GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 63
TO BE ANSWERED ON 24.02.2016

NUCLEAR POWER PLANTS

63. SHRI BHOLA SINGH:
SHRI SUNIL KUMAR MONDAL:
DR. SWAMI SAKSHIJI MAHARAJ:
SHRI JOSE K. MANI:
DR. KIRIT SOMAIYA:
SHRIMATI MEENAKASHI LEKHI:
SHRI P.K. BIJU:
SHRI INNOCENT:
SHRI S.P.MUDDAHANUME GOWDA:
SHRI ALOK SANJAR:
SHRI VISHNU DAYAL RAM:

Will the PRIME MINISTER be pleased to state:

(a) the present status of nuclear power plants in various States of the country, plant-wise;

(b) the number of them which are operational and produced atomic energy as per their capacity;

(c) the steps taken by the Government to increase the efficiency of the existing nuclear power plants;

(d) whether the Government has proposed to make any new nuclear power plant during the coming financial year and if so, the details thereof and the allocation made in this regard;

(e) the names of the countries with whom the Government has succeeded in entering a deal/agreement for nuclear power plants during the last two years and the current year; and

(f) the current method of disposal of nuclear waste and the proposed new technology in this regard?

ANSWER

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

(a) The installed nuclear power capacity in the country comprises twenty one reactors with a total capacity of 5780 MW. The plant wise details are given in Annexure.

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(b) Out of these twenty one reactors, one reactor Rajasthan Atomic Power Station-1 (RAPS) (100 MW) is under extended shutdown for techno-economic assessment on continuation of its operation. The remaining twenty reactors with a capacity of 5680 MW are presently operating.

(c) Efforts to enhance plant efficiency by Improvements in design, adoption of improved operational & maintenance practices, implementation of upgrades etc. are ongoing activities in Indian nuclear power plants. The Indian Pressurised Heavy Water Reactor (PHWR) technology which started with unit size of 220 MW was progressively scaled up to 540 MW and now to 700 MW resulting in economies of scale.

(d) The details of the nuclear power reactors planned for start of construction in the year 2016-17 are given below:

Nuclear Power Project	Location	Capacity (MW)	Sanctioned Cost (in Rs crore)	Allocation in BE 2016-17 (proposed) (Rs. in crore)	Status
Gorakhpur Anu Vidyut Pariyojana (GHAVP) Units – 1 to 2	Gorakhpur, Haryana	2x700	20594	836	Being prepared for launch.
Kudankulam Nuclear Power Plant (KKNPP) Unit – 3 & 4	Kudankulam, Tamil Nadu	2x1000	39849	3500	Excavation commenced

(e) India is engaged in detailed techno-commercial discussions with commercial enterprises of Russia, United States of America (USA) and France for setting up nuclear power plants in India based on Inter-Governmental Civil Nuclear Cooperation Agreements signed with these countries. These are on-going discussions at different stages of maturity.

(f) The waste generated by the nuclear power stations during the operation are of low and intermediate radioactivity level. These wastes are treated, concentrated, compacted, immobilised in solid materials like cement, bitumen, polymers etc. in high integrity steel containers and stored in specially constructed structures such as reinforced concrete trenches and tile holes, located at the site under monitoring.

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Annexure

Reactors in Operation

Location & State	Units	Capacity (MW)
Tarapur, Maharashtra	TAPS-1	160
	TAPS-2	160
	TAPS-3	540
	TAPS-4	540
Total		**1400**
Rawatbhata, Rajasthan	RAPS-1*	100*
	RAPS-2	200
	RAPS-3	220
	RAPS-4	220
	RAPS-5	220
	RAPS-6	220
Total		**1180**
Kalpakkam, Tamil Nadu	MAPS-1	220
	MAPS-2	220
Kudankulam, Tamil Nadu	KKNPP-1	1000
Total		**1440**
Narora, Uttar Pradesh	NAPS-1	220
	NAPS-2	220
Total		**440**
Kakrapar, Gujarat	KAPS-1	220
	KAPS-2	220
Total		**440**
Kaiga, Karnataka	KGS-1	220
	KGS-2	220
	KGS-3	220
	KGS-4	220
Total		**880**

** Under extended shutdown for techno-economic assessment for continued operation.*

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