

**GOVERNMENT OF INDIA
ATOMIC ENERGY
LOK SABHA**

STARRED QUESTION NO:89

ANSWERED ON:25.11.2009

NUCLEAR POWER PLANTS

Pandey Shri Ravindra Kumar;Singh Shri Jagada Nand

Will the Minister of ATOMIC ENERGY be pleased to state:

- (a) the details of the nuclear power plants presently functioning in the country alongwith their capacity and the actual quantity of power generated by each of these plants,
- (b) the details of resources of uranium in the country;
- (c) whether the Government proposes to set up new plants or expand the capacity of the existing nuclear power plants;
- (d) if so, the details thereof; and
- (e) the total quantity of electricity likely to be generated by each of these plants and the time by which these plants are likely to be commissioned?

Answer

THE MINISTER OF STATE FOR SCIENCE & TECHNOLOGY AND SCIENCES (INDEPENDENT CHARGES), PMO, PERSONNEL, PUBL GRIEVANCES AND PENSIONS AND PARLIAMENTARY AFFAIRS. (SHRI PRITHVIRAJ CHAVAN)

(a) to (e) A Statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO LOK SABHA STARRED QUESTION NO.89 FOR ANSWER ON 25-11-2009 BY SHRI JAGADANAND SINGH AND RAVINDRA KUMAR PANDEY REGARDING NUCLEAR POWER PLANTS

(a) The details of the nuclear power plants presently functioning in the country are as follows:-

Reactor Type	Present Capacity (MW)	Generation in 2009-10 (upto October, 2009) MUs
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TAPS-1 Tarapur, Maharashtra BWR 160 310

TAPS-2 Tarapur, Maharashtra BWR 160 660

TASP-3 Tarapur, Maharashtra PHWR 540 1572

TAPS-4 Tarapur, Maharashtra PHWR 540 1575

RAPS-1 Rawatbhata, Rajasthan PHWR 100 01

RAPS-2 Rawatbhata, Rajasthan PHWR	200	2622
RAPS-3 Rawatbhata, Rajasthan PHWR	220	728
RAPS-4 Rawatbhata, Rajasthan PHWR	220	591
MAPS-1 Kalpakkam PHWR	220	621
MAPS-2 Kalpakkam PHWR	220	670
NAPS-1 Narora, Uttar Pradesh PHWR	220	546
NAPS-2 Narora, Uttar Pradesh PHWR	220	03
KAPS-1 Kakrapar, Gujarat PHWR	220	04
KAPS-2 Kakrapar, Gujarat PHWR	220	647
KAIGA-1 Kaiga, Karnataka PHWR	220	687
KAIGA-2 Kaiga, Karnataka PHWR	220	669
KAIGA-3, Kaiga, Karnataka PHWR	220	629
Total	4120	10667

Notes:

1. RAPS-1 shutdown for techno-economic Assessment from 09-10-2004
2. RAPS-2 restarted operations from 01-09-2009 after undergoing Enmasse Feeder Replacement (EMFR)
3. NAPS-2 shutdown for Enmasse Coolant Channel Replacement (EMCCR) - 18-12-2007

4. KAPS-1 shutdown for EMCCR from 01-07-2008

(b) The total estimated uranium reserve in the country as on date is 1,37,365 tonnes of U3O8.

(c) Yes, Sir.

(d) & (e) The Government has accorded sanction for the construction of Kakrapar Atomic Power Project (KAPP)- Unit-3&4 (2 x 700 MWe) at Kakrapar, Gujarat and Rajasthan Atomic Power Project (RAPP) - Unit-7&8 (2 x 700 MWe) at Rawatbhata, Rajasthan in October, 2009. The work has commenced. These projects will be completed in 2015-16 and 2016-17 respectively, in addition, in-principle; approval has been accorded in October, 2009 for sites for more nuclear power plants. The details of the location / State/ Reactor type and capacity are as given below:-

Location	Reactor Type	Capacity (MW)
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Kumharia, Haryana	Indigenous PHWRs	4x700
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Bargi, Madhya Pradesh		2x700
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Kudankulam, Tamilnadu	LWRs based on	4x1000
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Jaitapur, Maharashtra	international	6x1650
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Chhayamithi Virdi, Gujarat	cooperation	6x1000
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Kowada, Andhra Pradesh		6x1000
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Haripur, West Bengal		6x1000
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Additional potential, 2 x 1000 MWe already under construction.

The projects at these locations are planned to be taken up progressively on a twin unit basis. The reactors based on foreign co-operation will be set up by Nuclear Power Corporation of India Limited (NPCIL), a Public Sector Undertaking of the Government of India. NPCIL have commenced discussions for finalizing the model of project execution/ division of scope and other commercial details with Russian Federation and France for setting up Light Water Reactors at Kudankulam, Tamil Nadu and Jaitapur, Maharashtra. The completion period of two units is about 6 years from the first pour of concrete. Initial discussions have also taken place with U.S. Vendors.