

coming crop almost regardless of its size. There could be an actual reduction in the carryover if the crop does not exceed 700 million bushels.

"The target for exports of wheat and flour for the current crop year is 600 million bushels, which is larger than the previous record, established in 1963-64. Adding 150 million bushels for domestic consumption means total disappearance of 750 million bushels.

IMPORTANCE TO EXCHANGE EARNINGS

"These two recent sales to the Soviet Union, plus smaller earlier sales for shipment during the current crop year, total 222 million bushels. These will be worth to the Canadian economy about \$450 million. This is a welcome addition to Canada's exchange earnings at a time of prosperity and mounting imports. We are also selling more wheat to our other customers as a group than in previous crop years.

"I am particularly pleased that there is included in the sale to the Soviet Union 300,000 tons of flour. Our milling industry is going through difficult times and this business will be of substantial help to them during the present period.

"Before this massive sale of wheat was completed, I called the heads of the railway companies into conference and asked them whether they could provide the transportation to move over 600 million bushels of wheat and flour into export, plus domestic requirements including the increased feed requirements of Eastern Canada. They expressed confidence that they could handle the movement, given reasonably good weather and the co-operation of all concerned in loading and unloading boxcars.

"When we faced a similar situation in 1963-64, all those who worked in handling Western grain did a magnificent job and I am sure they will again.

"Indeed, the Canadian Wheat Board and I were encouraged to accept these huge commitments because of the performance two years ago. At that time, we fulfilled every commitment dead on the nose and I know that is one of the reasons why we are once again called upon to supply such large quantities.

"I make an appeal to producers, elevator companies, the railways, the grain handlers, the longshoremens, the port authorities, the shipping companies, the Board of Grain Commissioners; I appeal to everyone involved for a maximum effort.

"I can think of nothing more important to the welfare of the farmer, and of the Canadian economy as a whole, than the attainment of the export target of 600 million bushels, which is equivalent to about \$1,200 million of income to Canada and Canadians, those who produce the wheat and those who move it from the farms to the ocean ports."

FIRM DROPS HEAVY-WATER PLANS

Atomic Energy of Canada Limited announced recently that Western Deuterium Company Ltd. had withdrawn its proposal to build a heavy-water pro-

duction plant at Estevan, Saskatchewan, capable of producing 300 tons a year. The proposed plant was to have employed a new process based on the use of ordinary water as a source of deuterium, coupled with an ammonia-hydrogen exchange process. AECL had examined the process and concluded that it was technically sound.

A MAIN CONSIDERATION

One of the stipulations in the invitation to submit proposals was that the plant should be in full productive capacity 31 months after the acceptance of a proposal. Western Deuterium had been informed that its proposal was acceptable but had subsequently decided that it could not guarantee under contract that full production would begin by November 1967. Consequently, no contract has been signed.

The decision of Western Deuterium was influenced by the consideration that, with the growing major increase in the demand for fertilizer, both in Canada and abroad, fertilizer-production plants were being planned that would produce very large quantities of ammonia. It appeared that heavy water could be produced in a combined fertilizer/heavy-water production plant at a cost even less than from a single-purpose heavy-water production plant. Mr. Harold Husband, president of Western Deuterium, said that prudence dictated that he forfeit the significant sum of money already spent on the preliminary design of the heavy-water plant rather than risk the penalties for late completion of the plant and the uncertainty of its future competitive position.

FRENCH INTERESTS INVOLVED

The ammonia-hydrogen isotope-exchange process for heavy-water production appears to have considerable potential for development and application. An association of interests in France, including the Commissariat a L'Energie Atomique, has been working on the process for some time. Western Deuterium had proposed to use, under appropriate agreements, some of the technology developed by this association.

Since Canada will have increasing requirement for heavy water to meet the needs of nuclear-power stations of Canadian design built at home and abroad, AECL has continued the discussions with the French interests begun by Western Deuterium. An AECL technical and economic study team is now on a visit to France, with the object of ensuring that the technology is available for future application in Canada.

Canada still needs additional heavy water in the immediate future to meet known requirements such as that of the major nuclear-power station of Ontario Hydro at Pickering, Ontario. An approach is therefore being made to Dynamic Power Corporation Ltd. of Calgary, Alberta, which submitted the second-lowest bid, with a view to entering contract discussions for the underwriting of 300 tons of heavy water a year. Dynamic Power proposed to use the hydrogen-sulphide process and to build a plant at Estevan, Saskatchewan.