

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Review Petition No. 5/RP/2023

in

Petition 287/GT/2020

Coram:

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

Date of Order: 19th January, 2024

In the matter of

Petition for review of order dated 1.10.2022 in Petition No. 287/GT/2020 in respect of revision of tariff of the Feroze Gandhi Unchahar Thermal Power Station, Stage-III (210 MW) for the period 2014-19 (after truing up exercise).

And

In the matter of

NTPC Limited,
Core-7, Scope Complex,
7, Institutional Area, Lodhi Road,
New Delhi-110 016.

...Petitioner

Vs

1. Uttar Pradesh Power Corporation Limited,
Shakti Bhawan, 14, Ashok Marg,
Lucknow – 226 001,
2. Rajasthan Urja Vikas Nigam Limited,
(on behalf of DISCOMs of Rajasthan),
Vidyut Bhawan, Janpath,
Jaipur 302 005.
3. Tata Power Delhi Distribution Limited,
Grid Substation, Hudson Road,
Kingsway Camp, New Delhi – 110009.
4. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi – 110019.



5. BSES Yamuna Power Limited,
Shakti Kiran Building, Karkardooma,
Delhi- 110092.
6. Haryana Power Purchase Centre,
Shakti Bhawan, Sector – VI,
Panchkula, Haryana – 134109.
7. Punjab State Power Corporation Limited,
The Mall, Patiala – 147001.
8. Himachal Pradesh State Electricity Board Limited,
Kumar Housing Complex Building-II,
Vidyut Bhawan, Shimla – 171004.
9. Power Development Department,
Govt. of J&K, Civil Secretariat,
Srinagar.
10. Electricity Department,
Union Territory of Chandigarh,
Additional Office Building, Sector-9 D,
Chandigarh.
11. Uttarakhand Power Corporation Limited,
Urja Bhavan, Kanwali Road,
Dehradun – 248001.

...Respondents

Parties present:

Shri A.S. Pandey, NTPC
Shri Shiv Bhavan, NTPC
Shri Nitin Kala, Advocate, TPDDL
Shri Tanmay Jain, Advocate, TPDDL
Shri Mohit K Mudgal, Advocate, BRPL
Shri Sachin Dubey, Advocate, BRPL

ORDER

Petition No. 287/GT/2020 was filed by the Review Petitioner, NTPC Limited, for truing-up of tariff of Feroze Gandhi Unchahar Thermal Power Station Stage-3 (210 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:

| | <i>(Rs. in lakh)</i> | | | | |
|-----------------------------|----------------------|-----------------|-----------------|-----------------|-----------------|
| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Depreciation | 4559.44 | 4567.46 | 4588.77 | 4619.90 | 4617.53 |
| Interest on Loan | 2244.50 | 1918.45 | 1625.30 | 1301.36 | 924.43 |
| Return on Equity | 5154.01 | 5189.21 | 5218.61 | 5257.22 | 5268.69 |
| Interest on Working Capital | 2291.60 | 2310.29 | 2318.12 | 2376.88 | 2389.05 |
| O&M Expenses | 5157.77 | 5525.16 | 5778.98 | 6152.21 | 6485.11 |
| Special Allowance | 0.00 | 0.00 | 0.00 | 42.00 | 42.00 |
| Total | 19407.32 | 19510.57 | 19529.78 | 19749.58 | 19726.81 |

2. Further, the Commission vide corrigendum order dated 30.11.2022 corrected certain inadvertent clerical/typographical errors in which had crept in the impugned order dated 1.10.2022, while considering the values for actual O&M expenses

3. Aggrieved by the impugned order dated 1.10.2022, the Review Petitioner has filed this Review Petition on the ground that there is error apparent on the face of the record on the following issues:

a) Error in consideration of Unchahar Stage-IV capacity even prior to its COD for computation of under-recovery in O&M expenses causing disallowance of wage revision impact;

b) Error in the non-consideration of GCV with moisture correction for computation of Working Capital;

c) Error in the non-consideration of reimbursement of expenditure incurred towards implementation of 5 km Scheme;

d) Error in disallowance of additional capitalization on account of Installation of 120 KW rooftop solar plant.

Hearing dated 27.4.2023

4. The Review Petition was heard on 'admission' on 27.4.2023. During the hearing the representative of the Review Petitioner submitted that while issue in para 3 (a) above had been addressed vide corrigendum order dated 30.11.2022, the issue in



para 3(d) was being withdrawn, since the same is pending consideration before APTEL. Accordingly, the Commission, based on the submissions of the representative of the Review Petitioner, admitted the Review Petition on the issues raised in paragraph 3 (b) and (c) above, vide ROP dated 27.4.2023 and issued notice to the Respondents. The Respondent TPDDL has filed its reply on 29.6.2023

Hearing dated 28.7.2023

5. During the hearing of the Review Petition on 28.7.2023, the representative of the Review Petitioner made oral submissions in the matter. The learned counsel for the Respondent TPDDL submitted the reply filed in the matter may be considered. The learned counsel for the Respondent BRPL submitted that the reliefs sought in the present review petition has already been granted vide corrigendum order dated 30.11.2022 and hence the Review Petitioner rearguing the original matter, is not permissible in review proceedings. The Commission, after hearing the representative of the Review Petitioner and the Respondents reserved its order in the matter. Based on the submissions of the parties and the documents available on record, we proceed to examine the issues raised in paragraph 3(b) and (c) in the subsequent paragraphs.

Issue no. (b)- Error in the non-consideration of GCV with moisture correction for computation of Working Capital

Submissions of the Review Petitioner, NTPC

6. The Review Petitioner has submitted that the impugned order has considered the fuel component and energy charges based on 'as received' GCV of the preceding three months (January 2014 to March 2014) for the period 2014-19, for the purpose of computation of IWC without adjustment for Total Moisture (TM). It has also submitted that, in compliance to the directions of the Commission, the Review Petitioner had in



the original petition, submitted the following GCV details in respect to generating station vide its 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 |
| Average | 4002 | | | 3779.72 |

7. The Review Petitioner has also submitted that it had claimed weighted average GCV of coal (as received) on TM basis, after applying 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 determined in laboratory as per relevant IS codes. It has further submitted that the Commission in its recent orders had allowed adjustment for total moisture on “as received GCV” during the preceding three months (January, 2014 to March, 2014) for the period 2014-19, in respect of the calculation of Fuel component of IWC, but in the present case, the Commission has deviated from its own established principle and disallowed adjustment for Total moisture on GCV “as received” causing loss to the Review Petitioner. Accordingly, the Review Petitioner has prayed to consider the GCV on ‘as received basis’ after applying adjustment for moisture content.

Reply of the Respondent TPDDL

8. The Respondent TPDDL has submitted that the Commission has considered the GCV in line with the 2014 Tariff Regulations, and no further adjustment is warranted. It has further submitted that energy charges (as per the formula mandated by the Commission) is inversely proportional to GCV and a lower GCV would thus lead to



higher tariff. The Respondent has also submitted that TM basis method, which gives the lowest GCV, is used by generating stations for billing which would lead to higher burden on consumers, and at the same time, coal companies are reimbursed an AD method (for imports) and EM basis (for domestic supplies) which gives a higher GCV and hence higher payment.

Analysis and Decision

9. The matter has been considered. It is observed that the Commission, had considered the fuel component and energy charges based on 'as received' GCV of the preceding three months (January 2014 to March 2014) for the period 2014-19, for the purpose of computation of IWC, without adjustment for Total Moisture (TM). This inadvertent error, is an error apparent on face of the impugned order dated 1.10.2022 and same is required to be rectified. Thus, review on this ground is maintainable. Accordingly, the energy charges determined vide order dated 1.10.2022 in paragraphs 104 to 107 of the impugned order, is modified as stated below:

“104. The Petitioner has calculated GCV of 3668.33 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 98 above, works out to 3779.72 kcal/kg.

105. 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.

106. 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> | | | | |
|---|----------------------|----------------|----------------|----------------|----------------|
| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Cost of Coal towards stock (30 days) | 3190.82 | 3190.82 | 3190.82 | 3267.71 | 3267.71 |
| Cost of Coal towards generation (30 days) | 3190.82 | 3190.82 | 3190.82 | 3267.71 | 3267.71 |
| Cost of Secondary fuel oil 2 months | 70.99 | 71.18 | 70.99 | 72.70 | 72.70 |



107. The cost of coal towards stock and generation allowed for the 2014-19 tariff period 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 the 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.'

10. Also, the paragraphs 109 and 110 of the impugned order dated 1.10.2022 are rectified as under:

"109. 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:

| Particulars | Unit | 2014-19 |
|--|----------|----------|
| Capacity | MW | 210.00 |
| 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 | 3930.54 |
| Rate of Energy Charge ex-bus | Rs. /kWh | 2.8250 |

110. The Energy Charges for two months for computation of working capital based on ECR of Rs. 2.8250/kWh, has been worked out as under:

(Rs. in lakh)

| 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|----------|----------|----------|----------|----------|
| 39251.96 | 39359.50 | 39251.96 | 40197.79 | 40197.79 |

11. Further, the table under paragraph 113 of the impugned order dated 1.10.2022 is rectified as under:



(Rs. in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|--|----------------|----------------|----------------|----------------|----------------|
| Energy charge (equivalent to two months of sale of electricity on NAPAF) (A) | 6541.99 | 6559.92 | 6541.99 | 6699.63 | 6699.63 |
| Fixed Charges (equivalent to two months of sale of electricity on NAPAF) (B) | 3251.03 | 3268.26 | 3271.44 | 3288.63 | 3284.40 |
| Total (C) = (A+B) | 9793.02 | 9828.18 | 9813.43 | 9988.26 | 9984.03 |

12. In addition, the table under paragraph 117 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) | 3190.82 | 3190.82 | 3190.82 | 3267.71 | 3267.71 |
| Working capital for Cost of Coal/Lignite for generation (30 days generation corresponding to NAPAF) (B) | 3190.82 | 3190.82 | 3190.82 | 3267.71 | 3267.71 |
| Working capital for Cost of secondary fuel oil (2 months generation corresponding to NAPAF) (C) | 70.99 | 71.18 | 70.99 | 72.70 | 72.70 |
| Working capital for O & M expenses (1 month of O&M Expenses) (D) | 429.81 | 460.43 | 481.58 | 512.68 | 540.43 |
| Working capital for Maintenance Spares (20% of Annual O&M Expenses) (E) | 1031.55 | 1105.03 | 1155.80 | 1230.44 | 1297.02 |
| Working capital for Receivables – (2 months of sale of electricity at NAPAF) (F) | 9793.02 | 9828.18 | 9813.43 | 9988.26 | 9984.03 |
| Total Working Capital (G) = (A+B+C+D+E+F) | 17707.02 | 17846.47 | 17903.44 | 18339.51 | 18429.60 |
| Rate of Interest (H) | 13.50% | 13.50% | 13.50% | 13.50% | 13.50% |
| Total Interest on Working capital (I) = (GxH) | 2390.45 | 2409.27 | 2416.96 | 2475.83 | 2488.00 |

Annual Fixed Charges

13. Accordingly, paragraph 118 of the impugned order dated 1.10.2022 is rectified as under:

“118. Based on the above discussion, the annual fixed charges approved for the 2014-19 tariff period in respect of the generating station is summarized as follows:

(Rs. in lakh)

| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|------------------|---------|---------|---------|---------|---------|
| Depreciation | 4559.44 | 4567.46 | 4588.77 | 4619.90 | 4617.53 |
| Interest on Loan | 2244.50 | 1918.45 | 1625.30 | 1301.36 | 924.43 |
| Return on Equity | 5154.01 | 5189.21 | 5218.61 | 5257.22 | 5268.69 |



| Particulars | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|-----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Interest on Working Capital | 2390.45 | 2409.27 | 2416.96 | 2475.83 | 2488.00 |
| O&M Expenses | 5157.77 | 5525.16 | 5778.98 | 6152.21 | 6485.11 |
| Special Allowance | 0.00 | 0.00 | 0.00 | 42.00 | 42.00 |
| Total | 19506.17 | 19609.56 | 19628.63 | 19848.53 | 19825.76 |

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.

Summary

14. The table under para 119 of the impugned order dated 1.10.2022 (summary) is corrected as under:

| Particulars | (Rs. in lakh) | | | | |
|--------------------------------|---------------|----------|----------|----------|----------|
| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Annual Fixed Charges | 19506.17 | 19609.56 | 19628.63 | 19848.53 | 19825.76 |
| Ash Transportation Expenditure | 0.00 | 0.00 | 0.00 | 0.00 | 1268.61 |

Issue (b) is disposed of accordingly.

Issue no. (c)- Error in the non-consideration of reimbursement of expenditure incurred towards implementation of 5 km Scheme

Submissions of the Review Petitioner, NTPC

15. The Review Petitioner has submitted that the Commission in the impugned order has not considered the reimbursement of expenditure incurred on implementation of '5 km scheme'. Accordingly, it has requested to consider the reimbursement of Rs. 1180.47 lakh claimed by the Petitioner towards implementation of the '5 km scheme' towards payment of liabilities of Rs. 62.33 lakh, when the same is discharged by payment. The Petitioner has further requested to allow the decapitalization of complete asset of Rs. 1346.07 lakh of '5 km scheme' under exclusion.

Analysis and Decision

16. The matter has been considered. It is observed that the total expenditure incurred towards implementation of the 5 km Scheme is Rs 1346.07 lakh, of which, the Commission, vide order dated 27.6.2016 in petition no 321/GT/2014 had allowed



Rs 103.27 lakh for reimbursement by the beneficiaries. Further, Commission in the impugned order dated 1.10.2022 had allowed the exclusion of Rs.1180.47 lakh (Rs 1346.07 lakh less Rs 103.27 lakh less undischarged liability of Rs 62.33 lakh) in 2014-15 and de-capitalization of Rs. 1346.07 lakh in 2015-16 under the head "Schemes Disallowed". The undischarged liability towards the said scheme was also not considered for the purpose of tariff. However, it is observed that the Petitioner, in the original Petition (287/GT/2020), had prayed for the reimbursement of expenditure incurred towards 5 km scheme, which had escaped the attention of the Commission while passing the impugned order. This accordingly to us, is an error apparent on the face of the impugned order and review on this ground is maintainable. Accordingly, the claim of the Review Petitioner is allowed.

17. However, it is observed that the Commission in its order dated 27.6.2016 in Petition No. 321/GT/2014 (revision of tariff of FGUTPS Stage-III (210 MW) for the period 2009-14 after truing up exercise) had not allowed the additional capital expenditure incurred by the Petitioner towards 5 km scheme, as under:

"29. In line with the above decision of the Commission and since the expenditure has been incurred and capitalized by the petitioner for creation of the infrastructure, we are of the view that the said expenditure should be reimbursed by the beneficiaries in proportion to their share, in the remaining three years of the tariff period 2014-19, in equal monthly installments beginning from July, 2016, along with regular bills, with the weighted average rate of interest on loan applicable for the relevant years as indicated in the table under para 50 of this order till the date of capitalization of Asset. The reimbursement directed as above is in relaxation of Regulation 9 (2) (ix) of the 2009 Tariff Regulations and shall not be cited as precedent in future. As regards the claim for balance expenditure during 2014-19, the same will be considered in accordance with law based on the justification submitted by the petitioner for the same. The petitioner shall however, ensure the security and safety of assets till the same is formally handed over to the State Distribution Company so that the assets stated and capitalized are neither removed nor destroyed."

18. Further, it is observed that the Commission vide order dated 19.4.2017 in Petition No. 373/GT/2014 (approval of tariff of FGUTPS, Stage-III for the period 2014-19) had granted liberty to the Petitioner to claim the said expenditure at the time of



truing up of tariff as stated below:

“18. We have examined the matter. It is observed that the Commission vide order dated 21.3.2017 in Petition No. 336/GT/2014 (tariff of Tanda TPS for the period 2014-19) had allowed the additional capital expenditure in similar matter and had observed as under:

“32. We have examined the matter. It is observed that the claim of the petitioner in Petition No. 329/GT/2014 was examined and the Commission in order dated 23.8.2016 had allowed Rs 775.70 lakh on actual basis out of the projected expenditure of Rs 14.10 crore and had observed as under:

“40. In line with the above decision and since the expenditure has been incurred and capitalized by the petitioner for creation of the infrastructure, we are of the view that the said expenditure of `775.70 lakh should be reimbursed by the beneficiaries in proportion to their share, in the remaining three years of the tariff period 2014-19, in equal monthly installments along with regular bills, with the weighted average rate of interest on loan applicable for the relevant years as indicated in the table under para 63 of this order till the date of capitalization of asset. As regards the claim for balance expenditure during 2014- 19, the same will be considered in accordance with law based on the justification and the documentary evidence in support of the handing over the said entire assets to the state utility. The petitioner shall also ensure the security and safety of assets till the same is formally handed over to the State utility so that the said assets capitalized are neither removed nor destroyed.”

33. It is evident from the above that the claim of the petitioner for balance expenditure during the period 2014-19 shall be considered by the Commission after handing over the entire assets to the State utility and producing documentary evidence in this regard. As the petitioner has not furnished documents which suggest that the entire assets have been handed over to State utility, we are not inclined to allow the projected additional capital expenditure of Rs 697.00 lakh. However, liberty is granted to the petitioner to claim the said expenditure with proper justification and documentary evidence in support of handing over the assets to State utility at the time of truing-up of the tariff in terms of the Regulation 8 of the 2014 Tariff Regulations.”

19. In the present case, the petitioner has not formally handed over the assets to the State utility. In this background and in line with the above decision, we are not inclined to allow the expenditure of `1445.00 lakh in 2014-15 for implementation of scheme for supply of electricity within 5 km radius of the generating station under Regulation 14 (3) (ii) of the 2014 Tariff Regulations. However, liberty is granted to the petitioner to claim the said expenditure with documentary evidence in support of handing over the assets to State utility at the time of truing-up of the tariff of the generating station in terms of Regulation 8 of the 2014 Tariff Regulations.

19. In the above background and in line with the earlier decision dated 27.6.2016, we, direct the reimbursement of the said expenditure of Rs. 1180.47 lakh towards additional capital expenditure and of Rs. 62.33 lakh towards payment of liabilities, when the same is discharged by the Review Petitioner towards the 5 Km Scheme separately, without considering the same as part of the capital cost. The reimbursement by the beneficiaries shall be in proportion to their share in the total



capacity of the generating station. The interest rate on the reimbursement amount shall be the weighted average rate of interest on loan applicable for the relevant period as indicated in the table under paragraph 47 of the impugned order dated 1.10.2022, interest being chargeable up to the date of passing of this Order. The reimbursement amount including interest on the reimbursement amount shall be recovered in six (6) equal monthly interest free installments beginning from the month following the date of this order, along with regular bills. We direct accordingly. Issue (C) is disposed of in terms of the above.

20. Review Petition No. 5/RP/2023 (in Petition No.287/GT/2020) is disposed of in terms of the above.

Sd/-
(Pravas Kumar Singh)
Member

Sd/-
(Arun Goyal)
Member

Sd/-
(I. S. Jha)
Member

