

year, higher than that of any other Canadian-produced metal. The value declined to \$269,938,192 in 1960 and again in 1961 when production of uranium oxide (U_3O_8) amounted to 9,800 tons valued at \$204,138,553. Production has declined as mines have continued to close following the United States Atomic Energy Commission announcement in November 1959 that it would not continue to purchase uranium from Canada in excess of contract commitments that were to expire in 1962 and 1963. As a result of this decision, arrangements were made to allow Canadian producers to stretch out to the end of 1966 the undelivered portion of uranium under their sales contracts. The stretch-out plan was designed to prevent a severe disruption in the industry that otherwise would have occurred in the 1962-63 period.

Early in 1961, two uranium mines closed—the Quirke mine of Rio Algom Mines Limited and the Stanleigh mine of Preston Mines Limited. In the Elliot Lake district, four mines continued production throughout the year—those of Denison Mines Limited and Stanrock Uranium Mines Limited, and two mines (Milliken and Nordic) owned by Rio Algom. In the Bancroft area, two mines operated by Bicroft Uranium Mines Limited and Faraday Uranium Mines Limited remained in operation. In the Lake Athabasca district, two mines continued to operate—the government-owned mine of Eldorado Mining and Refining Limited and the privately owned mine of Gunnar Mining Limited. At the end of the year only eight mines (seven companies) were producing uranium compared with 23 at the peak period in 1959; only four mines are expected to continue beyond 1963 and only one until 1966. Plans for future production necessitate a reduction, annually, over the next five years so that in 1966 contract deliveries are expected to be about 1,100 tons of U_3O_8 . The number of mine employees at all mines declined from 11,792 at the beginning of 1960 to about 4,650 at the end of 1961.

As of Dec. 31, 1961, the amount of uranium (U_3O_8) to be delivered under the stretch-out plan ending in November 1966 was approximately 21,000 tons. This figure does not include 12,000 tons of unallotted uranium which, according to "letters-of-intent", are scheduled for delivery to the United Kingdom Atomic Energy Authority (UKAEA) during the period Mar. 31, 1963–Dec. 31, 1966. However, delivery date and price were being renegotiated by the UKAEA during the latter half of 1961 and early 1962.*

The Mines Branch of the federal Department of Mines and Technical Surveys, in collaboration with Eldorado Mining and Refining Limited and the Canadian Uranium Research Foundation, continued its program of research into non-nuclear uses of uranium. This program was undertaken in an effort to find new uses for uranium in the metals field in order to provide an additional outlet for production during the period of declining demand. The new uranium steel alloy, developed by the Mines Branch in 1960, has been undergoing tests on a commercial scale. Although the tests of this new alloy on a laboratory scale have been most promising, further tests and economic studies on a commercial scale will be necessary to determine what benefits uranium holds for the steel industry.

Uranium producers are allowed to sell as much surplus uranium as they can to countries that hold bilateral agreements with Canada for co-operation in the peaceful uses of atomic energy but there have been very few sales of this nature. Apart from the special contract agreements for the sale of uranium to the United States and Britain, Canada holds bilateral agreements with Australia, Japan, Pakistan, Switzerland and EURATOM (Belgium, West Germany, France, Italy, Luxembourg and the Netherlands). For other countries, a Canadian producer may, subject to government approval, sell up to 2,500 lb. of uranium.

Iron Ore.—Canadian producers' shipments of iron ore decreased by 5.4 p.c. in 1961 to 20,383,333 tons; the all-time high was 24,488,325 tons in 1959. However, the value of iron ore shipments increased from \$175,082,523 in 1960 to \$180,457,020 in 1961. Imports decreased slightly while receipts of domestic ores increased, showing a net increase in consumption. Exports, representing over 85 p.c. of total shipments, declined.

* On May 22, 1962, the Prime Minister announced that agreement on the terms of a contract had been reached with Britain.