GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO. 3367
TO BE ANSWERED ON 25.03.2021

SUPPLY OF FUEL AND ITS SHORTAGE FOR ATOMIC POWER PLANTS

3367 DR. FAUZIA KHAN:

Will the PRIME MINISTER be pleased to state:

(a) whether the atomic power plants in the country are facing a shortage of fuel due to mismatch between demand and supply of natural Uranium;

(b) if so, the details thereof, plant-wise;

(c) the installed capacity of each of these plants and the actual quantity of electricity generated during the last ten years, plant-wise; and

(d) the concrete steps taken by Government to ensure a continuous supply of fuel to each of these atomic 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. Fuel in the required quantity is being provided to nuclear power plants to enable them to operate at their rated capacity.

(b) Does not arise in view of (a) above.

(c) The details are given in Annexure.

(d) The indigenous natural uranium ore concentrate produced by Uranium Corporation of India Limited (UCIL) is adequate for supplying fuel to all the operating Pressurized Heavy Water Reactors (PHWRs), Madras Atomic Power Station (MAPS)-1&2, Kaiga Generating Station (KGS)-1&2, Kaiga Generating Station (KGS) -3&4 and Tarapur Atomic Power Station (TAPS)-3&4 which are under domestic safeguards. UCIL has taken the expansion projects to augment the indigenous uranium production. Consequent on the opening up of the civil nuclear cooperation, Department of Atomic Energy (DAE) has been exploring arrangements with friendly countries having Inter-Governmental Agreements (IGA) for sourcing natural Uranium fuel for the PHWRs placed under International Atomic Energy Agency (IAEA) safeguards, in a manner conducive to stability and security of fuel supply in the medium and long terms. A strategic reserve of natural uranium is being maintained in order to have uninterrupted supply of fuel to the reactors under IAEA safeguards. Towards this long term contractual agreements were entered for import of natural uranium with Canada, Kazakhstan, Russia and Uzbekistan. Government of India has also entered into an Agreement with Government of Russian Federation for supply of fuel for Russian Reactors at Kudankulam Nuclear Power Project (KKNPP) throughout the operation period of power units.

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Annexure

Unit	Capacity (MW)	Electricity Generation[$] (Million Units)									
		2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
TAPS-1	160	1142	1371	577	1322	718	786	1236	174	1322	954
TAPS-2	160	1273	1337	1007	806	1297	500	935	1001	937	1234
TAPS-3	540	3582	4325	4373	3739	4545	4530	4159	3680	4354	3827
TAPS-4	540	3124	2781	3866	4017	3713	4573	4530	2013	4154	4522
RAPS-1[@]	100	--	--	--	--	--	--	--	--	--	--
RAPS-2	200	1720	1821	1584	1688	1282	1226	1106	1555	959	1410
RAPS-3	220	1564	1937	1757	1946	1720	1845	1618	1877	1550	1705
RAPS-4	220	1807	1645	1926	1772	1995	1668	1936	1656	1820	1688
RAPS-5	220	1753	1974	1760	2041	1628	1950	1715	1974	1720	1946
RAPS-6	220	1060	1764	1819	1787	1109	1773	1096	1543	1986	1703
MAPS-1	220	1260	1240	1485	1354	1318	1861	1465	1194	--	--
MAPS-2	220	979	1276	1257	761	1299	1349	1739	1781	1491	1843
NAPS-1	220	1228	1047	1226	1490	1341	1803	1655	1836	1498	1900
NAPS-2	220	658	937	1315	1214	1550	1630	1724	1800	1664	1891
KAPS-1	220	370	1919	1832	1862	1943	1608	--	--	--	1467
KAPS-2	220	1077	1868	1639	1891	1586	421	--	--	1000	1962
KGS-1	220	1259	1270	1464	1587	1695	1918	1742	1927	1600	1841
KGS-2	220	988	1381	1270	1740	1450	1834	1708	1885	1939	1773
KGS-3	220	1334	1231	1447	1759	1567	2078	1063	1898	1662	1838
KGS-4	220	294[#]	1330	1259	1454	1751	1842	2021	1824	2016	1827
KKNPP-1	1000	--	--	--	1106[#]	4330[#]	2261	6212	4437	2797	7115
KKNPP-2	1000	--	--	--	--	--	--	2340[#]	4281	3345	4029

[$] The generation figures are rounded to nearest integer.
[@] Unit under extended shutdown.
[#] Includes In-Firm Generation