

Canada. The Departments of External Affairs and Trade and Commerce are also represented on the Committee and representatives of the National Research Council and the Canada Council are associated with the Committee in a consultative capacity. Specialized advisory committees in the various academic fields assist the main committee in assessing the qualifications of candidates. The Canadian Universities Foundation provides the secretarial services for the Committee and the Economic and Technical Assistance Branch of the Department of Trade and Commerce will arrange transportation and payment of stipends to the scholars.

#### AWARDS TO CANADIANS

The Canadian Commonwealth Scholarship and Fellowship Committee also selects Canadians for awards offered by other Commonwealth countries. To date offers have been received from the United Kingdom, Australia, New Zealand, South Africa, Malaya, Hong Kong, and jointly from Kenya, Tanganyika and Uganda.

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#### CANADA-INDIA REACTOR

The Canada-India Reactor went into operation on July 10 at Trombay, India, it was announced recently by India's Atomic Energy Commission and Atomic Energy of Canada Limited.

The start-up of the research and engineering test reactor, which is a modified version of the NRX reactor at Chalk River, climaxes five years of close co-operation between engineers, scientists and technicians of two nations on opposite sides of the world.

"This event marks the successful completion of the first stage of Indo-Canadian co-operation in the peaceful use of atomic energy which started in 1955," said Dr. H.J. Bhabha, in a cable to J.L. Gray, president, Atomic Energy of Canada Limited. "I thank you and AECL for your wholehearted co-operation and request you convey our thanks to all Canadian scientists who contributed to this fine achievement."

#### USE OF CIR

The CIR is expected to operate at its full output of 40,000 kilowatts of heat on a routine basis beginning in the fall. The reactor provides Indian engineers and scientists with the means of carrying out advanced fundamental research; producing radioactive isotopes for use in medicine, agriculture and industry; and conducting engineering experiments of various kinds, including the testing of fuel-coolant systems for power reactors. The reactor and associated facilities will be available to scientists approved by the Government of India from other countries, including those from Colombo Plan countries in South and Southeast Asia.

The start-up of the reactor was under the

direction of F.W. Gilbert, manager of AECL's Reactor Commissioning Division. In immediate charge of the reactor operation is D.R. Tegart, superintending engineer who was formerly superintendent of the NRX reactor at Chalk River. His staff consists of 10 operators and six reactor engineers experienced in operation of the NRX reactor.

When the reactor is operating on a routine basis the Indians will assume control of operations and the AECL staff will return to Canada. Indian staff members participating in the CIR start-up were: N.B. Prasad, project manager; Surya Rao, superintendent; Vinay Meckoni, assistant superintendent; and various engineers and operators trained in India and Canada. H.N. Sethna was project manager in the early stages of the CIR construction, before being posted to a United Nations assignment in connection with the Second UN Conference on the Peaceful Uses of Atomic Energy.

In April 1955 the Government of Canada informed the Government of India that Canada was prepared to consider providing India, under the Colombo Plan, with a research reactor of the NRX type. Members of the staffs of Atomic Energy of Canada Limited and the Indian Department of Atomic Energy discussed various technical problems relating to the difference in conditions prevailing at Chalk River, where the NRX reactor had then been in operation for eight years, and at India's atomic research centre at Trombay, near Bombay. They agreed on modifications to be made to the design of the NRX reactor, which first went into operation in 1947, to take advantage of experience gained in the operation of NRX, and to provide additional facilities required by India's Atomic Energy Commission.

Excavation for the foundation of the CIR began at Trombay in February 1956 and the formal agreement between the two countries was signed in New Delhi on April 28, 1956. Atomic Energy of Canada Limited was responsible for advising the contractors on all aspects of the design and for providing information acquired from the construction and operation of the NRX reactor. AECL trained 48 Indian engineers, operators and maintenance men at Chalk River.

The Shawinigan Engineering Company, Montreal, did the detailed design of the CIR and issued specifications to various manufacturers. Foundation Overseas Limited, Toronto, a subsidiary of the Foundation Company of Canada, was in charge of erection of the reactor and the containment building and supervised Indian personnel who constructed them. Indian companies erected the containment shell -- which is 120 feet in diameter and 133 feet high and is made of steel-plate nearly an inch thick. They also built the 400-foot stack; a concrete water-storage tank with a capacity of 850,000 gallons; a million-gallon underground dump tank; and a 3200-foot jetty to carry the coolant water pipes.