

AECL HEAVY-WATER PLANT

Atomic Energy of Canada Limited has announced that it will build a heavy-water production plant with an initial capacity of 400 tons a year, adjacent to the Douglas Point nuclear-power station near Kincardine, Ontario, on the shores of Lake Huron. The estimated cost is \$65 million, construction is expected to take three years.

Greater supplies of heavy water are necessary for the expanding nuclear-power programme in Canada and to support AECL's marketing operations in other countries.

Ontario Hydro has announced that it will build a 3-million-kilowatt nuclear station near the Douglas Point site, which will double the total capacity of nuclear-power stations of Canadian design that are in operation, under construction, or committed.

Steam, first from the present Douglas Point power station and then from the new Ontario Hydro station, will be used in the AECL heavy-water production plant.

Existing heavy-water production plants in Canada will not be able to supply enough heavy water for the nuclear-power stations of specifically Canadian type that are already committed. The Deuterium of Canada Limited plant at Glace Bay, Nova Scotia, is more than two years behind schedule getting into production. Canadian General Electric Company Limited is building a heavy-water plant at Port Hawkesbury, Nova Scotia, which is to go into operation in October 1969. CGE has indicated that it is not prepared to enlarge its present plant until experience has been gained in its operation. The total production capacity of the two plants is to be 800 tons a year.

AECL has underwritten the sale of 5,000 tons of heavy water each from Deuterium of Canada Limited and Canadian General Electric Company Limited, within a maximum delivery period of 12½ years.

A nuclear-power station requires about a ton of heavy-water for every 1,000 kilowatts of its capacity.

MEDICAL MISSION TO SAIGON

A Canadian medical mission has left for South Vietnam to study the possibility of re-activating the Canadian Tuberculosis clinic at Quang-Ngai, 350 miles north of Saigon.

The team, which is headed by Robert W. McLaren, acting director of the Advisers Division of the Canadian International Development Agency, includes Dr. Guy Cardinal, director of the T.B. Division, Department of Health, Quebec, and Dr. C.W.L. Jeanes of Ottawa, executive secretary of the Canadian T.B. Association.

Announcing the departure of the mission, Mr. Mitchell Sharp, Minister of External Affairs, said that Canadian aid to South Vietnam, which began in 1955, had reached a value of \$5,786,200 by the end of 1968. This includes a \$2.5-million civilian re-

Canada's growing nuclear-power programme and the rapidly-increasing interest in heavy-water moderated power stations in other countries could create a need for a commitment to build additional heavy-water production capacity by 1971 or 1972.

OTHER CANADIAN-TYPE STATIONS

Besides the new station just announced, Ontario Hydro has under construction the 2-million kilowatt Pickering nuclear-power station, whose four units are scheduled to come into service successively between 1971 and 1973.

The Indian Department of Atomic Energy is building the Rajasthan Atomic Power Project, which will have two reactors and a total electrical output of 400,000 kilowatts. A duplicate of this station is in the initial stages of construction near Madras. These units are a near copy of the Douglas Point nuclear-power stations.

Canadian General Electric Company Limited is building the Karachi Nuclear Power Project for Pakistan, which will have an electrical output of 125,000 kilowatts.

Atomic Energy of Canada Limited, in co-operation with Hydro-Quebec, is building the 250,000-kilowatt Gentilly nuclear-power station on the south shore of the St. Lawrence River, about halfway between Montreal and Quebec.

The prototype Nuclear-Power Demonstration station near Rolphton, Ontario, which has been in operation since 1962, has an electrical output of 25,000 kilowatts.

The Douglas Point nuclear-power station, which first produced electricity in January 1967, has an output of 208,000 kilowatts.

AECL is also offering the CANDU nuclear-power station in the export market and will, of necessity, guarantee the supply of heavy water for such plants. Such a requirement might rise to 400 tons a year by the early 1970s.

habilitation centre at Qui-Nhon, some 250 miles north of Saigon.

The Quang-Ngai clinic, built to serve an area where seven per cent of the population has tuberculosis, consists of a two-storey building with 80 beds. During the TET offensive early this year, the nine Canadians staffing the clinic were evacuated to Saigon. However, the director of the clinic, Dr. Michel Jutras of Montreal, returned to Quang-Ngai in February and has remained there. Another Canadian, Arthur Ludwick, an X-ray technician, is working with Dr. Jutras.

The visiting Canadian team will re-examine the Quang-Ngai project in the light of new techniques developed in the control of tuberculosis, including the establishment of small T.B. clinics and increasing immunization doses.