

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Review Petition No. 4/RP/2023**

in

**Petition 302/GT/2020**

**Coram:**

**Shri I.S Jha, Member**

**Shri Arun Goyal, Member**

**Shri Pravas Kumar Singh, Member**

**Date of Order: 23<sup>rd</sup> November, 2023**

**In the matter of**

Review of Commission's order dated 1.10.2022 in Petition No. 302/GT/2020 pertaining to truing up of tariff for the period 2014-19 in respect of Feroze Gandhi Unchahar Thermal Power Station Stage-I (420 MW).

**And**

**In the matter of**

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

**...Review Petitioner**

**Vs**

1. Uttar Pradesh Power Corporation Limited,  
Shakti Bhawan, 14, Ashok Marg,  
Lucknow – 226 001.
2. Rajasthan Urja Vikas Nigam Limited,  
Vidyut Bhawan, Janpath,  
Jaipur – 302 005.
3. Tata Power Delhi Distribution Limited,  
Grid Substation, Hudson Road,  
Kingsway Camp, Delhi – 110 009.
4. BSES Rajdhani Power Limited,  
BSES Bhawan, Nehru Place,  
New Delhi – 110 019.
5. BSES Yamuna Power Limited,  
Shakti Kiran Building, Karkardooma,



- Delhi – 110 092.
6. Haryana Power Purchase Centre,  
Shakti Bhawan, Sector – VI,  
Panchkula, Haryana – 134 109.
  7. Punjab State Power Corporation Limited,  
The Mall, Patiala – 147 001.
  8. Himachal Pradesh State Electricity Board Limited,  
Kumar Housing Complex Building-II,  
Vidyut Bhawan, Shimla – 171 004.
  9. Power Development Department,  
Government of J&K, Civil Secretariat, Srinagar.
  10. Electricity Department,  
Union Territory of Chandigarh,  
Addl. Office Building, Sector-9D  
Chandigarh.
  11. Uttarakhand Power Corporation Limited,  
Urja Bhavan, Kanwali Road,  
Dehradun – 248 001.

**...Respondents**

**Parties Present:**

Shri A.S. Pandey, NTPC  
Shri Siddhant Pradhan, NTPC  
Shri Nitin Kala, Advocate, TPDDL  
Shri Tanmay Jain, Advocate, TPDDL  
Shri Rahul Kinra, Advocate, BRPL  
Shri Aditya Ajay, Advocate, BRPL  
Shri Girdhar Gopal Khattar, Advocate, BRPL

**ORDER**

Petition No. 302/GT/2020 was filed by the Review Petitioner, NTPC Limited, for truing up of tariff of Feroze Gandhi Unchahar Thermal Power Station Stage-I (420 MW) (in short ‘the generating station’) for the period 2014-19, in accordance with Regulation 8(1) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (in short ‘the 2014 Tariff Regulations’) and the Commission vide its order dated 1.10.2022 (in short the ‘impugned order’) approved the annual fixed charges of the generating station as under:



(Rs. in lakh)

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

2. Aggrieved by the said impugned order, the Review Petitioner has filed this Review Petition on the ground that there is an error apparent on the face of the record on the following issues:

*(A) Consideration of Unchahar Stage-IV capacity even prior to its COD for computation of under-recovery in O&M expenses, causing disallowance of impact due to wage revision; and*

*(B) Non-consideration of GCV with moisture correction.*

### **Hearing dated 27.4.2023**

2. The Review Petition was heard on 'admission' on 27.4.2023 and the Commission, after hearing the learned counsel for the Review Petitioner, 'admitted' the Review Petition on the issues raised in paragraph 2 above and notice was served on the Respondents, with directions to complete pleadings in the matter.

3. The Respondent TPDDL has filed its reply vide affidavit dated 27.6.2023 and the Review Petitioner vide affidavit dated 5.9.2023 has filed its rejoinder to the said reply.

### **Hearing dated 28.7.2023**

4. The Review Petition was heard on 28.7.2023. During the hearing, the representative of the Review Petitioner and the learned counsel for the Respondent, TPDDL made detailed oral submissions on the aforesaid issues. The learned counsel appearing for the Respondent, BRPL sought time to file reply, which was accepted by



the Commission, however no reply has been filed by the Respondent, BRPL. The Commission after hearing the representative of the Review Petitioner and the learned counsel for the Respondent, TPDDL reserved its order in the matter. Accordingly, based on the submissions of the parties and the documents available on record, we proceed to examine the issues raised by the Review Petitioner in the subsequent paragraphs.

**A. Consideration of Unchahar Stage-IV capacity even prior to its COD for computation of under-recovery in O&M expenses, causing disallowance of impact due to wage revision.**

5. The Commission in paragraphs 73 to 77 of the impugned order dated 1.10.2022, had observed as under:

*“73. The Petitioner has furnished the detailed break-up of the actual O&M expenses incurred during the 2014-19 tariff period for combined stages i.e. Stage-I, II, III and IV of the generating station (1550 MW). It is noticed that the total O&M expenses incurred is more than the normative O&M expenses recovered during each year of the 2014-19 tariff period. The impact of the wage revision could not be factored by the Commission while framing the O&M expenses norms under the 2014-19 Tariff Regulations, since the pay/ wage revision came into effect from 1.1.2016 (CISF & KV employees) and 1.1.2017 (employees of the Petitioner) respectively. As such, in terms of relevant provisions of SOR of the 2014 Tariff Regulations, the approach followed for arriving at the allowable impact of pay revision is given in the subsequent paragraphs.*

*74. First step is to compare the normative O&M expenses with the actual O&M expenses for the period from 2015-16 to 2018-19, commensurate to the period for which wage revision impact has been claimed. For like to like comparison, the components of O&M expenses like productivity linked incentive, water charges, filing fees, ex-gratia, loss of provisions, prior period expenses, community development, store expenses, ash utilization expenses, RLDC fee & charges and others (without breakup/ details) which were not considered while framing the O&M expenses norms for the 2014-19 tariff period, have been excluded from the yearly actual O&M expenses of the generating station as well as corporate centre. Having brought the normative O&M expenses and actual O&M expenses at same level, if normative O&M expenses for the period 2015-19 are higher than actual O&M expenses (normalized) for the same period, the impact of wage revision (excluding PRP and ex-gratia) as claimed for the period is not admissible/ allowed as the impact of pay revision gets accommodated within the normative O&M expenses. However, if the normative O&M expenses for the period 2015-19 are less than the actual O&M expenses (normalized) for the same period, the wage revision impact (excluding PRP and ex-gratia) to the extent of under recovery or wage revision impact (excluding PRP and ex-gratia), whichever is lower, is required to be allowed as wage revision impact for the period 2015-19.*



75. In this regard, the details as furnished by the Petitioner for actual O&M expenses for Stage-I, II, III and IV of the generating station (1550 MW) and wage revision impact (excluding PRP and ex-gratia) for Stage-I (420 MW) of the generating station are as follows:

	(Rs. in lakh)				
	2015-16	2016-17	2017-18	2018-19	Total for 2015-19
Actual O&M expenditure (normalized) for the generating station (Combined for stage-I, II, III and IV) (A)	34983.11	35960.36	42561.08	64281.01	177785.57
Actual O&M expenditure (normalized) for Stage-I of the generating station prorated based on capacity (B)	9479.30	9744.10	11532.68	17418.08	48174.15
Normative O&M Expenses for Stage-I of the generating station (C)	10668.00	11340.00	12054.00	12814.20	46876.20
Under-recovery (D) = (C)-(B)	1188.70	1595.90	521.32	(-)4603.88	(-)1297.95
Wage revision impact claimed excluding PRP/ex-gratia (E)	31.29	1597.94	1888.83	1826.70	5344.75

76. As stated, for like to like comparison of the actual O&M expenses and normative O&M expenses, sub-heads as discussed at above, has been excluded from the actual O&M expenses to arrive at the actual O&M expenses (normalized) for the Stage-I of the generating station (420 MW). Accordingly, the following table portrays the comparison of normative O&M expenses versus the actual O&M expenses (normalized) along with wage revision impact claimed by the Petitioner for the generating station (Stage-I 420 MW) for period 2015-19 (on combined basis) commensurate with the wage revision claim being spread over these four years:

	(Rs. in lakh)				
	2015-16	2016-17	2017-18	2018-19	Total for 2015-19
Actual O&M expenditure (normalized) for the generating station (Combined for stage- I, II, III and IV) (a)	31162.56	33682.91	37531.98	50644.03	153021.47
Actual O&M expenditure (normalized) for Stage -I of the generating station prorated based on capacity (b)	8444.05	9126.98	10169.96	13722.90	41463.88
Normative O&M Expenses for Stage -I of the generating station (c)	10668.00	11340.00	12054.00	12814.20	46876.20
Under-recovery (d) = (c)-(b)	2223.95	2213.02	1884.04	(-) 908.70	5412.32
Wage revision impact excluding PRP/ex-gratia (Claimed)	31.29	1597.94	1888.83	1826.70	5344.75
Wage revision impact excluding PRP/ex-gratia (Allowed)	0.00	0.00	0.00	0.00	0.00

77. It is observed that for the period from 2015-16 to 2018-19, the normative O&M expenses is more than the actual O&M expenses (normalized) incurred and the over recovery is to the tune of Rs.5412.32 lakh. As such, in terms of methodology as discussed above, the wage revision impact (excluding PRP/incentive) of Rs.5344.75 lakh is not allowable for this generating station.”



### **Submissions of the Review Petitioner**

6. The Review Petitioner has submitted that the Commission had erred in considering the station capacity as 1550 MW during the years, i.e., 2015-16, 2016-17, 2017-18 and 2018-19, for computing the wage revision impact. It has further stated that the generating station capacity was not to be taken as 1550 MW, during the period from 2015-18 as Stage-IV of the generating station (500 MW) was declared under commercial operation w.e.f. 00:00 hrs on 30.9.2017. The Review Petitioner has also submitted that if the generating station capacity had been considered with effect from COD date, the ratio for pro rating the actual O&M expenses (normalized) would have been worked out as under:

		<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
1	Stage-I Capacity	420.00	420.00	420.00	420.00
2	Stage-II Capacity	420.00	420.00	420.00	420.00
3	Stage-III Capacity	210.00	210.00	210.00	210.00
4	Stage-IV Capacity*			250.68	500.00
5	Station Capacity (1 + 2 + 3 + 4)	1050.00	1050.00	1300.68	1550.00
6	Ratio for pro-rating of actual O&M expenditure of Uncharhar-III (1)/ (5)	0.400	0.400	0.323	0.271

### **Reply of the Respondent TPDDL**

7. The Respondent, TPDDL has submitted that similar issue arose in the case of Uncharhar Stage-III generating station of the Review Petitioner and the Commission vide corrigendum order dated 30.11.2022 in Petition No. 287/GT/2020, had rectified the inadvertent clerical/ typographical errors while considering the values for actual O&M expenses. It has stated that since the issue in the present Review Petition appears to be in the nature of a typographical error, the same may be rectified. However, it has requested the Commission to direct the Review Petitioner not to charge interest on the



arrear payments towards the wage revision impact, if any, as was directed in the corrigendum order dated 30.11.2022 in Petition No. 287/GT/2020.

**Rejoinder of the Review Petitioner to the reply of the Respondent TPDDL**

8. The Review Petitioner in its rejoinder has pointed out that interest is a legitimate carrying cost which ought to be allowed as per the principle of restitution, while granting relief on account of change in law. It has further stated that the denial of legitimate carrying cost on actual expense incurred by a generating company cannot be countenanced in law as the reform legislation safeguards the consumer interest within the framework of the Electricity Act, 2003 and not dehors the cost-plus tariff principles enshrined under Section 61 of the Electricity Act, 2003 and denial of interest shall violate the said provision. Accordingly, the Review Petitioner has submitted to allow the claim against pay revision along with carrying cost keeping in view of the settled position laid down by APTEL in various judgments.

**Analysis and Decision**

9. The matter has been considered. It is observed that certain inadvertent errors have crept in the impugned order dated 1.10.2022, while computing the impact on wage revision, in respect of this generating station, as pointed out by the Review Petitioner. In view of this, the review sought on this ground is allowed and the impact on wage revision as allowed vide the impugned order is being modified as stated in the subsequent paragraphs.

10. Paragraphs 75 to 76 of the impugned order dated 1.10.2022, is substituted as under:





“75. In this regard, the details as furnished by the Petitioner for actual O&M expenses for Stage-I, II, III and IV of the generating station (1550 MW) and wage revision impact (excluding PRP and ex-gratia) for Stage-I (420 MW) of the generating station are as follows:

	<i>(Rs. in lakh)</i>				
	2015-16	2016-17	2017-18	2018-19	Total for 2015-19
Actual O&M expenditure (normalized) for the generating station (Combined for stage-I, II, III and IV) (A)	34983.11	35960.36	42561.08	64281.01	177785.57
Actual O&M expenditure (normalized) for Stage-I of the generating station prorated based on capacity (B)	13993.25	14384.14	13743.26	17418.08	59538.73
Normative O&M Expenses for Stage-I of the generating station (C)	10668.00	11340.00	12054.00	12814.20	46876.20
Under-recovery (D) = (C)-(B)	(-)3325.25	(-)3044.14	(-)1689.26	(-)4603.88	(-)12662.53
Wage revision impact claimed excluding PRP/ex-gratia (E)	31.29	1597.94	1888.83	1826.70	5344.75

76. As stated, for like to like comparison of the actual O&M expenses and normative O&M expenses, *sub-heads as discussed at above* in para 74, have been excluded from the actual O&M expenses to arrive at the actual O&M expenses (normalized) for the Stage-I of the generating station (420 MW). Accordingly, the following table portrays the comparison of normative O&M expenses versus the actual O&M expenses (normalized) along with wage revision impact claimed by the Petitioner for the generating station (Stage-I 420 MW) for period 2015-19 (on combined basis) commensurate with the wage revision claim being spread over these four years:

	<i>(Rs. in lakh)</i>				
	2015-16	2016-17	2017-18	2018-19	Total for 2015-2019
Actual O&M expenditure (normalized) for the generating station (Combined for stage-I, II, III and IV) (a)	31162.56	33682.91	37531.98	50644.03	153021.47
Actual O&M expenditure (normalized) for Stage-I of the generating station prorated based on capacity (b)	12465.02	13473.16	12119.33	13722.90	51780.42
Normative O&M Expenses for Stage-I of the generating station (c)	10668.00	11340.00	12054.00	12814.20	46876.20
Under-recovery (d) = (c)-(b)	(-)1797.02	(-)2133.16	(-)65.33	(-)908.70	(-)4904.22
Wage revision impact claimed excluding PRP/exgratia (Claimed)	31.29	1597.94	1888.83	1826.70	5344.75
Wage revision impact claimed excluding PRP/exgratia (Allowed)	<b>31.29</b>	<b>1597.94</b>	<b>1888.83</b>	<b>1386.16</b>	<b>4904.22</b>

77. It is observed that for the period 2015-19, the normative O&M expenses is lesser than the actual O&M expenses (normalized) incurred and the under recovery is to the tune of Rs. 4904.22 lakh. The Petitioner has claimed the under recovery of Rs. 5344.75 lakh due to wage revision impact. As such, in terms of methodology as discussed above, the wage revision impact (excluding PRP/incentive) of Rs. 4904.22 lakh is allowable for the generating station. Accordingly, we, in exercise of the Power under Regulation 54 of the 2014 Tariff





Regulations, relax Regulation 29(1) of the 2014 Tariff Regulations, and allow the reimbursement of the wage revision impact, as additional O&M expenses for the period 2015-19. The arrear payments on account of the wage revision impact is payable by the beneficiaries in twelve equal monthly instalments starting from October, 2023. Keeping in view the consumer interest, we as a special case, direct that no interest shall be charged by the Petitioner on the arrear payments on the wage revision impact allowed in this order. This arrangement, in our view, will balance the interest of both the Petitioner and the Respondents. Also, considering the fact that the impact of wage revision is being allowed in exercise of the power to relax, the expenses allowed are not made part of the O&M expenses and the consequent annual fixed charges determined in this order.

11. Accordingly, paragraphs 84 of the impugned order dated 1.10.2022 is also substituted and shall be read as under:

“84. Based on the above discussions, the total annualized O&M expenses allowed in respect of the generating station is summarized below:

		<i>(in Rs. lakh)</i>				
		2014-15	2015-16	2016-17	2017-18	2018-19
Installed Capacity (MW) (A)		420.00	420.00	420.00	420.00	420.00
O&M Expenses under Reg.29(1) in Rs lakh / MW (B)		23.90	25.40	27.00	28.70	30.51
Total O&M Expenses (C) = (A)*(B)	Claimed	10038.00	10668.00	11340.00	12054.00	12814.20
	Approved	10038.00	10668.00	11340.00	12054.00	12814.20
Water charges (in Rs lakh) (D)	Claimed	217.60	233.85	217.96	250.43	160.61
	Approved	217.60	233.85	217.96	250.43	160.61
Capital Spares consumed (E)	Claimed	147.12	559.28	82.09	47.58	119.55
	Approved	124.33	499.43	0.00	0.00	0.95
<b>Total O&amp;M Expenses as allowed (including Water Charges and Capital Spares Consumed) (F) = (C+D+E)</b>	Claimed	<b>10402.72</b>	<b>11461.13</b>	<b>11640.05</b>	<b>12352.01</b>	<b>13094.37</b>
	Approved	<b>10379.93</b>	<b>11401.28</b>	<b>11557.96</b>	<b>12304.43</b>	<b>12975.76</b>
<b>Additional O&amp;M Expenditure</b>						
Impact of Wage Revision (G)	Claimed	0.00	31.29	1597.94	2050.70	2451.02
	Approved	0.00	31.29	1597.94	1888.83	1386.16
Impact of GST (H)	Claimed	0.00	0.00	0.00	91.77	157.66
	Approved	0.00	0.00	0.00	0.00	0.00
Ash Transportation Expenditure (I)	Claimed	0.00	0.00	0.00	0.00	2537.23
	Approved	0.00	0.00	0.00	0.00	2537.23
<b>Sub Total Additional O&amp;M Expenditure (J) = (F+G+H+I)</b>	Claimed	<b>0.00</b>	<b>31.29</b>	<b>1597.94</b>	<b>2142.47</b>	<b>5145.91</b>
	Approved	<b>0.00</b>	<b>31.29</b>	<b>1597.94</b>	<b>1888.83</b>	<b>3923.39</b>
<b>Total O&amp;M Expenses (K) = (F+I)</b>	Claimed	<b>10402.72</b>	<b>11492.42</b>	<b>13237.99</b>	<b>14494.48</b>	<b>18240.28</b>
	Approved	<b>10379.93</b>	<b>11432.56</b>	<b>13155.90</b>	<b>14193.26</b>	<b>16899.16</b>

*Issue (A) is decided accordingly.*



**B. Non-consideration of GCV with moisture correction for computation of Working Capital**

12. The Commission in paragraphs 106 to 108 of the impugned order has observed, as under:

*“106. As per SOR to the 2014 Tariff Regulations.....In this background and keeping in view that in terms of amended Regulation 21(6) of the 2009 Tariff Regulations, the Petitioner is required to share details of the weighted average GCV of the fuel on ‘as received’ basis, we consider the fuel component and energy charges for two months based on ‘as received’ GCV of the preceding three months (January 2014 to March 2014) for the purpose of computation of IWC in terms of Regulation 28(2) of the 2014 Tariff Regulations.*

*107. The Petitioner has calculated GCV of 3667.83 kcal/kg which represents the simple average of GCV of the preceding three months. The weighted average GCV for three months, based on the net coal quantities as per Form-15 of the petition and the monthly GCVs as submitted by the Petitioner in the table under paragraph 101 above, works out to 4002.00 kcal/kg.*

*108. Accordingly, the cost for fuel components in working capital has been computed considering the fuel details (price and GCV) as per Form-15 of the petition, except for ‘as received’ GCV of coal, which is considered as 4002.00 kCal/kg, as discussed above. All other operational norms such as Station Heat Rate Auxiliary Energy Consumption and Secondary Fuel Cost have been considered as per the 2014 Tariff Regulations for calculation of fuel components in working capital.”*

**Submissions of the Review Petitioner**

13. The Review Petitioner has submitted that the impugned order had considered the fuel component and energy charges based on ‘as received’ GCV of the preceding three months (January, 2014 to March, 2014) of the period 2014-19, for the purpose of computation of IWC, without adjustment for Total Moisture (TM). The Review Petitioner has stated that in compliance to the direction of the Commission, it had furnished the following GCV details vide additional submission dated 30.6.2021:

Month	Wt Avg GCV of coal received (EM basis) (kcal/kg) A	Total Moisture (TM) (in %) B	Equilibrated Moisture/Air Dried Moisture (EM/AD) (in %) C	Wt Avg GCV of coal received (TM basis) (kcal/kg) $D=A*(1-B\%)/(1-C\%)$
January 2014	3975	8.71	4.72	3808.54
February 2014	4056	12.08	4.39	3729.77
March 2014	3975	8.12	3.91	3800.84
<b>Average</b>	<b>4002</b>			<b>3779.72</b>



### **Reply of the Respondent TPDDL**

14. The Respondent TPDDL has submitted that the Commission has rightly placed reliance on the 2014 Tariff Regulations, for concluding that the weighted average GCV for three months, based on the landed price and gross calorific value of the fuel, as per actuals, for the preceding three months is to be taken into consideration for calculation of Interest on Working Capital (IWC) and therefore, the calculation of IWC for the period 2014-19, is to be based on such values for months of January 2014 to March 2014. It has stated that the energy charges (as per formula mandated by the Commission) is inversely proportional to GCV i.e. a lower GCV would thus lead to higher tariff and the total moisture basis method, which gives the lowest GCV, is used by stations for billing which would lead to higher burden on consumers. The Respondent has also submitted that the coal companies are reimbursed on Air Dried basis (for imports) and Equilibrated basis (for domestic supplies) which gives a higher GCV and hence higher payment. Therefore, the Respondent has submitted that the Commission may reject the claim of the Review Petitioner for adjustment on TM basis. It has added that there is no error apparent on the face of the record on this issue for invoking the right of review by the Review Petitioner, but in case review on this ground is allowed, then the same may be subject to prudence check and documentary evidence.

### **Rejoinder of the Review Petitioner to the reply of the Respondent TPDDL**

15. The Review Petitioner in its rejoinder has submitted that it had claimed Weighted Average GCV of coal (as received) on TM basis, after applying the adjustment for moisture content (for Total Moisture in as received coal) on the Weighted Average GCV of coal on Equilibrated Moisture (EM)/Air Dried (AD) basis as determined in laboratory



as per relevant IS codes, which is IS 1350 (Part II)- 1970, i.e. Indian Standard Methods of Test for Coal and Coke Part II Determination of Calorific Value, which elaborates the method of measurement of GCV of SD coal and clearly specifies that to determine GCV of coal as received, the necessary adjustment for moisture content needs to be applied on the laboratory determined GCV on air-dried basis. The Review Petitioner has further stated that it had provided the figure for Weighted Average GCV of coal 'as received' during the period from January, 2014 to March, 2014 after applying the said moisture adjustment for the Total Moisture in the 'as received', coal at unloading point of the generating station, on the laboratory determined GCV of coal on EM/AD basis, in accordance with IS 1350 (Part II)-1970. It has also pointed out that the same adjustment of TM has been allowed by the Commission vide an established principle/methodology in similar other orders in the tariff petitions filed for other thermal generating plants of the Review Petitioner during the period 2014-19. The Review Petitioner has further clarified that GCV has been considered inadvertently from Column-3 (*Wt. Avg. GCV of coal received (EM basis) (kcal/kg)*) instead of Column 6 (*Wt. Avg. GCV of coal received (TM basis) (kcal/kg)  $D=A*(1-B\%/1-c\%)$* ) of the impugned order and it is merely an inadvertent error on the face of record.

### **Analysis and Decision**

16. The matter has been considered. It is observed from the above submissions, that the Commission had considered the fuel component and energy charges of the period 2014-19, based on 'as received' GCV of coal for the preceding three months (January, 2014 to March, 2014), for the purpose of computation of IWC without adjustment for Total Moisture (TM). This, in our view, is an error apparent on face of the impugned order dated 1.10.2022 and the same accordingly needs to be rectified.



Accordingly, the review on this ground is allowed and the energy charges determined vide impugned order dated 1.10.2022, is corrected /modified as stated in the subsequent paragraphs.

17. Paragraphs 107 to 110 of the impugned order dated 1.10.2022 shall stand corrected as under:

“107. The Petitioner has calculated GCV of 3667.83 kcal/kg which represents the simple average of GCV of the preceding three months. The weighted average GCV for three months, based on the net coal quantities as per Form-15 of the petition and the monthly GCVs as submitted by the Petitioner in the table under paragraph 101 above, works out to 3779.72 kcal/kg.

108. Accordingly, the cost for fuel components in working capital has been computed considering the fuel details (price and GCV) as per Form-15 of the petition, except for ‘as received’ GCV of coal, which is considered as 3779.72 kCal/kg, as discussed above. All other operational norms such as Station Heat Rate Auxiliary Energy Consumption and Secondary Fuel Cost have been considered as per the 2014 Tariff Regulations for calculation of fuel components in working capital.

109. Based on the above discussion, the cost of fuel components in working capital is worked out and allowed as follows:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Cost of Coal towards stock (30 days)	6380.56	6380.56	6380.56	6534.31	6534.31
Cost of Coal towards generation (30 days)	6380.56	6380.56	6380.56	6534.31	6534.31
Cost of Secondary fuel oil 2 months	141.97	142.36	141.97	145.39	145.39

110. The cost of coal towards stock and generation allowed for the period 2014-19 is more than the cost claimed by the Petitioner for the following reasons:

- a) The Petitioner has considered average GCV of coal for 30 months as 3668.33 kCal/kWh (including adjustment of GCV of 120 kCal/kg) and weighted average price of coal as 3940.46 Rs/MT while the Commission has considered the same as weighted average GCV 3779.72 kCal/kg and 3930.54 Rs/MT respectively. Storage loss of 120 kCal/kg as considered by the Petitioner has not been considered as there is no such provision in 2014 Tariff Regulations.
- b) The Petitioner has considered the ‘Normative Transit & Handling losses of 0.80% which is within the limit as prescribed in Regulation 30(8) of the 2014 Tariff Regulations.”



18. Consequently, Paragraphs 112 to 114 of the impugned order dated 1.10.2022 is corrected and shall be read as:

“112. The Petitioner has claimed Energy Charge Rate (ECR) ex-bus of 291.718 Paise/kWh for the generating station based on the landed cost of coal during preceding three months, GCV of coal (on ‘as received’ basis for average of 30 months) along with the storage loss of 120 kCal/kg & GCV and price of Oil procured and burnt for the preceding three months of 2014-19 for the generating station. Since these claims of the Petitioner has not been allowed in the para as stated above, the allowable Energy Charge Rate (ECR), based on the operational norms as specified under the 2014 Regulations and on weighted average of ‘as received’ GCV of 3779.72 kcal/kg is worked out as follows:

	Unit	2014-19
Capacity	MW	420.00
Gross Station Heat Rate	kCal/kWh	2450.00
Aux. Energy Consumption	%	9.00%
Weighted average GCV of oil	kCal/ lit	9990.00
Weighted average GCV of Coal for Jan to March 2014	kCal/ kg	3779.72
Weighted average price of oil	Rs. / KL	55789.96
Weighted average price of Coal	Rs. / MT	3929.87
Rate of Energy Charge ex-bus	Rs. /kWh	2.8240

113. The Energy Charges for computation of working capital based on ECR of Rs. 2.8240/kWh, has been worked out as under:

<i>(Rs. in lakh)</i>				
2014-15	2015-16	2016-17	2017-18	2018-19
78476.13	78691.13	78476.13	80367.12	80367.12

114. Accordingly, the fuel component in working capital is allowed as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Cost of Coal towards stock (30 days)	6380.56	6380.56	6380.56	6534.31	6534.31
Cost of Coal towards Generation (30 days)	6380.56	6380.56	6380.56	6534.31	6534.31
Cost of Secondary fuel oil 2 months	141.97	142.36	141.97	145.39	145.39

19. Also, Paragraph 118 of the impugned order dated 1.10.2022 is rectified as under and it shall be read as:

“118. Receivables equivalent to two months of capacity charge and energy charge has been worked out duly taking into account mode of operation of the generating station on secondary fuel, as under:



(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Variable Charges - for two months (A)	13079.35	13115.19	13079.35	13394.52	13394.52
Fixed Charges – for two months (B)	4140.83	4325.79	4347.52	4494.29	4590.69
Total (C) = (A+B)	<b>17220.19</b>	<b>17440.98</b>	<b>17426.88</b>	<b>17888.81</b>	<b>17985.21</b>

20. The table under para 122 and 123 of the impugned order dated 1.10.2022 is rectified as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Working capital for Cost of Coal Stock (30 days generation corresponding to NAPAF) (A)	6380.56	6380.56	6380.56	6534.31	6534.31
Working capital for Cost of Coal/Lignite for generation (30 days generation corresponding to NAPAF) (B)	6380.56	6380.56	6380.56	6534.31	6534.31
Working capital for Cost of secondary fuel oil (2 months generation corresponding to NAPAF) (C)	141.97	142.36	141.97	145.39	145.39
Working capital for O & M expenses (1 month of O&M Expenses) (D)	864.99	950.11	963.16	1025.37	1081.31
Working capital for Maintenance Spares (20% of Annual O&M Expenses) (E)	2075.99	2280.26	2311.59	2460.89	2595.15
Working capital for Receivables – (2 months of sale of electricity at NAPAF) (F)	17220.19	17440.98	17426.88	17888.81	17985.21
<b>Total Working Capital (G) = (A+B+C+D+E+F)</b>	<b>33064.26</b>	<b>33574.83</b>	<b>33604.73</b>	<b>34589.08</b>	<b>34875.69</b>
Rate of Interest (H)	13.50%	13.50%	13.50%	13.50%	13.50%
Total Interest on Working capital (I) = (GxH)	<b>4463.68</b>	<b>4532.60</b>	<b>4536.64</b>	<b>4669.53</b>	<b>4708.22</b>

21. Based on the above discussions, the revised annual fixed charges approved for the period 2014-19 in respect of the generating station is as under:

(Rs. in lakh)

	2014-15	2015-16	2016-17	2017-18	2018-19
Depreciation	545.87	562.78	559.79	570.40	429.36
Interest on Loan	58.30	23.95	2.27	0.00	0.00
Return on Equity	9397.22	9434.13	9428.47	9421.40	9430.81
Interest on Working Capital	4463.68	4532.60	4536.64	4669.53	4708.22
O&M Expenses	10379.93	11401.28	11557.96	12304.43	12975.76
Special Allowance	3150.00	3350.02	3562.76	3788.98	4029.58





	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Total</b>	<b>27994.99</b>	<b>29304.75</b>	<b>29647.88</b>	<b>30754.74</b>	<b>31573.73</b>

Note: All figures are on annualized basis. All figures under each head have been rounded. The figure in total column in each year is also rounded. As such, the sum of individual items may not be equal to the arithmetic total of the column.

22. Accordingly, the table under para 124 of the impugned order dated 1.10.2022 shall stand rectified as under:

	<i>(Rs. in lakh)</i>				
	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Fixed Charges	27994.99	29304.75	29647.88	30754.74	31573.73
Impact of Pay revision	0.00	31.29	1597.94	1888.83	1386.16
Ash Transportation expenditure	0.00	0.00	0.00	0.00	2537.23

*Issue (B) is decided accordingly*

23. Review Petition No. 4/RP/2023 (in Petition No. 302/GT/2020) is disposed of as above.

**Sd/-**  
**(Pravas Kumar Singh)**  
**Member**

**Sd/-**  
**(Arun Goyal)**  
**Member**

**Sd/-**  
**(I. S. Jha)**  
**Member**

