GOVERNMENT OF INDIA DEPARTMENT OF ATOMIC ENERGY LOK SABHA UNSTARRED QUESTION No. 3355 TO BE ANSWERED ON 23.03.2022

DEMAND AND SUPPLY OF URANIUM

3355. SHRI RAHUL KASWAN:

Will the PRIME MINISTER be pleased to state:

- (a) whether the nuclear power plants of the country are facing fuel shortage due to gap between demand and supply of natural uranium;
- (b) if so, the details thereof, plant-wise;
- (c) the details of installed capacity of each of these plants along with the actual generation of electricity during the last three years, plant-wise; and
- (d) the concrete steps taken by the Government to ensure continuous supply of fuel to each of such nuclear power plants in the country?

ANSWER

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

- (a) No, Sir.
- (b) Does not arise in view (a) above.
- (c) The details are given in Annexure.
- (d) The government has made arrangements to provide adequate quantity of fuel from both domestic and imported sources to ensure operation of nuclear power reactors at their rated power.

Uranium fuel requirement for the reactors which are not covered under the International Atomic Energy Agency (IAEA) safeguards is adequately met by Uranium Corporation of India Limited (UCIL), aPublic Sector Enterprise under the Department of Atomic Energy (DAE). Time to time, projects which include capacity expansion of some of existing units as well as for establishing new projects in various parts of the country, are planned for maintaining sustained supply.

Regarding fuel supply for Pressurized Heavy Water Reactors (PHWRs) which are under IAEA safeguards, a strategic reserve of imported natural uranium is maintained for enabling uninterrupted supply of fuel. Fuel for Boiling Water Reactors (BWRs) and water-water energetic reactor (VVERs) is met from the imports from Russia.

State	Location	Unit	Capacity (MW)	Commercial Generation (in Million Units, MU) ^{\$}		
				2018-19	2019-20	2020-21
Maharashtra	Tarapur	TAPS-1	160	1322	954	&
		TAPS-2	160	937	1234	341 ^{&}
		TAPS-3	540	4354	3827	3877
		TAPS-4	540	4154	4522	3669
Rajasthan	Rawatbhata	RAPS-1	100	Q	@	@
		RAPS-2	200	959	1410	429
		RAPS-3	220	1550	1705	1699
		RAPS-4	220	1820	1688	1816
		RAPS-5	220	1720	1946	1427
		RAPS-6	220	1986	1703	2015
Uttar Pradesh	Narora	NAPS-1	220	1498	1900	1738
		NAPS-2	220	1664	1891	1547
Gujarat	Kakrapar	KAPS-1	220	#	1467	1817
		KAPS-2	220	1000	1962	1896
Karnataka	Kaiga	KGS-1	220	1600	1841	1903
		KGS-2	220	1939	1773	1592
		KGS-3	220	1662	1838	1635
		KGS-4	220	2016	1827	1964
Tamil Nadu	Kalpakkam	MAPS-1	220	&	&	&
		MAPS-2	220	1491	1843	1704
	Kudankulam	KKNPP-1	1000	2797	7115	5638
		KKNPP-2	1000	3345	4029	6323

^{\$} The generationfigures are rounded to nearest integer.

[®]RAPS-1 is under extended shutdown for techno- economic assessment

[#] KAPS-1&2 have been taken in project mode for Enmasse Coolant Channel Replacement (EMCCR) and Enmasse Feeder Replacement (EMFR) activities from August 01, 2016. KAPS-2 was synchronized to grid on September 22, 2018 and KAPS-1 on May 24, 2019 upon completion of these activities.

[&]MAPS-1, TAPS-1 & TAPS-2 were taken in project mode from 01-04-2018, 01-04-2020 & 01-08-2020 respectively.