



ORDER

OF

WEST BENGAL ELECTRICITY REGULATORY COMMISSION

IN THE MATTER OF

CASE NO. OA-362/20-21

**APPLICATION FOR REMOVAL OF DIFFICULTIES IN ACHIEVING THE
NORMATIVE STATION HEAT RATE ALLOWED BY THE HON'BLE
COMMISSION FOR SAGARDIGHI THERMAL POWER PROJECT, STAGE-II OF
1000 MW (2X500 MW) CAPACITY IN TERM OF REGULATION 8.10 OF THE
WEST BENGAL ELECTRICITY REGULATORY COMMISSION (TERMS AND
CONDITIONS OF TARIFF) REGULATIONS, 2011 AS AMENDED FROM TIME TO
TIME.**

PRESENT:

SRI SUTIRTHA BHATTACHARYA, CHAIRPERSON

SRI DURGADAS GOSWAMI, MEMBER

SRI PULAK KUMAR TEWARI, MEMBER

DATE: 12.04.2022



Application for removal of difficulties in achieving the normative Station Heat Rate allowed by the Hon'ble Commission for Sagardighi Thermal Power Project, Stage-II of 1000 MW (2X500 MW) capacity in term of regulation 8.10 of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011 as amended time to time.

CASE IN BRIEF

- 1.1 The West Bengal Power Development Corporation Limited (in short 'WBPDCCL') has submitted a petition dated the 8th February, 2021 in terms of regulation 8.10 of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011, as amended ("Tariff Regulations") for removal of difficulties in achieving the target station heat rate allowed by the Commission in its tariff order dated 07.07.2017 in respect of Sagardighi generating station, Stage - II of 1000 MW (2X500 MW) capacity of WBPDCCL. Subsequently, WBPDCCL has submitted a supplementary petition dated 17th March, 2021 in continuation of the earlier petition dated 8th February, 2021.
 - 1.2 Upon receipt of the petition and supplementary petition, the Commission has decided to hear WBPDCCL and an e-hearing was fixed on 17th August, 2021 at 14.30 hours for which notice dated 23/26.07.2021 was issued.
 - 1.3 WBPDCCL, in addition to the original petition, submitted three supplementary petitions. Based on the second supplementary petition dt. 16th August, 2021 submitted by WBPDCCL and the request made therein, the hearing scheduled on 17th August, 2021 was postponed and the same was rescheduled on 23rd September, 2021. Before the date of the hearing, WBPDCCL submitted the third supplementary petition vide dt. 8th September, 2021. The Commission heard WBPDCCL on 23rd September, 2021, as scheduled, wherein Sri Sakya Singha Chaudhuri, Advocate, on behalf of WBPDCCL, inter-alia, submitted that in terms of paragraph A 1 of Schedule 9D of the Tariff Regulations, Gross Station Heat Rate (GSHR) of new thermal generating station is required to be computed by multiplying 1.065 with the design heat rate. WBPDCCL also submitted that during amendment of the Tariff Regulations 2013, the Commission has specified the GSHR of Sagardighi Thermal Power Project -phase-II (units III & IV) of WBPDCCL as
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2276 kCal/kWh where the multiplying factor 1.065 has not been considered, which may be due to some inadvertent error. Further, the construction of Sagardighi Thermal Plant was followed by 2 stage investment approval of the Commission, where it was intimated that, WBPDCCL received single bid from BHEL with design heat rate of 2322 kCal/kWh and the same was considered by the Commission. After settlement of the coal issues, performance guarantee test of Sagardighi phase-II (unit III & IV) were conducted and SHR as per PG test comes to 2285 kCal/kWh. Accordingly, WBPDCCL prayed before the Commission to allow GSHR of Sagardighi phase-II (unit III & IV) as 2433 kCal/kWh (by applying multiplication factor of 1.065 over the PG test value) in terms of regulation 2.8.1.4.9 of the Tariff Regulations with retrospective effect. It is further submitted that, norms specified in paragraph A of Schedule-9A of the Tariff Regulations are recommended norms. The Commission has to determine the norms of operating parameters under regulation 2.8.1.4.9 of the Tariff Regulations on the basis of design performance parameters.

- 1.4 Based on the above submission, the Commission observed that there seemed to be some merit on the issue raised by WBPDCCL. However, the Commission observed that the prayers made by the Petitioner in the Principal Petition and the Supplementary Petitions before the Commission are at variance with each other. As such, the Petitioner is required to submit a fresh amended Petition. Accordingly, WBPDCCL was directed vide order dated 30.10.2021 to submit an amended petition along with their written argument within 10 days from the date of receipt of the order upon receipt of which, the Commission would decide on the next course of action.
- 1.5 In view of Commission's order dated 30.10.2021 issued based on hearing held on 23.09.2021, WBPDCCL submitted fresh petition on 4th October, 2021 along with their written arguments which subsumed the earlier three petitions of WBPDCCL referred hereinabove.



Application for removal of difficulties in achieving the normative Station Heat Rate allowed by the Hon'ble Commission for Sagardighi Thermal Power Project, Stage-II of 1000 MW (2X500 MW) capacity in term of regulation 8.10 of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011 as amended time to time.

OBSERVATIONS OF THE COMMISSION

- 2.1 The Commission observes that the case is for consideration of the request made by WBPDCCL to consider the Normative Station Heat Rate of Sagardighi TPP-II as 2433 Kcal/kWh instead of 2276 Kcal/kWh which is specified in the Tariff Regulations amendment 2013 for the units.
 - 2.2 Apparently, SHR for SGTPP-II was determined by dividing the turbine heat rate by a boiler efficiency factor in decimal. The multiplying factor of 1.065 to give the tolerance was not considered. WBPDCCL had in their suggestion to the amendment of tariff regulation apparently raised issue of inadequate accommodation under schedule 9A and proposed SHR as 2540 Kcal/kWh for SGTPP-II. It is also brought out that SHR 2322 Kcal/ kWh was considered in the tariff order for 2016-17 and continued for 2017-18. But SHR 2276 Kcal/kWh was used from 2018-19 onwards, since it is mentioned as such in Schedule-9A of Tariff Regulations.
 - 2.3 The origin of factor 1.065 came from CERC Tariff Regulation 2009 for the period 2009-14 prevailed during 2013 when WBERC amended the Tariff Regulations in 2013. The formula specified for new plants in schedule 9D of the WBERC Amended Tariff Regulation 2013 are in line with the formula given for new thermal generating station achieving COD as on or after 01.04.2009 in CERC Tariff Regulations, 2009. Considering the factor 1.065 the SHR for new 500 MW unit comes at 2424 Kcal/kWh based on maximum allowable design heat rate of 2276 multiplied by 1.065, as per methodology prescribed in Schedule 9D of the Tariff Regulations 2011 ($2276 \text{ Kcal/kWh} \times \text{factor } 1.065$).
 - 2.4 In view of above, the Commission considers that to correct the manifest arithmetic error, SHR figure requires to be amended.
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Application for removal of difficulties in achieving the normative Station Heat Rate allowed by the Hon'ble Commission for Sagardighi Thermal Power Project, Stage-II of 1000 MW (2X500 MW) capacity in term of regulation 8.10 of the West Bengal Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011 as amended time to time.

ORDER

- 3.1 Based on the above observations, in exercise of its power under regulation 8.4 read with regulation 8.10 of the Tariff Regulations, the Commission directs that the Station Heat Rate of SGTPP-II (Units III and IV) of West Bengal Power Development Corporation Limited will be considered as 2424 Kcal/kWh instead of 2276 kcal/kWh as has been mentioned in Schedule 9A to Tariff Regulations Amendment, 2013 with effect from the date of COD of SGTPP-II (Units III and IV). The effect of the enhanced station heat rate will be given by the Commission at the time of determination of the APR/FCA of WBPDCCL for the years from 2016 – 2017 to 2022 – 2023. However, the same consideration of station heat rate of 2424 Kcal/kWh will be given at the time of determination of tariff order under 8th control period.
- 3.2 With the above direction, the petition of WBPDCCL is, thus, disposed off.
- 3.3 Let a copy of this order be served upon WBPDCCL.

Sd/-	Sd/-	Sd/-
(PULAK KUMAR TEWARI	(DURGADAS GOSWAMI)	(SUTIRTHA BHATTACHARYA)
MEMBER	MEMBER	CHAIRPERSON

DATE:12.04.2022

**Sd/-
SECRETARY**
