

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 362/GT/2020**

**Coram:**

**Shri P. K. Pujari, Chairperson**

**Shri I. S. Jha, Member**

**Shri Pravas Kumar Singh, Member**

**Date of Order: 21<sup>st</sup> April, 2022**

**In the matter of:**

Petition for truing-up of tariff of Kahalgaon Super Thermal Power Station, Stage-II (1500 MW) for the period from 1.4.2014 to 31.3.2019

**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. GRIDCO Limited,  
24, Janpath,  
Bhubaneswar-751007
2. Power Department,  
Govt. of Sikkim, Kazi Road, Gangtok,  
Sikkim-737101
3. Gujarat Urja Vikas Nigam Limited,  
Sardar Patel Vidyut Bhawan, Race Course,  
Baroda-390007
4. Madhya Pradesh Power Transmission Corporation Limited,  
Shakti Bhawan, Vidyut Nagar,  
Jabalpur-482008
5. Maharashtra State Electricity Distribution Company Limited,  
'Prakashgard', Bandra (East),  
Mumbai-400 051
6. Chhattisgarh State Power Trading Co. Limited,  
Po. Sundernagar, Dhagania,  
Raipur-492013
7. Electricity Department,  
Administration of Dadra and Nagar Haveli,  
Silvassa, (via VAPI)



8. Electricity Department,  
Administration of Daman & Diu,  
Daman-396210
9. Uttar Pradesh Power Corporation Limited,  
Shakti Bhawan, 14, Ashok Marg,  
Lucknow-226001
10. Uttaranchal Power Corporation Limited,  
Urja Bhawan, Kanwali Road,  
Dehradun-248001
11. Jaipur Vidyut Vitran Nigam Limited,  
Vidyut Bhawan, Janpath,  
Jaipur-302005
12. Ajmer Vidyut Vitran Nigam Limited,  
Old Power House, Hathi Bhata, Jaipur Road,  
Ajmer-305001
13. Jodhpur Vidyut Vitran Nigam Limited,  
New Power House Road, Industrial Area,  
Jodhpur-342003
14. Power Development Department,  
Government of J&K, Secretariat,  
Srinagar-190009
15. BSES Rajdhani Power Limited,  
BSES Bhawan, Nehru Place,  
New Delhi-110019
16. BSES Yamuna Power Limited,  
Shakti Kiran Building, Karkardooma,  
Delhi-110006
17. North Delhi Power Limited,  
33 KV Sub-station Building,  
Hudson Lane, Kingsway Camp,  
Delhi-110009
18. Haryana Power Purchase Centre Limited,  
Shakti Bhawan, Sector-VI, Panchkula,  
Haryana-134109
19. Punjab State Electricity Board,  
The Mall, Patiala-147001
20. Himachal Pradesh State Electricity Board,  
Vidyut Bhawan,  
Shimla-171004
21. Power Department,  
Union Territory of Chandigarh,  
Additional Office Building, Sector-9D,  
Chandigarh-160009

**...Respondents**



**Parties Present:**

Shri Venkatesh, Advocate, NTPC  
Shri Ashutosh K. Srivastava, Advocate, NTPC  
Shri Siddharth Joshi, Advocate, NTPC  
Shri Anant Singh, Advocate, NTPC  
Shri Abhishek Nangia, Advocate, NTPC  
Shri Neil Chatterjee, Advocate, NTPC  
Shri Vinay Kumar Garg, NTPC  
Shri Ishpaul Uppal, NTPC  
Shri Anand Pandey, NTPC  
Shri R.B. Sharma, Advocate, BRPL  
Ms. Megha Bajpeyi, BRPL  
Shri Mohit Mudgal, Advocate, BYPL  
Shri Prashant Kumar Das, GRIDCO  
Shri Mahfooz Alam, GRIDCO  
Shri Manish Garg, UPPCL  
Shri Anurag Naik, MPPMCL

**ORDER**

This Petition has been filed by the Petitioner, NTPC Ltd for truing-up of tariff of Kahalgaon Super Thermal Power Station, Stage-II (1500 MW) (in short ‘the generating station’) for the 2014-19 tariff period 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”).

2. The generating station with a capacity of 1500 MW comprises of three units of 500 MW each. The dates of commercial operation of the units of the generating station are as follows:

	<b>Actual COD</b>
Unit I	1.8.2008
Unit II	30.12.2008
Unit III/Generating station	20.3.2010

3. The Commission by its order dated 21.1.2017 in Petition No. 283/GT/2014 had determined the tariff of the generating station for the 2014-19 tariff period. Against this order, the Petitioner filed the Review Petition No. 13/RP/2017 before this Commission, challenging the disallowance of additional capital expenditure towards MGR land and



the rate of interest on loan. The Commission vide order dated 26.9.2017 disposed of the Petition No. 13/RP/2017 wherein, the Commission has granted liberty to claim the expenditure of MGR land since it form part of the total MGR system at the time of truing-up of tariff of this generating station provided supplies from linked mines get started. As regards the difference in the value of the rate of interest on loan, the Commission was of the view that the error in calculation of weighted average rate of interest having minor impact on tariff shall be corrected at the time of true-up of tariff for the period 2014-19. The directions of the Commission in the above said order has been considered in this order. The capital cost and the annual fixed charges allowed in order dated 21.1.2017 in Petition No. 283/GT/2014 are as follows:

#### Capital Cost allowed

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Capital Cost	544756.09	545916.09	545916.09	553258.40	559198.40
Add: Additional Capital Expenditure allowed	1100.00	1500.00	8442.31	1500.00	1100.00
Closing Capital Cost	545856.09	547356.09	555798.40	557298.40	558398.40

#### Annual Fixed Charges allowed

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	27871.70	27938.14	28192.23	28446.31	28512.76
Interest on Loan	20342.23	18421.01	16866.35	14918.17	12352.73
Return on Equity	32080.36	32312.62	32606.49	32900.36	32977.21
Interest on Working Capital	11042.77	11108.81	11169.69	11427.00	11480.29
O&M Expenses	23200.00	24664.50	26216.00	27869.00	29623.50
<b>Total</b>	<b>114537.05</b>	<b>114445.08</b>	<b>115050.75</b>	<b>115560.84</b>	<b>114946.49</b>

4. Regulation 8 (1) of the 2014 Tariff Regulations provides as follow:

*"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."*



5. The capital cost and the annual fixed charges claimed by the Petitioner for the 2014-19 tariff period are as follows:

**Capital Cost claimed**

*(Rs. in lakh)*

	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Opening Capital Cost	544756.09	549285.54	549370.86	553261.15	555025.44
Add: Addition during the year / period	2728.62	201.18	4118.69	1526.60	599.22
Less: Decapitalisation during the year /period	290.47	352.53	321.16	376.20	58.94
Less: Reversal during the year / period	0.00	0.00	0.00	0.00	0.00
Add: Discharges during the year /period	2091.30	236.68	92.75	613.88	129.96
Closing Capital Cost	549285.54	549370.86	553261.15	555025.44	555695.68
Average Capital Cost	547020.81	549328.20	551316.01	554143.30	555360.56

**Annual Fixed charges claimed**

*(Rs. in lakh)*

	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
Depreciation	27979.57	28227.23	28375.68	28531.73	28789.37
Interest on Loan	20558.07	18027.65	15886.10	13232.76	10909.90
Return on Equity	32182.88	32475.19	32592.70	32759.84	32918.44
Interest on Working Capital	13278.06	13346.27	13505.65	13862.76	13927.72
O&M Expenses	23490.47	25017.03	26614.71	28541.63	29756.52
Impact of Pay Revision	0.00	52.99	1969.42	2482.57	2889.94
Impact of GST	0.00	0.00	0.00	307.35	436.41
Total additional O&M expenses	0.00	52.99	1969.42	2789.92	3326.35
<b>Total</b>	<b>117489.06</b>	<b>117146.35</b>	<b>118944.26</b>	<b>119718.65</b>	<b>119628.30</b>

6. The Respondent UPPCL vide affidavit dated 2.7.2020 and the Respondent MSEDCL vide affidavit dated 6.1.2021 have filed their replies and the Petitioner vide its affidavits dated 4.3.2021 and 28.5.2021 has filed its rejoinder to the said replies. Thereafter, the Respondent MPPMCL and Respondent BYPL vide affidavits dated 31.5.2021 and 4.6.2021 respectively, filed their replies in the matter. The Petitioner has vide affidavit dated 4.6.2021 filed certain additional information with copy to the



Respondents. Subsequently, this petition was heard on 11.6.2021 through video conferencing and the order was reserved. The Respondent UPPCL (vide affidavit dated 21.6.2021), Respondent GRIDCO (vide affidavit dated 8.7.2021), Respondent TPDDL (vide affidavit dated 12.7.2021), Respondent BRPL and BYPL (vide affidavits dated 12.7.2021) has filed their replies. In response, the Petitioner vide separate affidavits dated 19.7.2021 has filed its rejoinders to the aforesaid replies of the Respondents. 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**

7. Regulation 9 (3) of the 2014 Tariff Regulations provides as follow:

***“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.”*

8. The Commission vide its order dated 22.1.2016 in Petition No. 206/GT/2013 with Petition No.272/GT/2014 had allowed the closing capital cost of Rs.544756.09 lakh as on 31.3.2014. The same has been considered as opening capital cost as on 1.4.2014 in accordance with Regulation 9(3) of the 2014 Tariff Regulations.

### **Additional Capital Expenditure**

9. Regulations 14(1) and Regulations 14(3) of the 2014 Tariff Regulations provides as under:

*“14.(1) The capital expenditure in respect of the new project or an existing project incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:*

- (i) Undischarged liabilities recognized to be payable at a future date;*



- (ii) Works deferred for execution;
- (iii) Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 13;
- (iv) Liabilities to meet award of arbitration or for compliance of the order or decree of a court of law; and
- (v) Change in law or compliance of any existing law:

(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 of 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 “

10. The projected additional capital expenditure allowed for the 2014-19 tariff period in order dated 21.1.2017 in Petition No. 283/GT/2014 is summarized as follows:

*(Rs. in lakh)*

Head of Work / Equipment	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Ash Dyke –III A/B/C	1100.00	1500.00	1100.00	1500.00	1100.00	6300.00
Additional DM Plant Stream	0.00	0.00	1000.00	0.00	0.00	1000.00
400KV Bus Sectionalizer	0.00	0.00	6342.31	0.00	0.00	6342.31
<b>Total projected additional capital expenditure allowed</b>	<b>1100.00</b>	<b>1500.00</b>	<b>8442.31</b>	<b>1500.00</b>	<b>1100.00</b>	<b>13642.31</b>

11. The Petitioner has claimed actual additional capital expenditure (on cash basis) for the 2014-19 tariff period as under:



(Rs. in lakh)

Sl. No.	Head of Work / Equipment	Additional capital expenditure claimed					
		2014-15	2015-16	2016-17	2017-18	2018-19	Total
<b>A</b>	<b>Approved in order dated 21.1.2017 in Petition No. 283/GT/2014 on projection basis</b>						
1	Ash Dyke works	937.26	124.45	3397.27	756.34	406.16	5621.48
<b>B</b>	<b>Additional works claimed</b>						
2	Wagons	1661.55	0.00	850.45	0.00	0.00	2511.99
	Decapitalization of Wagon	(-)124.55	0.00	(-)185.37	0.00	(-) 76.91	(-) 386.83
3	Safety and security related works	22.32	0.86	0.00	0.00	0.00	23.18
4	Civil works	33.54	7.94	56.34	0.00	16.80	114.63
5	MGR related works	89.22	61.53	0.00	0.00	0.00	150.75
6	Water supply, drainage & sewerage	18.45	0.00	0.00	0.00	0.00	18.45
7	Make-Up Water System Pkg Stage-II (Unit-7)	0.00	2.78	0.00	240.62	0.00	243.40
8	Steam Turbine Generator Pkg. Stage-II (Unit- 7)	0.00	0.00	0.00	3.56	0.00	3.56
9	Acoustic Treatment of Auditorium for EDC Building	0.00	0.00	0.00	5.81	0.00	5.81
10	S.G. Area Civil Work	0.00	0.00	0.00	86.81	0.00	86.81
11	Steam Generator with ESP Pkg Stage-II (Unit-7)	0.00	0.00	0.00	118.19	0.00	118.19
12	Construction of Multipurpose / Community Centre	0.00	0.00	0.00	17.72	0.00	17.72
13	Internal Electric Multipurpose / Community Centre	0.00	0.00	0.00	0.00	13.85	13.85
14	Installation of energy efficient lighting & fixtures	0.00	0.00	0.00	312.55	239.31	551.87
	Decapitalization of lighting works	0.00	0.00	0.00	(-)15.01	0.00	(-)15.01
15	Turbine Generator Civil & Structural works	0.00	0.00	0.00	0.00	0.00	0.00





Sl. No.	Head of Work / Equipment	Additional capital expenditure claimed					
		2014-15	2015-16	2016-17	2017-18	2018-19	Total
16	Plant Building Civil pkg Unit-7	0.00	0.00	0.00	0.00	0.00	0.00
17	Main Plant Building work	77.37	3.62	0.00	0.00	0.00	80.99
18	T&P (Tools and tackles)	13.47	0.00	0.00	0.00	0.00	13.47
	<b>Sub-total</b>	<b>1791.36</b>	<b>76.73</b>	<b>721.42</b>	<b>770.26</b>	<b>193.05</b>	<b>3552.83</b>
<b>C</b>	Additional Capitalization (A+B)	2728.62	201.18	4118.69	1526.60	599.22	9174.31
<b>D</b>	Decapitalization of Spares (part of capital cost)	(-)290.47	(-)352.53	(-)321.16	(-)376.20	(-)58.94	(-)1399.31
<b>E</b>	Discharge of Liabilities	2091.30	236.68	92.75	613.88	129.96	3164.58
	<b>Total additional capital expenditure claimed (C+D+E)</b>	<b>4529.45</b>	<b>85.33</b>	<b>3890.29</b>	<b>1764.29</b>	<b>670.24</b>	<b>10939.59</b>

12. We now examine the actual additional capital expenditure claimed by the Petitioner for the 2014-19 tariff period:

**Actual Additional Capital Expenditure for 2014-19 tariff period**

13. The claims of the Petitioner for actual additional capital expenditure for the 2014-19 tariff period have been examined based on the submission of the parties and the documents available on record and on prudence check considered as discussed below:

**a) Ash Dyke works**

14. The Petitioner has claimed total actual additional capital expenditure of Rs.5621.48 lakh in 2014-19 tariff period towards Ash dyke works in terms of Regulation 14(3)(iv) of the 2014 Tariff Regulations. The Petitioner, in justification of the same, has submitted that the Commission vide its order dated 21.1.2017 in Petition No. 283/GT/2014, had observed that the work of ash dyke for ash disposal is a deferred work within the original scope of work of the project and these works are of a continuous nature, during the entire operational lifetime of the generating station and had also directed the Petitioner to submit on affidavit, the details of work done under



ash dyke works along with proper justification for the actual capital expenditure incurred during the 2014-19 tariff period, at the time of truing-up. In compliance of the same, the Petitioner has submitted the details of work done under ash dyke works in this petition. The additional capital expenditure allowed on projection basis vide order dated 21.1.2017 in Petition No. 283/GT/2014 and those claimed by the Petitioner, on actual basis, under this head is shown in the table as follows:

*(Rs. in lakh)*

Sl. No.	Head of Work / Equipment	Additional capital expenditure claimed (Cash Basis)					
		2014-15	2015-16	2016-17	2017-18	2018-19	Total
1	Ash dyke related work allowed in order dated 21.1.2017 in Petition No. 283/GT/2014	1100.00	1500.00	1100.00	1500.00	1100.00	6300.00
<b>2</b>	<b>Ash dyke related work claimed on actual basis</b>						
i	Second raising of Ash Dyke Lagoon-III C	936.87	0.00	0.88	0.43	0.00	938.18
ii	3rd. Raising of Ash Dyke Lagoon-II	0.39	15.34	0.00	0.00	0.00	15.73
iii	Ash Bag Packing machine	0.00	5.89	0.00	0.00	0.00	5.89
iv	Transferred to Ash Fund	0.00	(-) 42.00	0.00	0.00	0.00	(-)42.00
v	Ash Dyke Pkg-Stage II/7956 III A, B & C Starter	0.00	8.01	0.00	0.00	0.00	8.01
vi	Ash Handling System Pkg. Stage-II Unit 7	0.00	0.05	0.00	0.00	0.00	0.05
vii	Ash Dyke Lagoon-III A/B 2nd raising	0.00	10.65	8.38	0.00	0.00	19.03
vii	Ash Water Re-circulation System	0.00	126.51	0.00	7.15	0.00	133.66
ix	Ash Dyke 3D (Starter Dyke)	0.00	0.00	1104.26	661.38	306.70	2072.34
x	RCC Culvert Box near Lagoon-IIID	0.00	0.00	68.96	0.00	0.22	69.18
xi	Third raising of Ash Dyke Lagoon-III ABC	0.00	0.00	2214.78	74.46	99.25	2388.49
xii	Construction of 4th raising of Ash Dyke Lagoon-II	0.00	0.00	0.00	12.92	0.00	12.92
	<b>Total (i to xii)</b>	<b>937.26</b>	<b>124.45</b>	<b>3397.27</b>	<b>756.34</b>	<b>406.16</b>	<b>5621.48</b>

15. The Respondent, GRIDCO has submitted that the Petitioner has not justified the expenditure claimed pertaining to Ash dyke work. It has also submitted that the Petitioner may be directed to furnish details of competitive bidding, date of opening of tender, number of participating bidders, date of opening of price bid, name of the

