

**GOVERNMENT OF INDIA
ATOMIC ENERGY
LOK SABHA**

UNSTARRED QUESTION NO:3330
ANSWERED ON:09.12.2009
NON-OPERATION OF NUCLEAR POWER PLANTS
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Will the Minister of ATOMIC ENERGY be pleased to state:

- (a) the details of the nuclear power plants in the country which are not operating as per their optimum capacity and the reasons therefor; plant-wise;
- (b) the capacity utilization factor of each of these plants and the total loss of generation of power from such plants in million units during the last three years and the current year; year-wise, plant-wise; and
- (c) the effective measures taken or being taken by the Government in this regard?

Answer

THE MINISTER OF STATE FOR SCIENCE & TECHNOLOGY AND EARTH SCIENCES (INDEPENDENT CHARGE), PMO, PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS AND PARLIAMENTARY AFFAIRS(SHRI PRITHVIRAJ CHAVAN)

(a) Out of seventeen (17) nuclear power reactors in the country, eleven (11) reactors are not operating at optimum capacity. These reactors use indigenous Uranium, which is not available in the required quantity. Three reactors use imported uranium and operate at maximum capacity. Three reactors are currently under long term maintenance and are shut down.

(b) The capacity utilization factor of these plants and the total loss of generation of power from such plants in million units during the last three years and the current year are given below:-

Unit Capacity (MWe)	2006-07	2007-08	2008-09	2009-10 (Upto Nov., 2009)
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CF Loss (%)	CF Loss (MU)	CF Loss (%)	CF Loss (MU)	CF Loss (%)	CF Loss (MU)
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Reactors currently operating at optimum capacity

TAPS-1	160	88	-	93	-	72	99
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TAPS-2	160	98	-	88	-	96	83
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RAPS-2	200	69	-	73	-	85
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Reactors currently under capital maintenance

RAPS-1

NAPS-2 220 53 296 43 357

KAPS-1 220 67 24 47 420 54 70

Reactors currently not operating at optimum capacity

TAPS-3 540 59 116 56 581 41 1318 58 333

TAPS-4 540 42 1232 45 1129 43 1210 56 398

RAPS-3 220 62 129 64 85 60 164 65 42

RAPS-4 220 66 45 57 221 68 17 55 178

MAPS-1 220 72 - 38 594 38 588 48 261

MAPS-2 220 64 80 53 305 41 535 59 119

NAPS-1 220 - 45 47 38 580 43 329

KAPS-2 220 59 170 58 198 50 366 56 162

KGS-1 220 69 - 54 274 60 163 53 195

KGS-2 220 63 108 54 288 56 241 59 121

Notes

The normative capacity factor for nuclear power reactors is 68.5%. The loss of generation is thus based on normative CF.

1. TAPS-3 commenced commercial operation on 18.08.2006
2. KGS-3 commenced commercial operation on 06.05.2007
3. RAPS-1 shutdown from 09.10.2004 for review of continuation of operation.
4. NAPS-1 shutdown for EMCCR from 01.11.05 to 24.02.2008
5. RAPS-2 shut down for EMFR from 02.07.2007 to 31.08.2009
6. NAPS-2 is shutdown for EMCCR since 18.12.2007
7. KAPS-1 is shut down for EMCCR since 01.07.2008

(c) The Government has taken steps to augment supply of indigenous uranium and use of imported uranium for reactors under the International Atomic Energy Agency (IAEA) safeguards. Resulting of these measures, overall capacity utilization of the nuclear plants are progressively improving. The capacity utilization which was about 50% in the year 2008-09 is higher at about 60% for the period April-November, 2009.