

No.FU-35/2020-FSC
Government of India/भारत सरकार
Ministry of Power/विद्युत मंत्रालय

Shram Shakti Bhawan, Rafi Marg
New Delhi dated 30.01.2023

OFFICE MEMORANDUM

Subject: Coal linkage to plants based on washery rejects - reg

The undersigned is directed to refer to this Ministry's OM No. FU-9/2009-IPC dated 18.03.2011 (**copy enclosed**) regarding amendment to coal linkage policy for 12th Plan Power Projects and to convey that representations have been received in this Ministry regarding revision in assessment of coal required for Thermal Power Plants (TPPs), based on washery rejects.

2. The matter has been examined in consultation with Central Electricity Authority (CEA).

3. Ministry of Power vide OM dated 18.03.2011 had fixed the eligible quantity of coal linkage for washery rejects based plants to be 22% of the nominal requirement. In the referred OM, it has been stipulated that the ratio of coal and rejects of 22:78 with F-grade coal would be considered for projects, having a unit size 50 MW and above. F-grade coal of that time corresponds to the Gross Calorific Value (GCV) of 3800 Kcal/Kg and the ratio was calculated based on the minimum GCV at which the CFBC boiler can operate.

4. CEA has informed that as per the information furnished by the washery reject based plants, the performance / design coal of the CFBC boiler is in the range of 2374 Kcal/Kg to 2900 Kcal/Kg. As rejects which generally have GCV lower than 2000 Kcal/Kg, coal as a supplementary fuel is required to blend in the rejects for the optimum performance of the CFBC boiler.

5. For further analysis, the quality of washery rejects generated during washing of coal is required which is very subjective in nature. As per the Ministry of Coal's (MoC) letter no. CCT-13011/3/2007-CA-I(Vol-III) dated 27.05.2021, coal washery rejects can be categorized into High Calorific Value (HCV) coal washery rejects and Low Calorific Value (LCV) coal washery rejects. HCV are rejects with GCV higher than 1500 Kcal/Kg and LCV are rejects with GCV lower than 1500 Kcal/Kg.

6. It is pertinent to mention here that, for the reference, CEA recommends the coal quantity for auction under SHAKTI Policy in G13 grade only. The recommended quantity can be proportionally adjusted to any grade of coal as required. GCV of the G13 grade of coal varies from 3400 to 3700 Kcal/kg.

7. In view of the above points, the ratio of coal (in G13 grade) and rejects for the washery reject based plants are calculated as below:

Average GCV of coal in G13 grade = 3550 Kcal/kg
GCV of reject = 1500 Kcal/Kg

Let the proportion of coal in blended coal be x.

The average value of the performance/design coal for washery reject based power plants is 2637 Kcal/kg

$$\begin{aligned}3550(x) + 1500(1-x) &= 2637 \\(3550-1500)x &= 2637-1500 \\x &= 1137/2050 \\x &= 55.46\end{aligned}$$

Therefore, for the optimum performance of the CFBC boiler, the ratio of coal (in G13 grade) and rejects that can be used in the reject based plants is 55:45. Similarly, for G12 grade of coal, the ratio would be 48:52 and for G11 grade of coal, the ratio would be 43:57.


8. Also, after Ministry of Environment, Forest and Climate Change's (MoEF&CC) Notification dated 21.05.2020 wherein use of unwashed coal (raw coal) by all power plants is allowed irrespective of their location from coal source. Therefore, the availability of washery rejects has reduced significantly. As a result, the plants based on washery rejects are facing difficulty in securing fuel. Further, CEA has been restricting the coal requirement of washery reject based power plants at 22% for bidding under auctions for various provisions of SHAKTI Policy, on the basis of MoP's OM dated 18.03.2011.

9. Keeping in view the above, Ministry of Power recommends that for washery reject based power plants, coal linkage may be given as under:

(i)	Plants based on washery rejects	The ratio of coal and rejects of 55:45 with G13 grade coal may be considered for projects, having a unit size 50 MW and above
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10. This issues with the approval of Hon'ble Minister of Power & NRE.

Encl: As above


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To

1. Secretary, Ministry of Coal
2. Chairman, CIL

Copy to:

1. Chairman, CEA
2. NIC for uploading on MoP website