

Uranium.—Despite the general decline of the uranium mining industry over the past five years, deliveries in 1964, at 6,914 tons of uranium oxide (U_3O_8), were about 18 p.c. lower than in the previous year (8,352 tons) and were substantially lower than the peak production year of 1959 (15,892 tons). Canada has been one of the world's leading producers of uranium since the metal became important as a fissionable material for military purposes and, more recently, in the development and production of atomic energy for electric power generation. One of the largest known deposits in the world is in Canada where present reserves represent about 35 p.c. of the total in the non-communist world.

The rapid growth of the uranium mining industry since World War II was remarkable. In 1958, Canada was the world's leading producer of uranium and the value of U_3O_8 produced in both 1958 and 1959 exceeded the value of any other Canadian-produced metal. As an export commodity, uranium ranked fourth in value in 1959 following newsprint, wheat and lumber. Production from 25 mines in that year was 15,892 tons of U_3O_8 valued at \$331,000,000. Since 1959 the decline in production, resulting from declining export markets, has been almost as rapid as the spectacular rise from 1953 to 1959. However, with the rapid development of economic nuclear power for the generation of electricity, the long-term future for the uranium industry holds considerable promise.

Practically all of Canada's uranium is sold under contract to the United States Atomic Energy Commission (USAEC) and the United Kingdom Atomic Energy Authority (UKAEA). The United States, Canada's largest customer, announced in 1959 that it would not exercise its option to purchase additional uranium from Canada. To prevent a collapse of the industry in 1962 and 1963, when the USAEC contracts would expire, the Government of Canada, through Eldorado Mining and Refining Limited, negotiated a delivery stretch-out for the uranium already under contract with the USAEC and the UKAEA. This plan also permitted the transfer of contracts between companies. In 1962, a contract was signed with the UKAEA for the delivery of 12,000 tons of U_3O_8 over a period extending until late 1971. This contract permitted each of the seven mining companies, which were still operating in 1962, to extend its operating life approximately 16.7 months past the completion date of previous commitments.

Procurement and marketing of most of the uranium produced in Canada has been the responsibility of Eldorado Mining and Refining Limited. Private producers are free to sell uranium abroad without reference to Eldorado but sales are subject to control measures administered through the Atomic Energy Control Board. Sales of uranium to countries that do not hold agreements with Canada for co-operation in the peaceful uses of atomic energy are permitted; however, the maximum amount any such country may receive from Canada is 2,500 lb.

Ore reserves as of Jan. 1, 1964, were estimated at 225,000,000 tons containing 207,000 tons of recoverable uranium oxide (U_3O_8) and about 82,000 tons of thorium oxide (ThO_2). Reserves in the conglomeratic deposits in the Blind River-Elliot Lake district of Ontario constitute 93 p.c. of Canada's total. Reserves in pitchblende-bearing vein-type deposits in the Beaverlodge Lake area of northern Saskatchewan comprise 6 p.c. and the pegmatitic deposits in the Bancroft area of southeastern Ontario make up about 1 p.c. Scheduled deliveries of U_3O_8 to the USAEC and the UKAEA from 1964 to 1971, inclusive, total 16,851 tons. By the end of 1971 Canada's reserves will be approximately 190,000 tons of recoverable U_3O_8 if no further exploration is undertaken before then. Domestic requirements of uranium for nuclear power purposes will not appreciably affect Canada's ability to export uranium in the future.

Silver.—With recovery of silver in substantial quantities commencing at several new base-metal mines in 1964 and several other producers completing their first full year of operation, Canada's silver production at 31,111,943 oz.t. was somewhat higher than 1963 output of 29,932,003 oz.t. The increase was largely the result of higher output in Ontario and initiation of by-product output from the zinc-lead-copper-silver mine of Brunswick