

**GOVERNMENT OF INDIA
POWER
LOK SABHA**

UNSTARRED QUESTION NO:4623
ANSWERED ON:18.12.2009
THERMAL POWER PLANTS
Singh Shri Rakesh

Will the Minister of POWER be pleased to state:

- (a) whether domestic coal used for power generation provides less temperature as compared to imported coal;
- (b) if so, the comparative difference between the two in this regard;
- (c) whether the thermal power plants set up to withstand the temperature generated from domestic coal would be capable to withstand the temperature generated by imported coal; and
- (d) if so, the details thereof?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF POWER(SHRI BHARATSINH SOLANKI)

(a) to (d): Imported coals generally have higher gross calorific value (heat produced in kcal by burning one kg of coal) as compared to the Indian coal and thus lesser quantity of imported coal is required for same levels of power generation. Generally speaking, Indian coals used for power generation have gross calorific value of 3500 to 4000 kcal/kg as against 4500 to 6000 kcal/kg for imported coals. The steam parameters (temperature and Pressure) required with both the coals are same which depend on design of boiler and steam turbine.

The boilers for thermal power stations are designed keeping in view a number of coal quality parameters like ash, moisture, gross calorific value, volatile matter, slagging characteristics etc. With very high difference in gross calorific value as compared to Indian coals, imported coals can generally not be used in thermal power stations designed for use of Indian coal as the boiler and auxiliaries are designed for indigenous coal. However, small quantities of imported coal can be used by blending with the domestic coal. The maximum blend quantity would depend on characteristics of imported and Indian coal and is determined by combustion studies. Many Indian Thermal Power Stations are known to be using a blend of 10-15% imported coal with Indian coal.