

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No: 152/MP/2018

Coram:

**Shri P.K.Pujari, Chairperson
Dr. M.K. Iyer, Member
Shri I.S. Jha, Member**

Date of Order: 28th of August, 2019

In the matter of

Petition under Section 79 (1) (a) & (f) and other applicable provisions of the Electricity Act, 2003 read with Regulation 110 & 111 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 seeking adjudication of dispute between the Petitioner and Respondent NTPC Ltd. regarding excess recovery of Annual Fixed Costs for various generating stations of the Respondent during FY 2014-19:

And

In the matter of

BSES Rajdhani Power Limited
Through its Manager- Regulatory
BSES Bhawa, Nehru Place
New Delhi 110019

.....**Petitioner**

Vs

National Thermal Power Corporation Limited
Through Its General Manager,
NTPC Bhawan, Scope Complex,
7 Institutional Area, Lodhi Road,
New Delhi – 110 003

.....**Respondent**

Parties present:

Shri Buddy A. Ranganadhan, Advocate, BRPL
Shri Kanishk, Advocate, BRPL
Shri M.G. Ramachandran, Sr. Advocate, NTPC
Ms. Ranjitha Ramachandran, Advocate, NTPC
Ms. Anushree Bardhan, Advocate, NTPC
Ms. Poorva Saigal, Advocate, NTPC
Ms. Tanya Sareen, Advocate, NTPC
Shri Nishant Gupta, NTPC
Shri E.P Rao, NTPC
Shri S.P Kesarwani, NTPC



ORDER

The Petitioner, BSES Rajdhani Power Ltd. (BRPL), has filed the present Petition seeking adjudication of dispute between the Petitioner and the Respondent, NTPC Ltd. regarding excess recovery Annual Fixed Costs (AFC) for various generating station of the Respondent. The Petitioner has made the following prayers:

“(a) Direct the Respondent to refund the excess capacity charges as follows:

(i) Rs. 300 crore being the excess capacity charges recovered from the Petitioner during the period of FY 2016-17 and FY 2017-18 and;

(b) In the alternative, so that the ARR of the Petitioner is protected and Petitioner does not suffer adversely on this account and because there is regulatory certainty in respect of treatment of AFC being billed by the Respondent, Commission may be pleased to clarify that the formula laid down by this Commission vide its order dated 28.07.2016 in P. No. 290/GT/2014 i.e. calculation of GCV of coal on “as billed” basis with adjustment of moisture, is only an interim arrangement and that the Commission shall re-fix the AFC of the Respondent in future based on “as received” GCV of coal in order to facilitate refund of excess billing of AFC by the Respondent to the beneficiaries including the Petitioner during the period of FY 2014-19;and

(c) Pass appropriate ad-interim orders.”

Submission of the Petitioner

2. The Petitioner has mainly submitted as under:

(a) As per Regulation 28 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as the 2014 Tariff Regulations), AFC of the generating stations of the Respondent for the respective periods are required to be determined and fixed by the Commission, taking into account the Interest on Working Capital (hereinafter referred to as 'IWC') towards cost of fuel. The cost of fuel is to be determined as per the GCV of coal measured on “as received” basis. However, The Respondent is unilaterally calculating the GCV of coal on “as billed” basis with unmonitored adjustment of moisture which leading to excess



billing of AFC that is contrary to the provisions of the 2014 Tariff Regulations. Therefore, the Respondent is liable to refund the excess billed amount to the Petitioner.

(b) The 2014 Tariff Regulations specify the methodology for computation of tariff for supply of electricity by the Central Sector Generating Stations for the period from 1.4.2014 to 31.3.2019. In terms of the 2014 Tariff Regulations, all the beneficiaries are required to pay the tariff as determined by the Commission for the control period of five years starting from 1.4.2014.

(c) The Respondent raises its energy bills on monthly basis payable by the Petitioner in line with the billing methodology prescribed by the Commission under Regulation 42 of the 2014 Tariff Regulations. Accordingly, the Respondent had filed Petitions for approval of tariff for the period 2014-19 for its various generating stations. The Commission through its various orders has issued certain directions that GCV of coal has to be taken on "as billed" basis with adjustment of moisture content.

(d) The calculation of IWC towards fuel cost is being done by the Respondent on the basis of formula specified by the Commission and is being considered in the total AFC of the plant. However, in earlier tariff orders, the entire AFC (including IWC) was determined by the Commission itself. As a result of calculation of IWC being done by NTPC, there is a substantial difference in the AFC as applicable under the tariff orders issued by the Commission under 2014 Tariff Regulations and the AFC being actually charged by the Respondent for the respective generating stations on account of re-calculation of IWC after adjustment of total moisture content.



(e) The Petitioner vide its letters dated 19.9.2016 and 19.5.2017 sought clarification from the Respondent regarding difference observed in the AFC used for the tariff orders notified by the Commission for financial year 2014-19 under 2014 Tariff Regulations. In response, the Respondent vide its letter dated 25.5.2017 has stated that the Commission has determined IWC provisionally on the basis of “as billed” GCV for arriving at the IWC component of the AFC of the relevant NTPC generating station. Accordingly, NTPC has re-calculated the GCV of coal after adjustment of total moisture content.

(f) The AFC determined by the Commission is required to be calculated taking into account the GCV of coal on “as received” basis, while Respondent is calculating the same on “as billed” basis after adjustment of moisture unilaterally, which is leading to excess recovery of AFC from the Petitioner. The Petitioner, being a regulated entity under Delhi Electricity Regulatory Commission (DERC), is not permitted to make any excess payment to the generating companies since the cost of total power purchase, including the sources for purchase of power are also regulated and approved by DERC.

Reply of the Respondent

3. The Respondent, NTPC in its reply dated 15.1.2019, has submitted as under:

(a) The claim of the Petitioner that NTPC has been billing in excess of the Annual Fixed Charges, is misconceived and devoid of any merit.

(b) The Commission in various tariff orders, on account of the unavailability of the data in respect of “as received” GCV of coal, had provisionally determined the energy charges on the basis of “as billed” GCV of



coal with a moisture correction formula. Such determination was subject to adjustment in light of the GCV of coal on 'as received' basis.

(c) NTPC has been billing the beneficiaries including the Petitioner, as per the tariff orders issued by the Commission. There is no inconsistency between the Annual Fixed Charges, as determined by the Commission and as billed by the Respondent and that the annual fixed charges, as billed by the Respondent are in accordance with the tariff orders issued by this Commission.

(d) In the absence of a mechanism to measure the GCV of coal on "as received" basis, the Commission proceeded to provisionally determine the GCV on "as billed" basis with a moisture correction formula.

(e) The computation of the IWC in terms of Regulation 28 of the 2014 Tariff Regulations includes amongst others, namely, the cost of fuel, maintenance spares, receivables and O&M expenses, etc. Accordingly, the determination of the energy charges on the basis of "as billed" GCV would consequentially have a corresponding effect on the determination of IWC as well.

(f) The Respondent has further denied that it is required to refund any amount to the Petitioner, as alleged or otherwise as the Commission in the tariff orders has already specifically stated that the amount computed shall be considered at the time of truing up.

Rejoinder of the Petitioner

4. The Petitioner, in its rejoinder dated 11.4.2019, has prayed to issue appropriate clarification for calculation of IWC component of AFC, based on the methodology specified by the Commission and has submitted as under:



(a) AFC is decided by the Commission and is not calculated by NTPC as is the case with ECR (Energy Charge Rate). Accordingly, the revised AFC may be required to be vetted by the Commission before attaining finality.

(b) In view of the admission by the Respondent in its reply, that the Commission has provisionally determined the GCV on “as billed” basis (with moisture correction formula) and the same is subject to adjustment of measurement of GCV on “as received” basis, the Petitioner is seeking Commission’s clarification as to whether this is an interim arrangement and AFC shall be re-calculated based on GCV “as received”.

(c) The Auditor of DERC has observed that for few generating stations of NTPC, the AFC billed by the generating stations are higher than that approved by CERC. However, the DERC has provisionally considered AFC as billed by NTPC, since it has taken up the issue with NTPC, subject to filing of the Petition by the Petitioner and its outcome before the CERC. Therefore, the Petitioner has requested the Commission to pass suitable orders/clarifications considering the observations of the DERC.

Analysis and decision

5. We have considered the submissions of the Petitioner, the Respondent and perused documents on record. The Commission in its order dated 25.1.2016 in Petition No. 283/GT/2014 has clarified that the measurement of GCV of coal on as received basis shall be taken from the loaded wagons at the unloading point either manually or through the Hydraulic Augur. Relevant extracts from Order dated 25.1.2016 is as under:



“55. The only practicable alternative is to take samples from the wagons either manually or by installing Hydraulic Auger at the suitable places. GUVNL vide affidavit dated 30.11.2015 has submitted the video recording of the samples of coal being collected from the railway wagon at the generating stations of GSECL, namely at Ukai TPS and Wanakbori TPS. They have also filed the laboratory testing procedure of the samples taken from the wagons/ Coal Rakes at Wanakbori TPS. From the examination of the video recording, it is observed that samplings of coal were being collected from the railway wagons using Hydraulic Auger. The process of taking samples was found to be smooth, capable of taking representatives samples from any depth of the wagon, from different locations without taking too much of time and the process appears to be safe and reliable. GSECL has been successfully using the Hydraulic Auger for collection of samples from the top of the wagons and NTPC and other generating companies can adopt and improvise the protocol for collection of samples from the wagons. As regards the threat to the safety of the personnel, the issue has been discussed in detail in para 41 of this order and the safeguards suggested in the said para should be adopted.

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58. In view of the above discussion, the issues referred by the Hon`ble High Court of Delhi are decided as under:

(a) There is no basis in the Indian Standards and other documents relied upon by NTPC, etc. to support their claim that GCV of coal on as received basis should be measured by taking samples after the crusher setup inside the generating station, in terms of Regulation 30 (6) of the 2014 Tariff regulations.

(b) The samples for the purpose of measurement of coal on as received as basis should be collected from the loaded wagons at the generating stations either manually or through the Hydraulic Auger in accordance with provisions of IS 436(Part1/Section1)-1964 before the coal is unloaded. While collecting the samples, the safety of personnel and equipment as discussed in this order should be ensured. After collection of samples, the sample preparation and testing shall be carried out in the laboratory in accordance with the procedure prescribed in IS436 (Part1/Section1)-1964 which has been elaborated in the CPRI Report to PSERC.”

6. Further, in absence of “as received” GCV of coal, the Commission in its order dated 21.1.2017 in Petition No. 283/GT/2014 decided as under:

“84. The petitioner has claimed Energy Charge Rate (ECR) of 282.080 Paise/kWh based on the weighted average price, GCV of coal (as fired basis) and oil procured and burnt for the preceding three months. It is observed that the petitioner has not placed on record the GCV of coal on “as received” basis though the petitioner was statutorily required to furnish such information with effect from 1.4.2014. The petitioner has not submitted the required data regarding measurement of GCV of coal in compliance with the directions contained in the said order dated 25.1.2016. The present petition cannot be kept pending till the petitioner submits the required information. Hence, the Commission has decided to compute fuel components and the energy charges in the working capital by provisionally taking the GCV of coal on as “billed basis” and allowing an adjustment for total moisture as per the formula given as under:

$$\frac{\text{GCV X (1-TM)}}{(1 - \text{IM})}$$



Where: GCV=Gross Calorific value of coal
TM=Total moisture
IM= Inherent moisture”

7. Regulation 28 (a) of the 2014 Tariff Regulations provides the method of computation of ‘Interest on Working Capital’ as under:

“28. Interest on Working Capita : (1) The working capital shall cover:

(a) Coal-based/lignite-fired thermal generating stations

(i) Cost of coal or lignite and limestone towards stock, if applicable, for 15 days for pit-head generating stations and 30 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;

(ii) Cost of coal or lignite and limestone for 30 days for generation corresponding to the normative annual plant availability factor;

(iii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one secondary fuel oil, cost of fuel oil stock for the main secondary fuel oil;

(iv) Maintenance spares @ 20% of operation and maintenance expenses specified in regulation 29;

*(v) Receivables equivalent to two months of capacity charges and energy charges for sale of electricity calculated on the normative annual plant availability factor;
and*

(vi) Operation and maintenance expenses for one month.”

8. Further, Regulation 30(6)(b)(a) of 2014 Tariff Regulations provides that the cost of fuel for working capital has to be computed by adopting the GCV of coal on “as received” basis. The Regulation is quoted as under:

“30. Computation and Payment of Capacity Charge and Energy Charge for Thermal Generating Stations:

(6) Energy charge rate (ECR) in Rupees per kWh on ex-power plant basis shall be determined to three decimal places in accordance with the following formulae:

(b) For gas and liquid fuel based stations

$$ECR = GHR \times LPPF \times 100 / \{CVPF \times (100 - AUX)\}$$

Where,



*AUX = Normative auxiliary energy consumption in percentage.
CVPF=(a) Weighted Average Gross calorific value of coal as received, in
kCal per kg for coal based stations”*

9. However, in absence of “as received” GCV of coal, the Commission in the various orders, has already given direction to consider the “as billed” GCV of coal with adjustment for total moisture.

10. The Petitioner has contended that NTPC is calculating the GCV of coal on “as billed” basis with unmonitored adjustment of moisture and hence, NTPC is charging over and above the Annual Fixed Cost approved by Commission in the tariff orders.

11. *Per contra*, The Respondent has submitted that the GCV of coal has been provisionally determined on “as billed” basis with a moisture correction formula and there is no variance in the costs determined by the Commission and that billed by the Respondent. The Respondent has further submitted that the argument of the Petitioner regarding absence of a mechanism for determining the moisture content is equally applicable to the determination of GCV of coal on “as received” basis. It was owing to the absence of a mechanism to measure the GCV on “as received” basis that the Commission proceeded to provisionally determine the GCV on “as billed” basis with a moisture correction formula. According to the Respondent, it has been billing the beneficiaries in accordance with the Annual Fixed Charges (including the interest on working capital) as determined by the Commission in various tariff orders and it has calculated the weighted average value of GCV based upon the formula as provided by the Commission. The adjustment in GCV on account of above has resulted in difference in the ECR value which consequently has changed the value of IWC and AFC. NTPC has stated that the AFC determined by the Commission is bound to undergo change due to application of the moisture correction formula, as this formula impacts IWC, which is one of the components of AFC.



12. During the course of hearing, the Commission directed the Respondent, NTPC to clarify whether it was revising the IWC on month to month basis by applying the correction factor/formulae approved by the Commission. NTPC has clarified that IWC, once frozen by applying moisture correction formulae to the "as billed" GCV for January-March 2014 period, is not revised on month to month basis. The Petitioner may, if they so wish, verify it from the bills submitted by the Respondent. We observe that in the similar issue, the Commission in its order dated 11.7.2018 in Petition No. 93/MP/2017 had observed as under:

"34. It is noticed that the Commission in its various orders for the period 2014-19 has arrived at the IWC on "as billed GCV" of the coal. It was left to the generator to revise the IWC based on the moisture content of coal received during the preceding three month by applying the moisture correction formulae. However, interest on working capital once fixed based on the landed price of fuel during preceding three months and by application of inherent moisture correction factor as finalized by the Commission, is not to be revised every month based on the moisture content of the fuel received during month of billing. Revising GCV based on moisture content of the fuel is allowed for calculation of "Energy Charge Rate" on month to month basis only for billing of monthly variable charges.

35. NTPC, vide Record of proceedings for the hearing dated 28.9.2017, was directed to clarify whether NTPC is revising the IWC on month to month basis by applying the correction factor/formula approved by the Commission. NTPC vide its affidavit dated 9.11.2017 has clarified that NTPC is not revising the IWC on month to month basis and the adjustment has been taken into account by NTPC in IWC calculation on normative basis only once to arrive at the fixed charges for the period 2014-19. 36.

36. Considering the submission of the NTPC that it is not revising the IWC on month to month basis, in our view, it is not claiming AFC over and above that approved by the Commission."

13. In view of the above, the prayer of the Petitioner to direct NTPC for refund of excess capacity charges is not sustainable.

14. Further, the Petitioner has prayed to clarify whether the formula laid down by the Commission vide its order dated 28.7.2016 in Petition No. 290/GT/2014 (the tariff Petition in respect of Singrauli generating station of NTPC) for calculation of GCV of



coal on “as billed” basis with adjustment of moisture, is only an interim arrangement. The Petitioner has also sought clarification whether the Commission shall re-fix the AFC of the Respondent in future based on “as received” GCV of coal. Relevant extract of order dated 28.7.2016 is as under:

“78. Further, the petitioner has claimed an energy charge rate (ECR) of 123.855 Paise/kWh based on the weighted average price, GCV of coal (as fired basis) & Oil procured and burnt for the preceding three months. It is observed that the petitioner has not placed on record the GCV of coal on „as received” basis though the petitioner was statutorily required to furnish such information with effect from 1.4.2014. In compliance with the direction of the Hon’ble High Court of Delhi, the Commission in its order dated 25.1.2016 in Petition No. 283/GT/2014 has clarified that the measurement of GCV of coal on as received basis shall be taken from the loaded wagons at the unloading point either manually or through the Hydraulic Augur. The petitioner has not submitted the required data regarding measurement of GCV of coal in compliance with the directions contained in the said order dated 25.1.2016. The present petition cannot be kept pending till the petitioner submits the required information. Hence, the Commission has decided to compute the energy charges by provisionally taking the GCV of coal on as “billed basis” and allowing on adjustment for total moisture as per the formula given as under:

$$\frac{GCV \times (1 - TM)}{(1 - IM)}$$

*Where: GCV=Gross Calorific value of coal
TM=Total moisture
IM= Inherent moisture”*

15. It is noted that the Respondent, NTPC has not submitted the information as per the direction of the Commission in Petition No. 283/GT/2014 dated 25.1.2016 till date. Accordingly, the Respondent, NTPC is directed to furnish the required information within three months of this order, for the Commission to take a final view on the issue.

16. The Petition No. 152/MP/2018 is disposed of in terms of above.

Sd/-
(I. S. Jha)
Member

Sd/-
(Dr.M.K.Iyer)
Member

Sd/-
(P.K. Pujari)
Chairperson

