

Purchasers of Canadian isotopes include the United States, the United Kingdom and various countries in Western Europe and South America. Shipments have also been made within Canada to industries, hospitals and universities.

The growing view that large-scale industrial application of atomic energy was closer at hand than had been expected made the Government decide to have the Atomic Energy project operated by a separate organization freed from all other responsibilities. A new Crown company, Atomic Energy of Canada Limited, was therefore incorporated in February 1952, under the Atomic Energy Control Act, 1946. The new company took over the operation of the project from the National Research Council on April 1, 1952. Dr. C. J. Mackenzie became its first President, and was succeeded in November 1953 by W. J. Bennett, who was also President of Eldorado Mining and Refining Limited. Dr. Mackenzie continued as President of the Atomic Energy Control Board.

In June 1954, the Government decided that the company responsible for the supply of uranium, Eldorado Mining and Refining Limited, and the company responsible for the research and development aspects of the program, Atomic Energy of Canada Limited, should be joined as the work at Chalk River had reached the point where it was believed possible to produce electricity (by the heat created within reactors) within an economical cost range.

So that the work of these two Crown companies could be more closely integrated in the development of atomic power, it was decided that a holding company should be incorporated. The responsibilities of the original companies would not be changed but they would, in future, be Divisions of the holding company which would report to a Cabinet Minister—the Chairman of the Committee of the Privy Council on Scientific and Industrial Research.

In the 1953-54 atomic power program a "feasibility study group" was established in co-operation with several public utilities and private companies, which had as its immediate goal the production of specifications for a pilot power reactor and the evaluation of cost per kilowatt of the electricity which such a reactor would produce.

In June 1954, the Government set up an Advisory Committee on Atomic Power Development, consisting of senior executives of power companies throughout Canada and this committee will keep Canadian power producers informed of the nature and scope of the program at Chalk River. The committee also assists in evaluating the economic importance of possible atomic power in the various regions of the country.

The development of atomic energy was furthered by the experience gained by the decontamination and reconstruction of the NRX reactor which broke down Dec. 12, 1952, and went back into operation Feb. 17, 1954.

Prior to the NRX breakdown it had been feared that a major accident with a reactor of such high power rating might force its abandonment. The decontamination was carried out without injury to personnel despite an unprecedented spreading of highly radioactive fission products and methods of decontamination were developed for a variety of materials. Scientists and engineers gathered information which will be invaluable in future reactor designs. The restoration of the NRX reactor, believed to be the first reactor of high power to be taken apart and reconstructed after several years of operation, has been followed with considerable interest by atomic energy establishments in other countries.