expenditure claimed	**M=K+L**	**39.36**	**8.92**	**374.15**	**215.58**	**7648.75**

<u>Exclusions</u>

31. The summary of exclusions from books of accounts under different heads for the purpose of tariff are shown as follows:

(Rs. in lakh)

Sl. No	Head of Work / Equipment	Additional Capital Expenditure claimed under Exclusion				
		2014-15	2015-16	2016-17	2017-18	2018-19
A	Items disallowed or not claimed	0.00	3007.43	3929.94	406.75	3404.40
B	CEA Approved R&M schemes and other disallowed works	4814.45	0.00	478.73	0.00	0.00
C	ERV	16.13	19.27	(-) 0.30	(-) 22.38	(-) 33.33