The importance of nuclear energy as a sustainable energy resource for India was recognized at the very inception of the atomic energy programme in the immediate post independence era of the country. A three stage nuclear power programme, to meet the country's specific requirement was chalked out with Natural Uranium fueled Pressurized Heavy Water Reactors in the first stage followed by Fast Breeder Reactors utilizing Plutonium based fuels in the second stage and with the advanced nuclear power systems utilizing the large available resources of Thorium in the third stage. Design and development of advanced nuclear systems, which will utilize the precious plutonium resources in an optimum way to maximize conversion of thorium to 233U and extract power in-situ from the thorium fuel, are in progress. The Advanced Heavy Water Reactor (AHWR) is in this direction. In the development of nuclear technology in any country, Research Reactors play a central and key role. They contribute towards development of essential infrastructure for research and development and also the trained human resources. Research reactors are also extensively used in the field of neutron beam research, production of radioisotopes for application in the fields of medicine, agriculture, food preservation and industry, neutron radiography and neutron activation analysis. To gainfully exploit all the nuclear energy options it was essential to develop the research reactors to cater to the multi stages of the power programme. The road map for Indian research reactor programme is to cater to the above requirement. Apsara a 1 MWt swimming pool type research reactor designed and built with totally indigenous effort attained criticality on August 4, 1956. Cirus, a 40 MWt tank type heavy water moderated and light water cooled reactor was commissioned in 1960. In early 1961 a zero energy critical facility named Zerlina (Zero Energy Reactor for Lattice Investigations and New Assemblies) was built, for studying various lattice parameters of natural Uranium fuelled, heavy water moderated reactors. Dhruva a 100 MWt tank type heavy water moderated and cooled reactor was commissioned in 1985, to fulfill the growing needs of Indian Nuclear Programme. In pursuing the development of the three-stage nuclear program, another critical facility was built in 1972 named PURNIMA (Plutonium Reactor for Neutron Investigations in Multiplying Assemblies). This facility was used for the physics study of plutonium fuelled fast reactors. As a part of studies with U233 fuel, a 30 kW research reactor called KAMINI (KAlpakkam MINI) using U233 as fuel was commissioned at IGCAR Kalpakkam near Chennai. Incidentally Kamini is the only operating reactor in the world with U233 fuel. Fast Breeder Test Reactor at Kalpakkam commissioned in 1985, provides an essential base for R&D aspects related to the second stage power programme. Considering the abundant resources of Thorium in India and utilization of Thorium for power production as an important feature of the long-term Indian Nuclear Power Programme, AHWR is being designed in BARC. The reactor is designed to generate most of its energy from U-233, which is produced in-situ from Thorium irradiation. This will provide long-term energy security by using available nuclear fuel resources in an optimal manner. AHWR is a technological development and demonstration prototype system for large scale commercial utilization of Thorium fuel cycle. This innovative design requires validation of the physics design prior to its acceptance as a proven core. Towards this a low power Critical facility (CF) for conducting lattice physics experiments for validating the physics design parameters of AHWR lattice was built and commissioned in 2008. After completion of the scheduled experiments, Zerlina and Purnima series of facilities were decommissioned. Apsara has been decommissioned in 2010. Cirus was permanently shut down in the year 2010.