

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
UNSTARRED QUESTION NO.5689
TO BE ANSWERED ON 06.04.2022

DEVELOPMENT OF NUCLEAR SECTOR

5689. SHRI E.T. MOHAMMED BASHEER:

Will the PRIME MINISTER be pleased to state:

- (a) whether any plan of action is under consideration of the Government for the development of nuclear sector; and
- (b) if so, the details thereof?

ANSWER

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

(a)to(b). Yes, Sir. Nuclear energy is a clean, environment friendly base load source of power available 24X7. It also has huge potential which can ensure long term energy security of the country in a sustainable manner. Therefore nuclear energy is an important component of the country's energy mix and is being pursued along with other sources of energy in an optimal manner. In pursuance of the above the details of the nuclear energy programme as follows.

There are presently 22 reactors with a total capacity of 6780 MW in operation and one reactor, KAPP-3 (700 MW) has been connected to the grid on January 10, 2021.

In addition, there are 10 reactors (Kudankulam Nuclear Power Plant (KKNPP) 3&4, KKNPP 5&6 - 4x1000 =4000 MW, 5 indigenous PHWR of 700 MW - 3500 MW, 500 MW PFBR) which are various stages of construction, which will add a total capacity of 8000 MW.

The Government has accorded administrative approval and financial sanction for construction of 10 indigenous 700 MW Pressurized Heavy Water Reactors (PHWRs) to be set up in fleet mode. On progressive completion of the projects under construction and accorded sanction, the

nuclear capacity is expected to reach 22480 MW by 2031. The Government has also accorded 'In-Principle' approval for five new sites for locating nuclear power plants in future.

Further in order to produce fuel for all indigenous PHWRs, Fuel fabrication capacity is augmented in the facilities available at Nuclear Fuel Complex (NFC), Hyderabad and the upcoming facilities at Nuclear Fuel Complex (NFC), Kota, Rajasthan in order to match with the requirement of existing PHWRs and upcoming PHWRs. The requirement of uranium for domestic safeguarded nuclear reactors are met by indigenously mined and produced uranium. However reactors which are safeguard are fuelled by imported uranium.

Given the strategic importance of Uranium, its imports are highly dependent on Inter-Governmental relations. To ensure uninterrupted supply of fuel to all the operating and proposed Safeguarded (SG) reactors, it is essential to procure nuclear fuel raw materials from reliable sources to create sufficient stockpile. Natural Uranium Ore Concentrate (UOC) is being procured from countries having Inter Governmental Agreement for supply of nuclear fuel. Efforts have been made to procure nuclear fuel from Russia, Kazakhstan, Uzbekistan, Canada.
