

**GOVERNMENT OF INDIA  
ATOMIC ENERGY  
LOK SABHA**

UNSTARRED QUESTION NO:1797  
ANSWERED ON:22.08.2012  
CAPACITY OF ATOMIC PLANTS  
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**Will the Minister of ATOMIC ENERGY be pleased to state:**

- (a) whether a number of atomic power plants are not working to their optimum capacity;
- (b) if so, the details thereof and reasons therefor, plant-wise;
- (c) the capacity utilization factor of each of the plant during the last three years and the current year, year-wise, plant-wise and the loss of power generation in terms of million units in these plants;
- (d) the effective steps taken/being taken by the Government in this regard;
- (e) whether some of the under construction Nuclear Power Plants are running behind the schedule and there is a possibility of time overrun in completion of these Nuclear Power Plants; and
- (f) if so, the details thereof and the reasons therefor along with the steps taken/ being taken by the Government in this regard?

**Answer**

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND PRIME MINISTER'S OFFICE (SHRI V. NARAYANASAMY) :

(a) Yes, Sir.

(b) Out of 20 nuclear power reactors with an installed capacity of 4780 MW, presently one reactor (Rajasthan Atomic Power Station (RAPS), Unit-1- 100 MW) is under extended shut down since October 2004 for techno-economic assessment for continued operation. Of the 19 reactors in operation, ten reactors with a capacity of 2840 MW comprising Kaiga Generating Station (KGS), Units 1 to 4 (4x220MW), Narora Atomic Power Station (NAPS), Units 1&2 (2x 220 MW), Madras Atomic Power Station (MAPS), Unit 1&2 (2x 220 MW) and Tarapur Atomic Power Station (TAPS), Unit 3&4 (2x540 MW) are fuelled by indigenous uranium, which is not available in the required quantity.

These are accordingly operated at comparatively lower power levels matching the fuel supply. The remaining 9 reactors which are under International Atomic Energy Agency (IAEA) safeguards use imported fuel and are operating at rated capacity.

(c) The details of Capacity factors (%) of each of the Units using domestic fuel during the last three years and the current year are as follows:-

Units	Capacity				
MW	2009-10	2010-11	2011-12	2012-13	upto July

TAPS-3	540	59	76	91	93
TAPS-4	540	58	66	59	85
MAPS-1	220	49	65	64	75
MAPS-2	220	58	51	66	67
NAPS-1	220	42	64	54	65
NAPS-2	220	-	61	48	61
KAIGA-1	220	52	65	66	77
KAIGA-2	220	58	51	71	61
KAIGA-3	220	58	69	64	77
KAIGA-4	220	-	78	69	72

Notes: NAPS-2 was shut down for Renovation & Modernization from 18.12.2007 to 06.09.2010.

Kaiga-4 commenced commercial operation on 20.01.2011.

In addition to the above units, Rajasthan Atomic Power Station( RAPS), Units 3&4 and Kakrapar Atomic power Station (KAPS), Unit 1&2 which are presently under IAEA safeguards, were also fuelled by indigenous uranium prior to their placement under IAEA

safeguards in 2010-11. The notional loss of generation, considering a possible capacity factor of 85% has been 7658, 4867, 4329 and 680 Million Units in 2009-10, 2010-11, 2011-12 and 2012-13 (upto July), respectively, as a result of mismatch in demand-supply of indigenous fuel.

(d) The Central Government has taken steps to augment supply of domestic uranium by opening of new mines and processing facilities. This has resulted in improvement in domestic uranium supply, which is evident in the increasing capacity factors of the units using domestic fuel supplies.

(e) Kudankulam Nuclear Power Plants, Units 1&2 (2x1000 MW) project was initially scheduled to be completed in Decemebr 2008. This however, got delayed because of various reasons including public unrest at the site. The first unit of this project is now scheduled to be operational by October 2012 and second unit is also closely following. Completion of the Prototype Fast Breeder Reactor (PFBR) has been rescheduled to September 2014.

(f) The Kudankulam project is being set up in technical cooperation with the Russian Federation. The project was initially delayed due to non sequential receipt of equipment from the Russian Federation and subsequently due to local protests impeding the work during September 2011 to March 19, 2012. The Government has taken steps to allay the legitimate apprehensions of the local people. The work has resumed round the clock since March 20, 2012.