GOVERNMENT OF INDIA DEPARTMENT OF ATOMIC ENERGY LOK SABHA UNSTARRED QUESTION NO. 2171 TO BE ANSWERED ON 15.03.2017

TARGETS FOR NUCLEAR POWER PRODUCTION

2171. SHRI KALIKESH N. SINGH DEO: SHRI BHARTRUHARI MAHTAB:

Will the PRIME MINISTER be pleased to state:

- (a) whether the Government, in 2014, had set a target of tripling the then existing nuclear power capacity by 2024;
- (b) if so, the details thereof along with the additional nuclear power generated across the country since 2014 along with the share of nuclear power in the total electricity generation of the country as on date;
- (c) whether there is a gap between nuclear power capacity and generation in some of the Nuclear Plants in the country and if so, the details thereof, nuclear plant-wise and the reasons therefor along with the total capacity and generation from nuclear plants of the country, nuclear plant-wise;
- (d) the other steps taken/being taken by the Government to increase the share of nuclear power in total electricity generated across the country; and
- (e) whether the Government proposes to promote domestic manufacturing of components of nuclear power plant and if so, the details thereof along with the steps taken by the Government in this regard?

ANSWER

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

(a)&(b)The Government, in July 2014, had announced tripling of the then existing nuclear power capacity of 4780 MW in the next ten years. With the commencement of commercial operation of Kudankulam Nuclear Power Project (KKNPP), Unit-1 (1000 MW) in December 2014, the installed nuclear power capacity in the country has reached 5780 MW. In addition, KKNPP, Unit-2 (1000 MW) has been connected to the grid for the first time in August 2016 and is presently generating infirm power. On commencement of commercial operation of KKNPP-2, the installed nuclear power capacity in the country will reach to 6780 MW. Further, four reactors with a total capacity of 2800 MW are under construction and four more reactors with a total capacity of 3400 MW have been accorded sanction by the Government. Bharatiya Nabhikiya Vidyut Nigam Limited (BHAVINI), a public sector company under Department of Atomic Energy (DAE) is constructing one 500 MWe capacity Prototype Fast Breeder Reactor (PFBR) at Kalpakkam, Tamil Nadu. PFBR is expected to be fully functional by October 2017. On progressive completion of these projects, the installed nuclear capacity will reach 13480 MW. More reactors, based on both indigenous technologies and with foreign cooperation, are also planned in future.

The present share of nuclear energy in the country is about 3.2% in the current financial year 2016-17 (up to Feb-2017).

- (c) The nuclear power plants in the country are operating close to their rated capacity.
- (d) The share of nuclear power in total electricity generation is planned to be progressively increased by addition of nuclear power capacity on the basis of a large expansion programme based on both indigenous technology and with foreign technical cooperation. In this regard, the government has taken several enabling steps to increase the nuclear power capacity and to provide adequate quantity of fuel. These include according of "In principle" approval of sites for locating future reactors based both on indigenous technologies and with foreign technical cooperation; entering into enabling agreements with foreign countries for nuclear cooperation including supply of fuel; amendment of the Atomic Energy Act to enable Joint Ventures of Public Sector Companies to set up nuclear power projects and creation of India Nuclear Insurance Pool (INIP) for resolving issues arising out of Civil Liability for Nuclear Damage (CLND) Act, 2010.
- (e) The components for indigenous reactors are already being manufactured to exacting standards by the Indian industry. In respect of components / equipment of reactors to be set up with foreign technical cooperation, the government is facilitating foreign manufacturers and Indian industry to reach agreements to enable them to manufacture these equipments in the country.
