

ALL INDIA POWER ENGINEERS FEDERATION



(REGISTERED UNDER SOCIETIES ACT XXI of 1860), Regd. No. 24085/93

REGD HEAD OFFICE B-1A/45A, Janakpuri, New-Delhi-10058

Corres. Address of CHAIRMAN-Hydel Field Hostel, 17 Rana Pratap Marg Lucknow-226001

M: 09415006225 Phone : 0522-4107706(Off), FAX:0522-2205417/0522-4079628

Email : ersdubey@yahoo.com/: ersdubeylko@gmail.com&chairmanaipef@gmail.com

No. 68 - 2021/ Coal Crisis

27 - 10 – 2021

Sri R K Singh
Minister of Power
Govt. of India
New Delhi.

Sub : Response of AIPEF to Ministry of Power letter dated 20/10/2021.

Respected Sir,

With reference to the Ministry of Power advisory on coal based generating stations, dated 20/10/2021, All India Power Engineers Federation (AIPEF) submits its comments / response as under.

1. There is an extreme shortage of coal since CIL production of coal is far less than requirement. The shortage is so extreme that CIL and Govt. of India / Ministry of Power are functioning in fire fighting mode on a 24 hours basis, and the priority is to rush coal to stations which are on the verge of shutdown due to fuel getting finished or with NIL coal stock. The dispatch of coal by railway is therefore from one crisis location to another.
2. The advice to maintain coal stocks is valid and capable of being implemented only if the coal production is substantially higher than the requirement of thermal stations. Coal stations cannot be expected to build up their stock when CIL/Railways/Ministry of Power is operating to avoid closure of units / stations whose stock position is NIL.
3. There are instances when specific stations did act to build up coal stocks about 30 days before the start of summer, in May 2021. However, after this the CIL and Railways stopped sending coal rakes to the plant on the ground it already has sufficient coal. As a result, the coal stock gradually reduced to NIL even though there was no lapse or fault of the thermal plant managers.

4. Blending of coal with imported coal @ 15%

4.1 It is well known that due to global increase of coal prices, the cost of imported coal has increased. The data of coal price parameters with respect to coal import from Indonesia and from south Africa is attached, and may be seen. The landed cost of South African Coal is Rs. 22205 per tonne with coal of calorific value 5500 (as received). In case of Indonesian coal the landed price is Rs. 21720 per tonne, with GAR 5000 k cal per kg.

For a load centre thermal stations say in Punjab, the landed cost of Indian coal is Rs. 5150 per tonne with GCV 4000.

The coal cost per KWH is estimated as under.

a) 100% indigenous coal, with station heat rate 2500 k cal per kWh

$$\begin{aligned}\text{Coal consumption per kwh} &= 2500/4000 \text{ kg.} \\ \text{Cost} &= \text{Rs } 5.15 \times 2500/4000 \\ &= \text{Rs. } 3.22/\text{unit}\end{aligned}$$

b) With Blending @ 15%

$$\begin{aligned}\text{K Cal from Indian Coal} &= 2125 \\ \text{K Cal from Imported Coal} &= 375 \\ \text{Cost of Indian Coal} &= 2125 \times 5.5/4000\end{aligned}$$

Rs. 2.74 / unit

$$\begin{aligned}\text{Cost of Imported Coal} &= \text{Rs } 375 \times 21.720/5000 \\ &= \text{Rs. } 1.63 / \text{unit} \\ \text{Cost of blending coal per unit} &= \text{Rs. } 4.37/\text{unit}\end{aligned}$$

It is seen that with 15% blending the coal cost is Rs. 4.37 per unit as against Rs. 3.22 per unit with Zero blending. Hence, 15% blending results in an increase of Rs 1.15 per unit in the fuel cost of the station.

5. Illustrative case of UMPP CGPL – Tata Mundra

As per the Supreme Court judgment of 11/04/2017 (Energy Watchdog case) the station should supply the energy at the bid rate, and any increase on account of imported coal is not allowed.

The station is required to supply the power to the procurers.

Gujarat	Maharashtra	Haryana	Punjab	Rajasthan
47.5 %	20 %	10 %	12.5 %	10 %

Total contracted capacity 3800 MW the actual figures of declared capacity for April to September 2021 are as under, for CGPL UMPP.

Generation data CGPL Mundra

Month	Average MW	PLF%
April 2021	759	19.96
May 2021	694	18.28
June 2021	874	23.01
July 2021	2022	53.22
August 2021	782	20.57
September 2021	352	9.27

(Contracted capacity 3800 MW)

5.1 The UMPP was envisaged as a coastal thermal power station with imported coal and bidding under Section 63.

The bidding and PPA were supervised by the Ministry of Power and this station should operate as per Ministry of Power instructions. The advisory of 20/10/2021 applies to UMPP Tata Mundra. However, this station has not operated beyond 53% PLF in 2021, and from other months April-June and August-September 2021 it has operated at near 20% PLF only. In September 2021 PLF was 9.27% and the station remained shut down from 18/09/2021 onwards.

6. Illustrative case of Kawai TPS 2x660 MW (contracted power 1200 MW)

6.1 During the process of bidding, Kawai TPS has stated that it is a station based on Indian coal. It was the responsibility of the station to arrange the Indian (domestic) coal for the station.

6.2 During October 2021 (1 to 24) The Kawai thermal station operated to generate 341.53 MU with an average MW of 593.

Hence, this station of 2x660 MW and contracted capacity 2x600 MW actually operated at less than 50% i.e. at average 593 MW during period 1-24 October 2021.

7. Conclusions:

The following conclusion may be considered by Ministry of Power / Govt. of India

a) The extreme crisis of coal shortage during 2021 must not be allowed to repeat in future, and CIL must take steps to increase coal production to ensure that the crisis does not repeat next /subsequent year.

b) Import of coal at 21000 Rs. /Tonne or Rs. 22000/Tonne is not justified as cost is prohibitive and energy cost escalate by about Rs. 1.15 per unit. State Discoms which are already in crisis / financial difficulty can not afford this price increase.

c) IPPs which have contracts of 25 years at fixed rates for each year must be directed to ensure supply to procurers as per their share and as per the bid rate contained in PPA. Since the Supreme Court has disallowed the pass through of coal increases the PPA bid rate must be followed / Implemented.

d) As per Tariff Policy 2016 the thermal power stations are required to be ready to dispatch at all times to meet power demand of the grid. This provision of policy must be applied and implemented on priority to CGPL Mundra (Tata) and to Kawai (Adani) thermal stations.

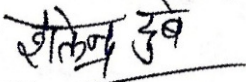
State thermal stations can be expected to be ready for dispatch at all times only if there is adequate stock of coal. This provision cannot be implemented if stock is Zero.

e) Govt. of India / Ministry of Power must draw up an action plan so that renewable capacity addition from solar, wind sources is ramped up so that the crisis of 2021 (thermal coal shortage) can be mitigated to that extent.

f) The Ministry of Power must direct CGPL Mundra to arrange more fuel to increase PLF of CGPL UMPP Mundra from 20% to nearly 100%.

Thank You with Regards.

Sincerely Yours



Shailendra Dubey

Chairman

Copy

1. Cabinet Secretary, Govt of India, New Delhi.
2. NITI Aayog, New Delhi.
3. Secretary Power, Govt. of India, New Delhi
4. Chairman /CEA, New Delhi