

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 34/RP/2022

in

Petition No. 426/GT/2020

Coram:

Shri I. S. Jha, Member

Shri Arun Goyal, Member

Shri Pravas Kumar Singh, Member

Date of Order: 26th September, 2023

In the matter of

Review of the Commission's order dated 8.4.2022 in Petition No. 426/GT/2020 pertaining to approval of tariff of the Rihand Super Thermal Power Station-II (1000 MW) for the period 2019-24.

And

In the matter of

NTPC Limited,
NTPC Bhawan
Core-7, Scope Complex,
7, Institutional Area, Lodhi Road
New Delhi-110003

...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 Rajasthan Discoms)
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-134109
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,
Govt. of J&K, Civil Secretariat
Srinagar
10. Electricity Department of Chandigarh,
Union Territory of Chandigarh
Additional Office Building, Sector-9 D
Chandigarh
11. Uttarakhand Power Corporation Limited,
Urja Bhavan, Kanwali Road
Dehradun-248 001.

...Respondents

Parties Present:

Shri Anand Sagar Pandey, NTPC
Shri P. Piyush, NTPC
Shri Mohit K. Mudgil, Advocate, BRPL
Shri Sachin Dubey, Advocate, BRPL
Ms. Aanchal, Advocate, BRPL

ORDER

Petition No. 426/GT/2020 was filed by the Review Petitioner, for approval of tariff of the Rihand Super Thermal Power Station-II (1000 MW) (in short “the generating station”) for the period 2019-24, in accordance with the provisions of the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2019 (in short ‘the 2019 Tariff Regulations’) and the Commission vide para 94 of the order dated



8.4.2022 (in short “the impugned order”) had determined the tariff of the generating station as under:

| | <i>(Rs. in lakh)</i> | | | | |
|---|----------------------|-----------------|-----------------|-----------------|-----------------|
| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Depreciation (A) | 5770.91 | 5834.12 | 5984.52 | 6110.94 | 6185.50 |
| Interest on Loan (B) | 473.74 | 124.67 | 0.00 | 0.00 | 0.00 |
| Return on Equity (C) | 16685.48 | 16720.72 | 16802.09 | 16849.08 | 16883.73 |
| Interest on Working Capital (D) | 4359.58 | 4107.58 | 3867.04 | 3904.70 | 3941.93 |
| O&M Expenses (E) | 24207.30 | 25136.59 | 25956.97 | 26775.05 | 27646.60 |
| Total Annual Fixed Charges (F) = (A+B+C+D+E) | 51497.02 | 51923.69 | 52610.62 | 53639.77 | 54657.75 |

2. Aggrieved by the impugned order, the Review Petitioner has filed this review, on the ground that there are errors apparent on the face of the order, on the following issues:

- a) *Non-grossing up of the ‘ROE at weighted average rate of interest’.*
- b) *Considering GCV and landed cost Heavy Fuel Oil instead of Light Diesel Oil; and*
- c) *Considering the incorrect value of working capital and annual fixed charges.*

Hearing dated 24.1.2023

3. The Review Petition was heard on ‘admission’ on 24.1.2023. During the hearing, the representative of the Review Petitioner made detailed oral submissions, in support of its prayer for review of the impugned order, on the aforesaid grounds. Accordingly, the Review Petition was admitted vide interim order 13.2.2023, on the issues raised in paragraph 1 above. The Commission also ordered notice on the Respondents, with directions to complete pleadings in the matter.

4. In response, the Respondent, UPPCL, filed its reply vide affidavit dated 15.10.2022 and the Review Petitioner vide affidavit dated 22.3.2023 has filed its rejoinder to the said reply.



Hearing dated 27.4.2023

5. Thereafter, the Review Petition was heard on 27.4.2023. During the hearing, the representative of the Review Petitioner made detailed oral submissions on the aforesaid issues. The learned counsel for the Respondent BRPL sought time to file its reply in the matter. Accordingly, based on the consent of the parties, order in the Review Petition was reserved, after permitting the Respondent BRPL to file its reply and the Review Petitioner, its rejoinder, if any.

6. The Respondent TPDDL has filed its reply vide affidavit dated 21.6.2023 and the Respondent BRPL has filed its reply vide affidavit dated 7.8.2023.

7. 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. Non- grossing up of the 'ROE at Weighted Average Rate of Interest

Submissions of the Review Petitioner

8. The Review Petitioner has submitted that the Commission, in the impugned order dated 8.4.2022, has inadvertently erred in not grossing up the Return on Equity (ROE) at the weighted average rate of interest (WAROI) for the purpose of tariff. It has also submitted that the rate of ROE as allowed under Regulation 30 of the 2019 Tariff Regulations has to be grossed up with the effective tax rate of the effective financial year, as per Regulation 31 of the 2019 Tariff Regulations. The Review Petitioner has further submitted that Regulation 30 (as amended) read with Regulation 31 provides for grossing up of base ROE with the effective tax rate. Accordingly, the Review Petitioner has contended that the base rate of 15.50%, as applicable for additional capital



expenditure items, within the original scope and base rate of WAROI (weighted average rate of interest) as applicable for additional capital expenditure items beyond the original scope, are to be grossed up with the effective tax rate. It has also pointed out that the Commission had determined the ROE for additional capital expenditure items within the original scope, by grossing up ROE @15.50% with the effective tax rate. The Review Petitioner has added that while calculating ROE for additional capital expenditure items beyond the original scope of work, the Commission had not grossed up WAROI, with the effective tax rate. It has also stated that the Commission has erred by not moving to pre-tax ROE (from post-tax ROE) since the period 2009-14. The Review Petitioner has submitted that the 2004 Tariff Regulations, had provisions for post-tax ROE i.e., the income tax liability was pass through tariff based on actuals, but in terms of the 2009 Tariff Regulations, the Commission migrated to pre-tax ROE (from post-tax ROE) and in either case, the income tax liability arising out of the returns allowed was a pass through in tariff. Accordingly, the Review Petitioner has prayed that the review may be allowed on this ground.

Submissions of the Respondents

Respondent UPPCL

9. The Respondent UPPCL in its reply affidavit has submitted that the Commission in the Statement of Reasons (SOR) to the 2009 Tariff Regulations and the 2014 Tariff Regulations, had adopted a pre-tax ROE and accordingly the provisions for rate of ROE and tax on ROE have been made in the 2019 Tariff Regulations. Referring to Regulation 25 of the 2019 Tariff Regulations, which categorises the additional capitalization beyond the original scope of work, and which includes legal expenses, force majeure events, higher security of the plant and deferred works relating to ash



pond and ash handling system and water for sewage treatment plant, the Respondent has submitted that as a beneficiary, it is obliged to pay income tax on ROE, in respect of the works within the original scope of work of the plant and within the cut-off date. In respect of the works specified under Regulation 25, as beyond the original scope of work, such as litigation cost, force majeure events and higher security are not incidental to the generation of electricity and therefore, the Respondent should not be asked to pay income tax on ROE on account of such works, which should be paid by the Petitioner. The Respondent has also pointed out that in para-47 of the impugned order dated 8.4.2022, the Commission had not considered the additional capital expenditure beyond the original scope of work for grossing up by effective tax rate under Regulation-31 of the 2019 Tariff Regulations. Accordingly, the Respondent has submitted that there is no error apparent in the impugned order on this ground, and the same may be rejected.

Respondent BRPL

10. The Respondent BRPL in its reply affidavit has submitted that the Commission vide the impugned order had allowed the additional capital expenditure under the original scope of work, for which change in law etc. has been allowed at the normal rate. It has also submitted that for additional capital expenditure beyond the original scope of work, the Commission, after excluding the additional capital expenditure due to change in law, had allowed ROE at WAROI on actual loan portfolio of 7.698% for 2019-20 and 7.620% from 2020-21 to 2023-24 in terms of the Regulation 30 and 31 of the 2019 Tariff Regulations. Accordingly, the Respondent has submitted that the grossing up of ROE for additional capitalization items beyond the original scope of work was rightly denied by the Commission in terms of the applicable regulations. It has further stated that



additional capitalization beyond the original scope of work is provided under Regulation 26 of the 2019 Tariff Regulations, which nowhere provides for grossing up of the additional cost and therefore, the contention of the Review Petitioner is devoid of merits and is liable to be rejected.

Respondent TPDDL

11. The Respondent TPDDL in its reply affidavit has pointed out to the Commission's order dated 17.3.2023 in Petition No.11/RP/2022 (in Petition No.401/GT/2020), and has mainly submitted that the present issue does not constitute a grave error apparent on the face of record. It has also stated that this issue ought to be appealed against before the Appellate Tribunal, if the Review Petitioner felt that the same has been erroneously decided. The Respondent has further submitted that it is no longer in dispute that as long as the point has been dealt with and answered, the parties are not entitled to challenge the impugned order in the guise that an alternative view is possible under the review jurisdiction. It has contended that Regulation 31 nowhere provides for grossing up of the ROE arrived at using the WAROI methodology, in respect of additional capitalisation beyond the original scope of work and it is only the base rate of ROE which is required to be grossed up in terms of Regulation 31 of the 2019 Tariff Regulations.

Rejoinder of Review Petitioner to reply of Respondent UPPCL

12. The Review Petitioner in its rejoinder (to reply of Respondent UPPCL) has pointed out to the Statement of Objects and Reasons to the 2009 and 2014 Tariff Regulations and has submitted that once the ROE is allowed, the income tax liability arising out of such returns, provided on admitted equity of the project, considered for the tariff purposes are to be borne by the beneficiaries. Accordingly, it has submitted that the rate



of ROE is to be grossed up at the effective tax rate for passing on the income tax liability in tariff. It has further submitted that the Appellate Tribunal for Electricity in a catena of judgments has held that a generating company/ transmission licensee should neither benefit nor lose on account of tax payable, which is a pass through in tariff. The Review Petitioner has stated that the grossing up of tax has to be carried out to ensure that after paying the tax, the admissible post tax return is assured to the Petitioner.

Analysis and Decision

13. We have examined the matter. Regulation 30 and Regulation 31 of the 2019 Tariff Regulations provides as under:

“30. Return on Equity

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

(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of river generating station with pondage:

Provided that return on equity in respect of additional capitalization after cut-off date beyond the original scope excluding additional capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;

Provided further that:

i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO) or Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system based on the report submitted by the respective RLDC;

ii. in case of existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;

iii. in case of a thermal generating station, with effect from 1.4.2020:

a) rate of return on equity shall be reduced by 0.25% in case of failure to achieve the ramp rate of 1% per minute;



b) an additional rate of return on equity of 0.25% shall be allowed for every incremental ramp rate of 1% per minute achieved over and above the ramp rate of 1% per minute, subject to ceiling of additional rate of return on equity of 1.00%:

Provided that the detailed guidelines in this regard shall be issued by National Load Dispatch Centre by 30.6.2019.

14. Regulation 31 of the 2019 Tariff Regulations, provides as under:

31. Tax on Return on Equity:

(1) The base rate of return on equity as allowed by the Commission under Regulation 30 of these regulations shall be grossed up with the effective tax rate of the respective financial year. For this purpose, the effective tax rate shall be considered on the basis of actual tax paid in respect of the financial year in line with the provisions of the relevant Finance Acts by the concerned generating company or the transmission licensee, as the case may be. The actual tax paid on income from other businesses including deferred tax liability (i.e. income from business other than business of generation or transmission, as the case may be) shall be excluded for the calculation of effective tax rate.

(2) Rate of return on equity shall be rounded off to three decimal places and shall be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

Where "t" is the effective tax rate in accordance with clause (1) of this Regulation and shall be calculated at the beginning of every financial year based on the estimated profit and tax to be paid estimated in line with the provisions of the relevant Finance Act applicable for that financial year to the company on pro-rata basis by excluding the income of non-generation or non-transmission business, as the case may be, and the corresponding tax thereon. In case of generating company or transmission licensee paying Minimum Alternate Tax (MAT), "t" shall be considered as MAT rate including surcharge and cess.

Illustration-
xxxxxx

(c) Effective Tax Rate for the year 2019-20 = Rs. 240 Crore/Rs. 1000 Crore = 24%;

(d) Rate of return on equity = $15.50 / (1 - 0.24) = 20.395\%$.

(3) The generating company or the transmission licensee, as the case may be, shall true up the grossed-up rate of return on equity at the end of every financial year based on actual tax paid together with any additional tax demand including interest thereon, duly adjusted for any refund of tax including interest received from the income tax authorities pertaining to the tariff period 2019-24 on actual gross income of any financial year. However, penalty, if any, arising on account of delay in deposit or short deposit of tax amount shall not be claimed by the generating company or the transmission licensee, as the case may be. Any under-recovery or over-recovery of grossed up rate on return on equity after truing up, shall be recovered or refunded to beneficiaries or the long term customers, as the case may be, on year to year basis."

15. The Commission in para 49 of the impugned order had allowed ROE based on projected additional capital expenditure as under:



Return on Equity at Normal Rate

(Rs. in lakh)

| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|--|----------|----------|----------|----------|----------|
| Normative Equity-Opening (A) | 88837.02 | 88837.02 | 89161.02 | 89631.96 | 89631.96 |
| Addition of Equity due to additional capital expenditure (B) | 0.00 | 324.00 | 470.94 | 0.00 | 360.00 |
| Normative Equity-Closing (C) = [(A)+(B)] | 88837.02 | 89161.02 | 89631.96 | 89631.96 | 89991.96 |
| Average Normative Equity (D) = [(A+C)/2] | 88837.02 | 88999.02 | 89396.49 | 89631.96 | 89811.96 |
| Return on Equity (Base Rate) (E) | 15.500% | 15.500% | 15.500% | 15.500% | 15.500% |
| Effective Tax Rate (F) | 17.472% | 17.472% | 17.472% | 17.472% | 17.472% |
| Rate of Return on Equity (Pre-Tax) (G) = [(E)/(1-F)] | 18.782% | 18.782% | 18.782% | 18.782% | 18.782% |
| Return on Equity (Pre-Tax) annualised (H) = [(D)x(G)] | 16685.37 | 16715.80 | 16790.45 | 16834.67 | 16868.48 |

(a) Return on Equity at WAROI Rate

(Rs. in lakh)

| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|--|---------|---------|---------|---------|---------|
| Normative Equity - Opening (A) | 0.00 | 3.00 | 126.30 | 179.25 | 198.90 |
| Addition of Equity due to additional capital expenditure (B) | 3.00 | 123.30 | 52.95 | 19.65 | 2.40 |
| Normative Equity-Closing (C) =[(A)+(B)] | 3.00 | 126.30 | 179.25 | 198.90 | 201.30 |
| Average Normative Equity (D) = [(A+C)/2] | 1.50 | 64.65 | 152.78 | 189.08 | 200.10 |
| Weighted average rate of interest on actual loan portfolio (E) | 7.698% | 7.620% | 7.620% | 7.620% | 7.620% |
| Return on Equity (Pre Tax)-Annualized (E) = [(D) x (E)] | 0.12 | 4.93 | 11.64 | 14.41 | 15.25 |

Total Return on Equity allowed

(Rs. in lakh)

| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|
| Return on Equity at Normal Rate (A) | 16685.37 | 16715.80 | 16790.45 | 16834.67 | 16868.48 |
| Return on Equity at WAROI (B) | 0.12 | 4.93 | 11.64 | 14.41 | 15.25 |
| Total Return on Equity allowed (A+B) | 16685.48 | 16720.72 | 16802.09 | 16849.08 | 16883.73 |



16. Regulation 30(1) of the 2019 Tariff Regulations provides for computation of ROE, on the equity base, as determined in accordance with Regulation 18 of the 2019 Tariff Regulations. While clause (1) of Regulation 18 provides for the determination of the debt-equity ratio for new projects, clauses (3) and (4) of the said Regulation provides for consideration/ determination of the debt-equity ratio in respect of the generating stations declared under commercial operation prior to 1.4.2019. Further, clause (5) of the said regulation provides that the admitted additional capital expenditure incurred or projected to be incurred on or after 1.4.2019, is to be serviced in the manner specified in clause (1) of Regulation 18 of the 2019 Tariff Regulations. On the same analogy, Regulation 30(2) of the 2019 Tariff Regulations provides for the computation of at the base rate of 15.50% (for thermal generating stations) while the proviso to Regulation 30(2) provides for computation of ROE in respect of additional capitalization after cut-off date, beyond the original scope, excluding additional capitalization due to change in law, at the weighted average rate of interest on actual loan portfolio of the generating station. It is however noticed that as per clause (1) of Regulations 31 of the 2019 Tariff Regulations (tax on ROE), the base rate of return on equity, as allowed by the Commission under Regulation 30 of the said regulations, is required to be grossed up with the effective tax rate of the respective financial year. Thus, we are of the view that on a harmonious construction of the provisions of Regulation 18 with Regulation 30 and Regulation 31 of the 2019 Tariff Regulations, the ROE computed at the predetermined base rate of 15.50% and the ROE computed at the weighted average rate of interest (WAROI) are required to be grossed up with the effective tax rate of the respective financial year.

17. Admittedly, in the present case, the Commission, had determined the ROE for admitted additional capital expenditure items within the original scope, by grossing



15.50% ROE with the effective tax rate. However, while calculating the ROE for admitted additional capital expenditure items beyond the original scope of work, the Commission had not grossed up WAROI, with the effective tax rate. This, apparently escaped the attention of the Commission, while passing the impugned order dated 8.4.2022. In our view, the non-grossing up of ROE on the admitted capital expenditure at the weighted average rate of interest, is an error apparent on the face of the order and review on this ground is maintainable. Similar issue raised by the Review Petitioner in Petition No.11/RP/2022 in Petition No.401/GT/2019 (tariff of Vindhyachal Super Thermal Power Station Stage-I for 2019-24) was allowed, vide Commission's order dated 17.3.2023. Accordingly, the prayer of the Review Petitioner is allowed and the impugned order dated 8.4.2022, is rectified on this ground, as shown below.

18. Return on Equity, as allowed in the table (a) under paragraph 49 of the impugned order dated 8.4.2022 is revised as under:

(b) Return on Equity at WAROI Rate

(Rs. in lakh)

| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|--|-------------|-------------|--------------|--------------|--------------|
| Normative Equity - Opening (A) | 0.00 | 3.00 | 126.30 | 179.25 | 198.90 |
| Addition of Equity due to additional capital expenditure (B) | 3.00 | 123.30 | 52.95 | 19.65 | 2.40 |
| Normative Equity-Closing (C) = (A) + (B) | 3.00 | 126.30 | 179.25 | 198.90 | 201.30 |
| Average Normative Equity (D) = (A+C)/2 | 1.50 | 64.65 | 152.78 | 189.08 | 200.10 |
| Weighted average rate of interest on actual loan portfolio | 7.698% | 7.620% | 7.620% | 7.620% | 7.620% |
| Tax rate for the year | 17.472% | 17.472% | 17.472% | 17.472% | 17.472% |
| Rate of Return on Equity (Pre-Tax) | 9.328% | 9.233% | 9.233% | 9.233% | 9.233% |
| Return on Equity (Pre-Tax) -Annualized | 0.14 | 5.97 | 14.11 | 17.46 | 18.48 |

Total Return on Equity allowed

(Rs. in lakh)

| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|
| Return on Equity at Normal Rate (A) | 16685.37 | 16715.80 | 16790.45 | 16834.67 | 16868.48 |
| Return on Equity at WAROI (B) | 0.14 | 5.97 | 14.11 | 17.46 | 18.48 |
| Total Return on Equity allowed (A+B) | 16685.51 | 16721.77 | 16804.55 | 16852.13 | 16886.96 |



B. Considering GCV and landed cost Heavy Fuel Oil instead of Light Diesel Oil

Submissions of the Review Petitioner

19. The Review Petitioner has submitted that the Commission while computing the cost of secondary fuel oil had considered the GCV & Weighted Average price of Heavy Fuel Oil (HFO), instead of Light Diesel Oil (LDO). The Review Petitioner has also submitted that in Form-15A of the tariff petition, the Petitioner had provided the details, such as, the quantity supplied, total amount charges, weighted average GCV, weighted average landed price of both Secondary Oil (i.e. HFO & LDO) for the months of Oct'18-Dec'18. The Review Petitioner has submitted that it had specifically mentioned in the Form-15A of tariff petition about the judgement of Hon'ble Supreme Court regarding the ban on use of HFO and that the main secondary fuel at Rihand is LDO w.e.f. 1.1.2019. Therefore, the Review Petitioner has prayed that there is an error apparent on the face of record and the same may be corrected.

Submissions of the Respondents

Respondent UPPCL

20. The Respondent UPPCL in its reply affidavit has submitted that the Commission may verify the GCV and price of the secondary oil considered for the computation of energy charges in working capital and decide.

Respondent BRPL

21. The Respondent BRPL in its reply affidavit has submitted that the weightage average price of the coal is to be decided on the basis of the details of the weighted average GCV of the fuel on 'as received' basis used for generation during the period. It has accordingly submitted that the Commission had considered the weighted average GCV of fuel only on the basis of the data furnished by the generating company after



applying the applicable method provided in the Regulation 34 of the 2014 Tariff Regulations. It has pointed out that Regulation 34 of the 2014 Tariff Regulations, nowhere provides that the fuel cost for computation of interest on working capital to be calculated in HFO or LDO basis for consideration of GCV & Landed Price, and hence by raising this contention, the Petitioner is only trying to misguide the Commission.

Respondent TPDDL

22. The Respondent TPDDL in its reply affidavit has submitted that the Hon’ble Commission may verify and substantiate the GCV and the Weighted Average Landed Price of secondary fuel oil being considered for computation of energy charges in working capital and accordingly decide on the basis of prudence check.

Analysis and Decision

23. The matter has been examined. The Fuel components in working capital as allowed in para 81 of the impugned order dated 8.4.2022 is as under:

| | <i>(Rs. in lakh)</i> | | | | |
|---|----------------------|---------|---------|---------|---------|
| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Cost of Coal for stock (10 days) | 2665.86 | 2665.86 | 2665.86 | 2665.86 | 2665.86 |
| Advance towards cost of Coal for generation (30 days) | 7997.59 | 7997.59 | 7997.59 | 7997.59 | 7997.59 |
| Cost of Secondary fuel 2 Months | 190.46 | 189.94 | 189.94 | 189.94 | 190.46 |

14. Similarly, the Energy Charge Rate (ECR) worked out and allowed in para 84 of the impugned order is as under:

“84. The submissions have been considered. The ECR, as worked out, based on the operational norms specified under the 2019 Regulations and on “as received” GCV of coal for the preceding three months i.e., October 2018 to December 2018 have been considered for allowing two months of energy charge in working capital as follows:

| Description | Unit | 2019-24 |
|------------------------------|----------|----------------------------|
| Capacity | MW | 1000.00 |
| Gross Station Heat Rate | Kcal/kWh | 2390.00 |
| Auxiliary Energy Consumption | % | 6.25 |
| Weighted average GCV of oil | Kcal/lit | 9790.00 |
| Weighted average GCV of coal | Kcal/kg | 4088.62 (4173.62-85.00) |



| Description | Unit | 2019-24 |
|--------------------------------|--------|----------|
| Weighted average price of oil | Rs/KL | 30611.29 |
| Weighted average price of Coal | Rs/MT | 2240.15 |
| Rate of energy charge ex-bus | Rs/kWh | 1.4100 |

15. The Review Petitioner has submitted that the Commission while computing the cost of secondary fuel oil has considered the GCV & weighted average price of HFO instead of LDO. We notice that the Review Petitioner in Form-15 of the original Petition, had mentioned about the ban on use of HFO and had accordingly, claimed interest on working capital, after considering the main secondary fuel as LDO. However, the Commission in the impugned order dated 8.4.2022, while considering the fuel cost for secondary fuel oil for computation of interest on working capital, had considered the weighted average GCV and landed price of HFO, instead of LDO. This according to us, is an error apparent on the face of the order and review on this ground is maintainable. Accordingly, the prayer of the Review Petitioner is allowed and the impugned order dated 8.4.2022, is rectified on this ground, as under:

Fuel cost for computation of working capital

16. The fuel component in working capital as allowed in the table under para 81 of the impugned order dated 8.4.2022 is revised as under:

| | <i>(Rs. in lakh)</i> | | | | |
|---|----------------------|---------|---------|---------|---------|
| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Cost of Coal for stock (10 days) | 2666.03 | 2666.03 | 2666.03 | 2666.03 | 2666.03 |
| Advance towards cost of Coal for generation (30 days) | 7998.10 | 7998.10 | 7998.10 | 7998.10 | 7998.10 |
| Cost of Secondary fuel 2 months | 366.50 | 365.50 | 365.50 | 365.50 | 366.50 |

Energy Charge Rate (ECR)

17. The ECR as worked out and allowed in the table under para 84 of the impugned order dated 8.4.2022 is also revised as under:



| Description | Unit | 2019-24 |
|--------------------------------|-------------|----------------------------|
| Capacity | MW | 1000.00 |
| Gross Station Heat Rate | Kcal/kWh | 2390.00 |
| Auxiliary Energy Consumption | % | 6.25 |
| Weighted average GCV of oil | Kcal/lit | 9487.82 |
| Weighted average GCV of coal | Kcal/kg | 4088.62 (4173.62-85.00) |
| Weighted average price of oil | Rs/KL | 58903.62 |
| Weighted average price of Coal | Rs/MT | 2240.15 |
| Rate of energy charge ex-bus | Rs/kWh | 1.4250 |

C. Considering incorrect values of working capital and annual fixed charges

Submissions of the Review Petitioner

18. The Review Petitioner has submitted that the Commission in paragraph 66 of the impugned order dated 8.4.2022, had allowed the total O&M expenses, including water charges and security expenses for the period 2019-24 as claimed by the Review Petitioner. It has submitted that the Commission has however erred in consideration of the incorrect value of O&M expenses during 2019-20 only, while computing the working capital for O&M expenses. The Review Petitioner has submitted that the working capital for O&M expenses (including water charges and security expenses) for one month considered in 2019-20 is Rs 2017.28 lakh, instead of Rs 2018.13 lakh as claimed by the Petitioner. Similarly, the Review Petitioner has submitted that the Commission has erred in consideration of the incorrect value of Maintenance spares during 2019-20 only, while computing the working capital for Maintenance spares. It has stated that the working capital for maintenance spares considered in 2019-20 is Rs 4841.46 lakh, instead of Rs 4843.50 lakh as claimed by the Petitioner.

Submissions of the Respondents

Respondent UPPCL

19. The Respondent UPPCL in its reply affidavit has submitted that the Commission may examine the allowable water charges and security expenses which actually



correspond to one-month O&M expenses of Rs.2017.28 lakh and Maintenance spares of Rs. 4841.46 lakh and decide the issue.

Respondent BRPL

20. The Respondent BRPL in its reply affidavit has submitted that the Commission had considered the aforesaid amount relying on the applicable tariff regulations and principles laid down by it. It has also submitted that the Commission in the impugned order had elaborately discussed the method of calculating the same and accordingly vide para 92 and 93 of the impugned order had summarized the entire calculation on working capital. Hence, there appears to be no computational error on part of the Commission and therefore the contention of the Petitioner is liable to be rejected on this ground.

Respondent TPDDL

21. The Respondent TPDDL in its reply affidavit has submitted that the Commission may examine the purported error, if any, with regard to the incorrect values of O&M expenses for calculation of working capital charges and the annual fixed charges for 2019-20, and conduct prudence check and decide the issue.

Analysis and Decision

22. The matter has been considered. The Commission had worked out and allowed the components of working capital in the impugned order as extracted below:

Working capital for O&M Expenses

86. Regulation 34(1)(a)(vi) of the 2019 Tariff Regulations provides for O&M expenses including water charges and security expenses for one month. Accordingly, the O&M expenses (1 month) component of working capital is allowed as follows:



(Rs. in lakh)

| 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|---------|---------|---------|---------|---------|
| 2017.28 | 2094.72 | 2163.08 | 2231.25 | 2303.88 |

Working capital for Maintenance Spares

87.Accordingly, maintenance spares have been allowed as under:

(Rs. in lakh)

| 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|---------|---------|---------|---------|---------|
| 4841.46 | 5027.32 | 5191.39 | 5355.01 | 5529.32 |

xxxx

Working capital for Receivables

“89. Accordingly, after taking into account the mode of operation of the generating station on secondary fuel, the Receivable component of working capital is allowed as follows:

(Rs. in lakh)

| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Fixed charge for 45 days | 12134.81 | 12134.81 | 12134.81 | 12134.81 | 12134.81 |
| Energy charge for 45 days | 6331.60 | 6401.55 | 6486.24 | 6613.12 | 6720.22 |
| Total | 18466.41 | 18536.36 | 18621.05 | 18747.93 | 18855.03 |

Xxxx

Interest on working capital

93. Accordingly, Interest on working capital is allowed as under:

(Rs. in lakh)

| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|
| Cost of Coal - 10 or 20 days (pit or non-pit) (A) | 2665.86 | 2665.86 | 2665.86 | 2665.86 | 2665.86 |
| Cost of Coal - 30 days(B) | 7997.59 | 7997.59 | 7997.59 | 7997.59 | 7997.59 |
| Cost of Secondary fuel - 2 Months (C) | 190.46 | 189.94 | 189.94 | 189.94 | 190.46 |
| Maintenance Spares - 20% of O&M (D) | 4841.46 | 5027.32 | 5191.39 | 5355.01 | 5529.32 |
| Receivables - 45 Days (E) | 18466.41 | 18536.36 | 18621.05 | 18747.93 | 18855.03 |
| O&M expenses - 1 month (F) | 2017.28 | 2094.72 | 2163.08 | 2231.25 | 2303.88 |
| Total Working Capital (I) = (A+B+C+D+E+F) | 36179.07 | 36511.80 | 36828.93 | 37187.60 | 37542.15 |
| Rate of Interest (G) | 12.05% | 11.25% | 10.50% | 10.50% | 10.50% |
| Total Interest on Working capital (H) = [(I)*(G)] | 4359.58 | 4107.58 | 3867.04 | 3904.70 | 3941.93 |

23. It is observed on prudence check, that the Commission in para 66 of the impugned order dated 8.4.2022 had allowed the water charges of Rs 466.24 lakh as claimed by the Petitioner. However, an inadvertent error had crept in, while considering the value of O&M expenses and Maintenance spares in working capital for the year 2019-20. This, according to us, is an error apparent on the face of the order and review on this ground



is maintainable. Accordingly, the values as claimed by the Petitioner on these counts, for 2019-20 are corrected and the interest on working capital is modified as stated in the subsequent paragraphs.

Working capital for O&M Expenses (1 month)

24. The working capital for O&M expenses, as allowed in the table under para 86 of the impugned order dated 8.4.2022, is revised as under:

| <i>(Rs. in lakh)</i> | | | | |
|----------------------|----------------|----------------|----------------|----------------|
| 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| 2018.13 | 2094.72 | 2163.08 | 2231.25 | 2303.88 |

Working capital for Maintenance Spares

25. The working capital for Maintenance spares, as allowed in the table under para 87 of impugned order dated 8.4.2022 is revised as under:

| <i>(Rs. in lakh)</i> | | | | |
|----------------------|----------------|----------------|----------------|----------------|
| 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| 4843.50 | 5027.32 | 5191.39 | 5355.01 | 5529.32 |

Working capital for Receivables

26. The working capital for Receivables, as allowed in the table under para 89 of the impugned order dated 8.4.2022 is revised as under:

| <i>(Rs. in lakh)</i> | | | | | |
|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Fixed charge for 45 days | 12263.91 | 12263.91 | 12263.91 | 12263.91 | 12263.91 |
| Energy charge for 45 days | 6337.52 | 6405.98 | 6490.55 | 6617.51 | 6724.62 |
| Total | 18601.43 | 18669.88 | 18754.46 | 18881.41 | 18988.52 |

Interest on Working Capital

27. Interest on working capital, as allowed in the table under para 93 of the impugned order dated 8.4.2022 is revised as under:

| <i>(Rs. in lakh)</i> | | | | | |
|---|----------------|----------------|----------------|----------------|----------------|
| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Cost of Coal - 10 or 20 days (pit or non-pit) (A) | 2666.03 | 2666.03 | 2666.03 | 2666.03 | 2666.03 |
| Cost of Coal - 30 days(B) | 7998.10 | 7998.10 | 7998.10 | 7998.10 | 7998.10 |
| Cost of Secondary fuel- 2 | 366.50 | 365.50 | 365.50 | 365.50 | 366.50 |



| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|
| Months (C) | | | | | |
| Maintenance Spares - 20% of O&M (D) | 4843.50 | 5027.32 | 5191.39 | 5355.01 | 5529.32 |
| Receivables - 45 days (E) | 18601.43 | 18669.88 | 18754.46 | 18881.41 | 18988.52 |
| O&M expenses - 1 month (F) | 2018.13 | 2094.72 | 2163.08 | 2231.25 | 2303.88 |
| Total Working Capital (I) = (A+B+C+D+E+F) | 36493.69 | 36821.54 | 37138.56 | 37497.30 | 37852.35 |
| Rate of Interest (G) | 12.05% | 11.25% | 10.50% | 10.50% | 10.50% |
| Total Interest on Working capital (H) = (I)*(G) | 4397.49 | 4142.42 | 3899.55 | 3937.22 | 3974.50 |

Annual Fixed Charges

28. Consequent upon the above, the annual fixed charges allowed for the generating station, for the period 2019-24, in the table under para 94 of the impugned order dated 8.4.2022, is revised as under:

| | <i>(Rs. in lakh)</i> | | | | |
|---|----------------------|-----------------|-----------------|-----------------|-----------------|
| | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Depreciation (A) | 5770.91 | 5834.12 | 5984.52 | 6110.94 | 6185.50 |
| Interest on Loan (B) | 473.74 | 124.67 | 0.00 | 0.00 | 0.00 |
| Return on Equity (C) | 16685.51 | 16721.77 | 16804.55 | 16852.13 | 16886.96 |
| Interest on Working Capital (D) | 4397.49 | 4142.42 | 3899.55 | 3937.22 | 3974.50 |
| O&M Expenses (E) | 24217.52 | 25136.59 | 25956.97 | 26775.05 | 27646.60 |
| Total Annual Fixed Charges (F) = (A+B+C+D+E) | 51545.18 | 51959.58 | 52645.60 | 53675.34 | 54693.55 |

Summary

29. Consequently, the annual fixed charges allowed vide impugned order dated 8.4.2022 and those allowed in this order, is summarized below:

| | <i>(Rs. in lakh)</i> | | | | |
|-----------------------------------|----------------------|-----------------|-----------------|-----------------|-----------------|
| Annual Fixed Charges | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 |
| Allowed vide order dated 8.4.2022 | 51497.02 | 51923.69 | 52610.62 | 53639.77 | 54657.75 |
| Allowed in this order | 51545.18 | 51959.58 | 52645.60 | 53675.34 | 54693.55 |



30. All other terms in order dated 8.4.2022 remain unchanged.

31. Review Petition No. 34/RP/2022 (in Petition No.426/GT/2020) is disposed of as above.

Sd/-
(Pravas Kumar Singh)
Member

Sd/-
(Arun Goyal)
Member

Sd/-
(I.S. Jha)
Member

