

NEW ENGINEERING TEST REACTOR

A contract to build an engineering test reactor at the Whiteshell Nuclear Research Establishment in Manitoba has been awarded to the Canadian General Electric Company Limited, according to Atomic Energy of Canada Limited. Known as Whiteshell Reactor No. 1 (WR-1), it will be the first major nuclear facility to be constructed at the Whiteshell centre, which is now being developed by AECL at a site on the Winnipeg River about 60 miles from Winnipeg. Plans for construction of the reactor were first announced early this year by Mr. Gordon Churchill, Chairman of the Committee of the Privy Council on Scientific and Industrial Research.

The cost of the reactor, formerly known as the Organic Test Reactor (OTR), and the building to house it will be about \$14.5 million. CGE's Civilian Atomic Power Department in Peterborough, Ontario, will act as prime contractor for the project. Apart from the building design, which is being supplied to AECL by Shawinigan Engineering Company Limited, Montreal, CGE is responsible for the design, supply, installation and construction testing of the WR-1 reactor.

Excavation for the reactor building will begin late this year. The reactor and process systems will be installed and tested throughout 1964 and the reactor will go into operation in 1965.

The primary purpose of WR-1 is to provide facilities for large-scale testing of fuel rods, heat-transfer systems and components for organic-cooled, heavy-water-moderated power reactors. In addition, WR-1 is being designed with enough flexibility to allow it to be used for a variety of engineering tests, including those involving other heat-transfer media, such as steam. The reactor will have an initial heat output of up to 40,000 kilowatts, with provision for increases to 60,000 kilowatts. (The NRX engineering test reactor at Chalk River has a heat output of 42,000 kilowatts.)

Like other reactors in the Canadian nuclear research and development programme, WR-1 will use heavy water to maintain the chain reaction in the uranium fuel. To remove the heat given off by the fuel, however, WR-1 will use organic liquids, which consist of carbon and hydrogen atoms linked in unique ways. Organic liquids have not been used as heat-transfer media ("coolants") in Canadian reactors, though they have been tested in the NRX reactor. The NRU, Douglas Point and NPD reactors use heavy water to transfer heat from the fuel. Organic coolants will operate at very much lower pressures than water at the same temperature. Stress problems, and hence capital costs, are thus much reduced.

U.S.-CANADA LUMBER TALKS

The following is a communiqué issued on October 17 at the conclusion of the Canadian-United States meeting on softwood-lumber exports from Canada to the States:

"Officials of the United States and Canadian Governments today concluded two days of discussion

at Ottawa on present and future problems confronting the North American softwood-lumber industries. They developed further the subjects discussed at the first meeting relating to the position of the softwood-lumber industries in Canada and the United States, factors currently affecting the two industries, and the outlook for the future, both short and long term. Industry representatives from the two countries were available for consultation.

"It was recognized that both countries have a mutual interest in a satisfactory resolution of problems facing the North American softwood-lumber industries. It was agreed that an *ad hoc* joint expert working group of government officials would be established to examine co-operatively such matters as the results of the recent storm on the Pacific coast, the longer-term North American supply and demand prospects for timber resources, wood utilization generally, and market development.

"It was agreed that, as need arose, industry representatives of the two countries would be consulted in an appropriate manner."

NEW CZECH ENVOY

On October 16, His Excellency Dr. Jaroslav Tauer presented his letter of credence as Ambassador Extraordinary and Plenipotentiary of Czechoslovakia to Canada. The ceremony took place at Government House, where the Chief of Protocol of the Department of External Affairs, Mr. Henry F. Davis, presented the Ambassador to the Governor-General. Mr. M.H. Wershof, Assistant Under-Secretary of State for External Affairs, and Mr. Esmond Butler, Secretary to the Governor-General, were in attendance.

The Ambassador was accompanied by the following members of his staff: Mr. Jaroslav Chmela, First Secretary; Colonel Josef Sakar, Military and Air Attaché; Mr. Ladislav Soska, Second Secretary; Major Bohumil Socha, Assistant Military & Air Attaché; Mr. Vladimír Dočekal, Third Secretary.

CHAIN-STORE SALES & STOCKS

Chain-store sales in August were valued at an estimated \$316,631,000, an increase of 8.2 per cent from last year's August total of \$292,618,000. With gains in all earlier months of the year, sales in the January-August period were valued 4.9 per cent higher than a year ago at \$2,340,532,000, versus \$2,232,205,000. August 1 stocks (at cost) amounted to \$492,842,000, up by 12.3 per cent from the total of \$438,952,000 a year earlier.

Grocery and combination store chains, the largest group for which separate data are shown, had sales in August estimated at \$142,764,000, higher by 9.3 per cent than last year's August figure of \$130,559,000. Sales were above a year ago in all preceding months of the year except April, and the January-August total advanced 4.0 per cent to \$1,117,330,000 from \$1,074,566,000 in the equivalent span of 1961. August sales of variety-store chains, the next largest group, rose 5.8 per cent to \$26,490,000 from \$25,047,000.