CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Suo Moto Petitions No. 10/SM/2022
Coram:
Shri I. S. Jha, Member
Shri Arun Goyal, Member
Shri P. K. Singh, Member

Date of Order: 26.07.2022

In the matter of:

Blending of imported coal with domestic coal to mitigate the domestic coal shortage

Background

The recent sharp increase in electricity demand has necessitated that the thermal generating stations generate and supply electricity to their maximum feasible level. However, on account of shortage of domestic coal, the coal based thermal generating stations are constrained to restrict their generation, thereby resulting in shortfall in supply of electricity. In order to address issue of depleting coal stocks and building stocks before onset of monsoon, the Ministry of Power directed the concerned stake holders to import at least 10 % of their requirement of coal for blending and if required, higher percentage of blending in future. However, some generating companies have pointed out that they are facing problem to comply with the above direction of Ministry of Power on account of delay in accord of permission and in some cases, absence of permission by the concerned beneficiaries.

2. In reference to Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019, in the public interest, Ministry of Power has issued direction to this Commission under section 107 of Electricity Act, 2003 to allow higher amount of blending of blending up to 30 % with imported coal, subject to

technical feasibility, without the requirement of prior consultation with the beneficiaries up to 31.03.2023 to maintain resource adequacy and 24X7 supply to consumers.

3. Regulation 43 of 2019 Tariff Regulations provides for Computation and Payment of Energy Charge in respect of Thermal Generating Stations which is extracted as follows:

"43. Computation and Payment of Energy Charge for Thermal Generating Stations

(1) The energy charge shall cover the primary and secondary fuel cost and limestone consumption cost (where applicable), and shall be payable by every beneficiary for the total energy scheduled to be supplied to such beneficiary during the calendar month on ex-power plant basis, at the energy charge rate of the month (with fuel and limestone price adjustment).

Total Energy charge payable to the generating company for a month shall be

Energy Charges = (Energy charge rate in Rs./kWh) x {Scheduled energy (exbus)for the month in kWh}

a) For coal based and lignite fired stations: ECR = {(SHR – SFC x CVSF) x LPPF / (CVPF + SFC x LPSFi + LC x LPL} x 100/(100 – AUX) (b) For gas and liquid fuel based stations: ECR = SHR x LPPF x 100 / {(CVPF) x (100 – AUX)}

(b) For gas and liquid fuel based stations: ECR = SHR x LPPF x 100 / {(CVPF) x (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 less 85 Kcal/Kg on account of variation during storage at generating station;

(b) Weighted Average Gross calorific value of primary fuel as received, in kCal per kg or per litre or per standard cubic meter, as applicable for lignite, gas and liquid fuel based stations;

(c) In case of blending of fuel from different sources, the weighted average Gross calorific value of primary fuel shall be arrived in proportion to blending ratio:

CVSF = Calorific value of secondary fuel, in kCal per ml;

ECR = Energy charge rate, in Rupees per kWh sent out;

SHR = Gross station heat rate, in kCal per kWh;

LC = Normative limestone consumption in kg per kWh;

LPL = Weighted average landed cost of limestone in Rupees per kg;

LPPF = Weighted average landed fuel cost of primary fuel, in Rupees per kg, per litre or per standard cubic metre, as applicable, during the month. (In case ofblending of *fuel from different sources, the weighted average landed fuel cost of primary fuel shall be arrived in proportion to blending ratio);*

SFC = Normative Specific fuel oil consumption, in ml per kWh;

LPSFi = Weighted Average Landed Fuel Cost of Secondary Fuel in Rs./ml during the month:

Provided that energy charge rate for a gas or liquid fuel based station shall be adjusted for open cycle operation based on certification of Member Secretary of respective Regional Power Committee during the month.

(3) In case of part or full use of alternative source of fuel supply by coal based thermal generating stations other than as agreed by the generating company and beneficiaries in their power purchase agreement for supply of contracted power on account of shortage of fuel or optimization of economical operation through blending, the use of alternative source of fuel supply shall be permitted to generating station:

Provided that in such case, prior permission from beneficiaries shall not be a precondition, unless otherwise agreed specifically in the power purchase agreement:

Provided further that the weighted average price of alternative source of fuel shall not exceed 30% of base price of fuel computed as per clause (5) of this Regulation:

Provided also that where the energy charge rate based on weighted average price of fuel upon use of alternative source of fuel supply exceeds 30% of base energy chargerate as approved by the Commission for that year or exceeds 20% of energy charge rate for the previous month, whichever is lower shall be considered and in that event, prior consultation with beneficiary shall be made at least three days in advance.

Xxxxxx"

4. The Commission published the Staff Paper on "Blending of imported coal with domestic coal to mitigate the domestic coal shortage" and sought comments from the stakeholders vide notice dated 2.6.2022, on "to what extent blending of imported coal can be allowed without the permission or consultation of the beneficiaries and to what extent the increase in energy charge rate over and above base energy charge rate, approved by the Commission for that year, be allowed upon blending of imported coal". The Generating companies have made following submissions/ suggestions to meet extraordinary situation:

(i) Seeking prior consent for the import of coal from the beneficiaries, particularly, generating stations having multiple beneficiaries, would be very difficult in the prevailing situation and may not be practicable.

(ii) The restriction on the percentage of blending should be removed until the coal shortage situation is normalized; or in the alternate the generators should be allowed to procure imported coal equivalent to the shortfall in quantity as per coal requirement and coal available under FSA.

(iii) The cost of imported coal should be allowed to be recovered in full as a pass through and there should not be any cap on the ECR and the clause pertaining to obtaining consent of beneficiaries should be removed.

(iv) As the blending of imported coal depends on domestic coal availability, energy required technical feasibility etc, upfront determination of blending percentage and increase in ECR may be difficult. Therefore, the ceiling in ECR may be kept in abeyance till 31.03.2024.

5. It has been further submitted that the percentage increase in ECR on account of imported coal is very high for the plants with lower ECR (pit head stations) in comparison to plants with high ECR (non-pit head stations) and import of coal requires additional working capital, new infrastructure and certain modification in plant design, which involves capital expenditure. Further, the impact in increased ECR due to imported coal may be excluded for scheduling of power in Merit Order Dispatch (MOD) stack ;compensation for the non-use of imported coal due to low scheduling should be provided and deficiency in coal quantity due non consent of beneficiaries should be treated as deemed availability.

6. The DISCOMs are of view that price of imported coal is volatile and would impact the Energy Charge Rate of power supply. The higher blending of imported coal would lead to excessive increase in ECR of power supply to DISCOMs and result in substantial increase in cost of power for the end consumers. The end users have an option of either paying exorbitantly high charges or else face load shedding and the same would impact the finances of the DISCOMs. Therefore, the percentage of coal

blending may be reduced to the minimum possible extent and a cap may be levied for the cost of imported coal and should not be allowed more than 10 % and increase in ECR upto 30 % also may be allowed in a smooth manner, so that consumers do not feel the tariff shock. Further, pit head plants or the generating stations which are far away from coast require inland transportation of imported coal, which further escalates ECR. Therefore, these stations, particularly, pit head stations may be excluded from imported coal and option of swapping imported coal quantity with equivalent domestic linkage coal quantity of coastal power projects may be explored in order to reduce the inland transportation cost, burden on road / rail and cost of coal thereof.

7. Some stakeholders are of the view that shortage in coal is temporary in nature and due to monsoon, in the coming months, the demand would reduce and other sources of generation (hydro and wind) also would be available to meet the demand requirement. The coal availability has increased across the country on account of higher production by CIL and operationalization of new captive mines. Further, excessive import would lead to higher ECR, which may not be affordable to the consumers and act as a counter measure in meeting the demand of the consumers.

8. The Commission has considered the submission of the parties. The Commission has also analysed the power demand-supply position as also coal availability in thermal power plants in the country. As per CEA monthly coal report, coal stock as on 31.05.2022 stands at 23.68 million tons (MT) for an installed capacity of 204 GW (Thermal) as compared to coal stock of 32.63 million tons (MT) as on 31.05.2021 for an installed capacity of 202 GW (Thermal). On the demand side, it is noted that the peak demand met and energy supplied during the period April – May 2022 was about 207 GW and 267 BUs respectively as compared to 182 GW peak demand met and 226 BUs of energy supplied during the period April – May 2021. The onset of south-west monsoon could adversely affect the mining and transportation of coal from mine

to power stations. Accordingly, in order to maintain adequate coal stocks, coal from alternative sources is required to be arranged to avoid any power crises in future.

9. The Commission has also noted that the Ministry of Power has issued directions under Section 11 of the Electricity Act, 2003 to all imported coal based generating stations to maximize generation. The Ministry has also directed all GENCOs based on domestic coal to import at least 10 per cent of their requirement of coal for blending.

10. The Commission is vested with the power to relax any of the provisions of the 2019 Tariff Regulations on its own motion or on an application made by an interested person. Regulation 76 of the 2019 Tariff Regulations is extracted as under:

> *"76. Power to Relax: The Commission, for reasons to be recorded in writing, may relax any of the provisions of these regulations on its own motion or on an application made before it by an interested person."*

11. The Commission has noted the directions issued by the Government of India under section 107of the Act and considered the recent inadequate coal stocks / supply from domestic sources for meeting the increasing power requirement in the country.

In the light of the analysis of the power demand-supply and coal stock position in the country as highlighted in para 8 above; with due consideration to the views of the stakeholders in response to the Staff Paper in this context; in order to facilitate availability of adequate quantum of coal in thermal power plants to ensure smooth and uninterrupted generation and in turn to aid the distribution companies to meet their universal supply obligation to consumers, the Commission in exercise of its powers under Regulation 76 of the 2019 Tariff Regulations, relaxes the provisions of Sub-Regulation (3) of Regulation 43 and issues the following directions:

a. The first proviso of sub Regulation (3) of Regulation 43 of 2019 Tariff Regulations shall be read as under:

> *"Provided that in such case, prior permission from beneficiaries shall not be a precondition for blending upto 20% from alternate sources of fuel supply*

including imported coal, subject to technical feasibility, unless otherwise agreed specifically in the power purchase agreement."

b. The operation of second and third provisos of sub Regulation 3 of Regulation 43 of 2019 Tariff Regulations shall be kept in abeyance.

12. The directions contained in Para 11 of this order shall remain operative till 31.10.2022 or until further orders, whichever is earlier.

13. Petition No. 10/SM/2022 is disposed of in terms of the above.

sd/-	sd/-	sd/-
(P. K. Singh)	**(Arun Goyal)**	**(I. S. Jha)**
Member	**Member**	**Member**