NPCIL’s Kaiga Unit-1 equipped with BHEL-supplied Nuclear Power equipment creates World Record for continuous operation; Indigenous capability in Nuclear Power creates a new benchmark

New Delhi, December 17: Equipped with BHEL-supplied Nuclear Power equipment, the 220 MW Unit-1 at the indigenously developed Kaiga Atomic Power Station (KAPS) of Nuclear Power Corporation of India Ltd (NPCIL), has created a world record for continuous operation among all nuclear power reactors.

NPCIL’s Kaiga Unit-1, a Pressurized Heavy Water Reactor (PWHR), has registered 941 days of continuous operation, surpassing the previously held world record of 940 days held by Heysham 2 Unit-8 of the United Kingdom. Earlier in October, 2018, the unit had surpassed the world record of 894 days for continuous operation among all PHWRs.

Notably, the complete steam turbine generator set and all the steam generators for the above unit of NPCIL have been manufactured and supplied by BHEL. This landmark achievement has demonstrated the country’s indigenous capability in design, manufacture, erection, commission and efficient operation of PWHRs.

The first stage of the indigenous nuclear power program of the country has attained maturity with 18 operating PHWRs. Twelve PHWRs accounting for 74% of the Nuclear Power capacity are equipped with BHEL-supplied Steam Turbine Generator sets (10 units of 220 MW each and two units of 540 MW).

BHEL is currently installing two units each of its highest rating 700 MW nuclear sets at Kakrapara, Gujrat and Rawatbhata, Rajasthan and is fully geared for enhanced contribution in NPCIL’s upcoming 700 MW PHWRs.

Significantly, BHEL is the only Indian company associated with all the three stages of the Indian Nuclear Power Programme - the first stage PHWR, the second stage Fast Breeder Reactor (FBR) and the third stage Advanced Heavy Water Reactor (AHWR) and has been a partner for over four decades in the development of the indigenous Nuclear Power Programme since its inception.

BHEL has dedicated infrastructure and skilled manpower to address the special design, manufacturing and testing requirements complying with international codes and standards for various components/equipment of a Nuclear power plant. BHEL has proven its capability as a designer and manufacturer of both primary (steam generators, reactor headers, end shields, etc.) and secondary (turbine, generator, heat exchangers etc.) side equipment for Nuclear power projects.