

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.4292
TO BE ANSWERED ON 18.07.2019**

USE OF FARM STUBBLE IN POWER PLANTS

4292. SHRI CHANDRA SEKHAR SAHU:

**Will the Minister of POWER
be pleased to state:**

- (a) whether the Government has implemented the mixing of farm stubble pellets up to 10% of the total fuel in a power plant and if so, the details thereof;**
- (b) whether mixing of farm stubble pellets will affect the efficiency in terms of gross calorific value and if so, the details thereof;**
- (c) whether the NTPC has completed test runs and if so, the details thereof;**
- (d) whether the NTPC has planned to expand scheme of mixing of farm stubble pellets gradually in its all plants and if so, the details thereof;**
- (e) whether the use of farm stubble in power plants will increase the power generation cost; and**
- (f) if so, the details thereof?**

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) : Central Electricity Authority (CEA) has issued an advisory in Nov 2017 to all the coal based power plants to use 5-10% of agro residue based pellets along with coal. CEA has also issued technical specification for pellets/ torrefied pellets. Accordingly, test run was conducted by NTPC for biomass co-firing in its Dadri plant with 100 Metric tonne of biomass pellets after making suitable modification in one unit of 200 MW.

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(b) : Prolonged biomass co-firing is required to ascertain the effect of mixing of farm stubble pellets on efficiency.

(c) : Test run was conducted in Dadri from September 2017 onwards with 100 Metric tonne of biomass pellets after making suitable modification in one unit of 200 MW. Now, NTPC is moving forward to start commercial scale biomass co-firing for which purchase order for 200 metric tonnes per day of pellets/ torrefied pellets has already been placed and part supply has begun.

(d) : To start biomass co-firing in majority of NTPC power plants including its JV at Jhajjar, NTPC had invited Expression of Interest (EOI) from entrepreneurs for supply of paddy straw and other agro residue based pellets/ torrefied pellets. About 109 parties have been enlisted through EOI. Bids will be invited soon from enlisted parties to supply pellets/torrefied pellets to NTPC power plants.

(e) & (f) : Use of farm stubble based pellets/torrefied pellets in power plants will increase the generation cost. The increase in variable charge of electricity shall depend upon difference of price between biomass and coal and thus it shall be different for different plants (price of agro residue based biomass pellets/ torrefied biomass pellets/briquettes will be discovered through tender). In addition to this, there shall be a slight increase in fixed charge due to additional capital expenditure required for biomass material handling infrastructure.
