

Unit-4 of India's biggest Nuclear Power Project TAPP-3&4, developed indigenously, attained criticality. Unit-3 will be operational soon

TAPP-4, the fifteenth reactor unit now in operation in the country, is of pressurized heavy water reactor (PHWR) type. It uses natural uranium as fuel, and heavy water as moderator and coolant. TAPP-3&4 is located at Tarapur, Maharashtra where the first nuclear power project was started with TAPP-1&2. The latter reactors are running satisfactorily producing electricity at the cheapest cost among the

project were completed and 1.6 km Exclusion Zone boundary was established before the criticality of TAPP-4. This short construction time has been achieved through the efforts of a highly dedicated and motivated team. The methods used included modern computer aided design, adoption of advanced construction techniques such as open top construction, greater use of mechanized equipment, award of

mega package contracts, use of modern tools for integrated planning and project monitoring, and improved and faster decision making.

It is expected that TAPP-4 will start delivering electricity to the western grid in a "commercial" manner from August 2005. The other unit TAPP-3 would follow suit about nine months later. Physical progress of TAPP-3 is now 88%.

With the criticality of TAPP-4 the total installed capacity of nuclear power plant in the country has gone up from 2770 MWe to 3310 MWe, and shall be 3850 MWe after TAPP-3 becomes operational. Other reactors under construction are the projects of Kudankulam (Russian, VVER), Kaiga (PHWR), Rajasthan (PHWR) and Kalpakkam (FBR) the total installed capacity shall become 7230 MWe which will be progressively increased to 20,000 MWe by the year 2020. All the reactors under construction except FBR, will be operational by the year 2008.



operating nuclear power plants in India.

The first pour of concrete of TAPP-3&4 project was done on March 8, 2000. Unit-4 of Tarapur-3&4 achieved criticality in just five years from the date of first pour of concrete, and seven months ahead of schedule. This is the shortest time taken to build any PHWR in India. This time of construction compares well with international benchmarks.

Land acquisition, rehabilitation and evacuation from around the



The moment of achievement