



Construction of New PHWR

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The Government has accorded administrative approval and financial sanction for construction of 10 indigenous 700 MW Pressurized Heavy Water Reactors (PHWRs) in fleet mode. The reactors are planned at Kaiga, Karnataka (Kaiga-5&6), Gorakhpur, Haryana (GHAVP-3&4), Chutka, Madhya Pradesh (Chutka-1&2) and Mahi Banswara, Rajasthan (Units-1 to 4).

The total cost of setting up the ten reactors is estimated at Rs.1,05,000 crore at constant price level (excluding Escalation and Interest during Construction). The details of power to be generated by these projects, State/UT - wise would be as follows:

| State | Project | Capacity (MW) |
|----------------|----------------------|---------------|
| Karnataka | Kaiga 5&6 | 2 X 700 |
| Haryana | GHAVP 3&4 | 2 X 700 |
| Madhya Pradesh | Chutka 1&2 | 2 X 700 |
| Rajasthan | Mahi Banswara 1 to 4 | 4 X 700 |

However, as nuclear power projects are in the central sector, power generated by them would be allocated to the beneficiary States/ UTs in the Electricity Region by the Ministry of Power as per the extant guidelines.

The ten reactors are scheduled to be progressively completed by the year 2031.

The nuclear power reactors have a combination of advanced active and passive (not requiring motive power or operator action) safety features. Some of the features include Containment Spray System, Passive Decay Heat Removal System, Double Containment with Steel Lined Inner Containment etc.

The materials / components / equipment required for setting up these projects will be sourced indigenously. In respect of fuel, a decision on using indigenous or imported fuel in respect of each project would be taken by the Government at an appropriate time.

The details of the present installed nuclear power capacity in the country, State/UT wise and reactor-wise are as below:

Operational Nuclear Power Plants in the country

| State | Location | Units | Capacity (MW) |
|-------------|----------|--------|---------------|
| Maharashtra | Tarapur | TAPS-1 | 160 |
| | | TAPS-2 | 160 |
| | | TAPS-3 | 540 |
| | | TAPS-4 | 540 |
| | | | |

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|---------------|------------|---------------------|------|
| Rajasthan | Rawatbhata | RAPS-1* | 100 |
| | | RAPS-2 | 200 |
| | | RAPS-3 | 220 |
| | | RAPS-4 | 220 |
| | | RAPS-5 | 220 |
| | | RAPS-6 | 220 |
| Tamil Nadu | Kalpakkam | MAPS-1 | 220 |
| | | MAPS-2 | 220 |
| | Kudankulam | KKNPP-1 | 1000 |
| | | KKNPP-2 | 1000 |
| Uttar Pradesh | Narora | NAPS-1 | 220 |
| | | NAPS-2 | 220 |
| Gujarat | Kakrapar | KAPS-1 [#] | 220 |
| | | KAPS-2 [#] | 220 |
| Karnataka | Kaiga | KGS-1 | 220 |
| | | KGS-2 | 220 |
| | | KGS-3 | 220 |
| | | KGS-4 | 220 |

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

Presently the units are under long shutdown for Enmasse

Coolant Channel Replacement (EMCCR) and Enmasse Feeder Replacement (EMFR)

This information was provided by the Union Minister of State (Independent Charge) Development of North-Eastern Region (DoNER), MoS PMO, Personnel, Public Grievances & Pensions, Atomic Energy and Space, Dr Jitendra Singh in written reply to a question in Lok Sabha today.

KSD/NK/KM

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