



No. 11/86/2017-Th.II
Government of India
Ministry of Power

Shram Shakti Bhawan, Rafi Marg,
New Delhi, dated the 07th April, 2022

To,

1. Principal Secretary /Secretary in charge of Energy /Power Departments, All states/UTs.
2. Chairman, CEA
3. CMDs of all CGSs/State Gencos/IPPs

Subject: Clarification regarding Applicability of Policy dated 8th October 2021 on Fluidized Bed Boilers

Sir/Madam,

The undersigned is directed to refer this Ministry's "Revised Policy for Biomass Utilization for Power Generation through Co-firing in Coal based Power Plants" dated 08.10.2021 (copy enclosed) and to state that this Ministry has examined various references/queries in connection with the subject mentioned above.

2. In this regard, it is to clarify that the revised Ministry of Power (MoP) policy dated 8th October 2021 is further modification of the MoP policy dated 17th November 2017. MoP vide its policy dated 17-11-2017 on biomass utilization for power generation had advised that all fluidized bed and pulverized coal units (coal based thermal power plants) except those having ball and tube mill, of power generation utilities, public or private, located in India, to use 5-10% blend of biomass pellets made, primarily, of agro residue along with coal after assessing the technical feasibility, viz. safety aspect etc.

3. In the revised policy, co-firing of the suitable biomass pellets in the range of 5% to 7% has been made mandatory in all coal based power plants

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including ball & tube mills depending upon certain conditions.

4. Accordingly, it is clarified that the clause 3(i) of "Revised Policy for Biomass Utilization for Power Generation through Co-firing in Coal based Power Plants" dated 08.10.2021 is also applicable to Circulating Fluidized Bed Combustion (CFBC) boilers.

5. Mission Directorate on Sustainable Agrarian Mission on use of Agro Residue in Thermal Power Plants (SAMARTH) has been requested to issue separate Standard Operating Procedure (SOP) for the Fluidized bed boilers based TPPs.

6. This issues with the approval of Secretary (Power).

Encl: As above

Yours Faithfully



Kumar Saurabh
Deputy Director (Thermal)
Ministry of Power
Tele: 23063746

Copy to:

- (i) PS to Hon'ble Minister,
- (ii) PS to Hon'ble MoS for Power,
- (iii) Sr. PPS to Secretary (Power),
- (iv) PPS to AS(SKGR), PPS to AS&FA, PPS to AS(VKD)
- (v) All Joint Secretaries/EA/Chief Engineer, Ministry of Power
- (vi) In charge, NIC, Ministry of Power - with a request to upload this document on the website of MoP.



No. 11/86/2017-Th.II
Government of India
Ministry of Power

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Shram Shakti Bhawan, Rafi Marg,
New Delhi, dated the 8th October, 2021

To,

1. Principal Secretary/Secretary in charge of Energy/Power
Departments, All States/UTs
2. Chairman, CEA
3. CMDs of all CGSs

Subject: Revised Policy for Biomass Utilisation for Power Generation through Co-firing in Coal based Power Plants


Sir/Madam,

The undersigned is directed to refer to this Ministry's "Policy for Biomass Utilisation for Power Generation through Co-firing in Pulverised Coal Fired Boilers" issued in November, 2017

2. In order to further promote use of biomass pellets in coal based thermal power plants, the above Policy is further modified. A copy of "Revised Policy for Biomass Utilisation for Power Generation through Co-firing in Coal based Power Plants" is enclosed for information and necessary action please.

Yours faithfully

Encls: As Above


Kumar Saurabh
Deputy Director(Thermal)
Ministry of Power

Copy to:

- (i) PS to Hon'ble Minister,
- (ii) PS to Hon'ble MoS for Power,
- (iii) Sr. PPS to Secretary(Power),
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- (v) All Joint Secretaries/EA/Chief Engineer, Ministry of Power
- (vi) Incharge, NIC, Ministry of Power - with a request to upload this document on the website of MoP.

REVISED POLICY OF MINISTRY OF POWER FOR BIOMASS UTILIZATION FOR POWER GENERATION THROUGH CO-FIRING IN COAL BASED POWER PLANTS

1. The current availability of biomass in India is estimated at about 750 million metric tonnes per year. The estimated surplus biomass availability is at about 230 million metric tonnes per annum covering agricultural residues.

2. Ministry of Power (MoP) vide its policy dated 17-11-2017 on biomass utilization for power generation had advised that all fluidized bed and pulverized coal units (coal based thermal power plants) except those having ball and tube mill, of power generation utilities, public or private, located in India, to use 5-10% blend of biomass pellets made, primarily, of agro residue along with coal after assessing the technical feasibility, viz. safety aspect etc.

3. In order to further promote use of biomass pellets in coal based thermal power plants, the above Policy is further modified. The modifications in the above Policy are as under:

(i). All coal based thermal power plants of power generation utilities with **bowl mill**, shall on annual basis mandatorily use 5 percent blend of biomass pellets made, primarily, of agro residue along with coal with effect from one year of the date of issue of this guideline. The obligation shall increase to 7 percent with effect from two years after the date of issue of this order and thereafter.

(ii). All coal based thermal power plants of power generation utilities with **ball & race mill**, shall on annual basis mandatorily use 5 % blend of biomass pellets (torrefied only) made, primarily, of agro residue along with coal. This is to be complied within one year starting from this order. Two years from the date of issue of this order and thereafter the obligation will increase to 7 percent.

(iii). All coal based thermal power plants of power generation utilities with **ball & tube mills**, shall on annual basis mandatorily use 5 % blend of torrefied biomass pellets with volatile content below 22%, primarily made of agro residue along with coal. This is to be complied within one year.

(iv). Generating Utilities having certain units under Reserve Shutdown or not being despatched due to MOD (Merit Order Despatch) consideration would ensure to increase the percentage of co-firing up to 10 % in their other operating units/ plants (5 % in plants having ball and tube mills).

(v). Any power plants seeking exemptions / relaxation from co-firing may be considered on case to case basis, based on recommendations of CEA. A Committee headed by Chief Engineer (TE&TD), CEA, including representatives from NTPC, BHEL, CPRI, Ministry of Agriculture and Mission

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Directorate shall examine the request of power plants for their exemption/relaxation from mandatory co-firing of biomass, as mentioned at para (i) to (iv) above.

(vi). The policy for co-firing of biomass would be in force for 25 years or till the useful life of the thermal power plant whichever is earlier. The minimum percentage of biomass for co-firing will be reviewed from time to time.

(vii) The minimum contract period for procurement of biomass pellets by generating utilities shall be for 7 years so as to avoid delay in awarding contracts by generating companies every year and also to build up long term supply chain. There may be provision of firm price of biomass pellets for the first year of the contract and yearly rate variation from second year onwards where rates can vary as per terms and conditions of the contract. In order to enable its implementation, a model RfP and contract shall be issued by MOP by 15.11.2021 for adhering to by all generating utilities. However, the ongoing process of contracting for biomass co-firing by generating utilities shall not be affected till issue of Model Contract.

(viii). Provisions related to tariff determination and scheduling shall be as given below:

- a. For projects set up under Section 62 of the Electricity Act 2003, the increase in cost due to co-firing of biomass pellets shall be pass through in Energy Charge Rate (ECR).
- b. For projects set up under Section 63 of the Electricity Act 2003, the increase in ECR due to biomass co-firing can be claimed under Change in Law provisions.
- c. Such additional impact on ECR shall not be considered in deciding Merit Order Despatch (MOD) of the power plant.
- d. Obligated Entities such as Discoms can meet their Renewable Purchase Obligations (RPO) by buying such generation of co-firing.