

**GOVERNMENT OF INDIA  
ATOMIC ENERGY  
LOK SABHA**

UNSTARRED QUESTION NO:812  
ANSWERED ON:16.07.2014  
FAST BREEDER REACTOR  
Roy Prof. Saugata

**Will the Minister of ATOMIC ENERGY be pleased to state:**

- (a) the progress made in the commissioning of the Fast Breeder Reactor at Kalpakkam in Tamil Nadu;
- (b) the reasons for delay if any, in commissioning the same; and
- (c) the extent to which the Fast Breeder Reactor is likely to help the nuclear power generation capacity in the country?

**Answer**

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND PRIME MINISTER'S OFFICE (DR. JITENDRA SINGH):

- (a) The 500 MWe Prototype Fast Breeder Reactor (PFBR) being constructed at Kalpakkam is in advanced stage of construction and commissioning. Erection of all major components of the reactor has been completed. Commissioning of auxiliary systems such as water system, ventilation, electrical and gas systems have been completed. Next stage in commissioning is preheating and filling of sodium into secondary and primary systems. The project has achieved overall physical progress of 97.6% as on 30.06.2014.
- (b) The approved date for criticality of PFBR is in September- 2014. However, being first of its kind reactor being built completely indigenously in our country, some delay on account of the requirement of rigorous testing and qualification of all major equipment and sub-systems is anticipated.
- (c) Fast Breeder Reactors (FBRs) help multifold enhancement in the nuclear power generation capacity in the country not only by not requiring mined uranium for their fuel, but also producing surplus plutonium (a man made nuclear fuel material produced in nuclear reactors) that can meet lifetime fuel requirements of these reactors and also provide fuel for initial load of additional FBRs. FBRs provide the essential pathway to enable full deployment of our vast thorium resources in the third stage of our nuclear power programme, to meet substantial part of the Indian energy needs for several centuries.