

ments which expire in 1962 and 1963. As a result, arrangements were made to allow Canadian companies to 'stretch out' to the end of 1966 the undelivered portion of the uranium under firm contract. The transfer of uranium sales contracts from one company to another is also permitted. The stretch-out plan was designed to allow the more economic producers to continue production until the late 1960's when it is hoped that the demand for uranium will increase sufficiently to provide adequate market outlets for the world's productive capacity.

Since May 1958, Canadian uranium producers have been allowed to sell any amount of surplus uranium to countries that hold bilateral agreements with Canada for co-operation in the peaceful uses of atomic energy. For all other countries, Canada may sell up to a maximum of 2,500 lb. of surplus uranium but, when this limit is reached for a given country, further sales are not permitted under present arrangements.

Ontario's output of 12,399 tons of uranium oxide ( $U_3O_8$ ) in 1959 was about 80 p.c. of the Canadian total. Production in the Elliot Lake camp, the leading uranium producer in the world for the second consecutive year, reached an all-time high of 11,420 tons. The Elliot Lake orebodies contain 369,626 tons of uranium oxide which is sufficient for 30 years of operation at the present rate of production. Eleven mines were in operation in this area at the beginning of 1959 but in February the Spanish American mine, owned by Northspan Uranium Mines Limited, was closed. Two of the ten operating mines are owned by Algom Uranium Mines Limited, two by Northspan Uranium Mines Limited and one each by Can-Met Exploration Limited, Consolidated Denison Mines Limited, Milliken Lake Uranium Mines Limited, Pronto Uranium Mines Limited, Stanleigh Uranium Mining Corporation Limited and Stanrock Uranium Mines Limited. These mines produced 74 p.c. of the Canadian total in 1959.

The producing mines in the Bancroft area of Ontario are Bicroft Uranium Mines Limited, Canadian Dyno Mines Limited and Faraday Uranium Mines Limited. A fourth, Greyhawk Uranium Mines Limited, which had been shipping ore on a custom basis to the nearby Faraday treatment plant, was closed down in April 1959. The total ore reserves of the three producers are estimated at between 4,500,000 and 6,000,000 tons grading 0.09 p.c.  $U_3O_8$ . During the latter part of the year production at the three mines was 3,800 tons of ore a day.

All uranium production in Saskatchewan comes from mines in the Beaverlodge Lake area on the north shore of Lake Athabasca. During 1959 six mines and three treatment plants were in operation. Production for the year was about 2,675 tons of uranium oxide valued at \$54,068,000, a slight decrease from that of 1958. The principal producers were Eldorado Mining and Refining Limited, Gunnar Mines Limited and Lorado Uranium Mines Limited. Lorado continued to treat ore on a custom basis from Lake Cinch Mines Limited, Cayzor Athabaska Mines Limited, Rix-Athabasca Mines Limited, the Lorado mine and from about eight smaller mining operations.

Production of uranium oxide in the Northwest Territories in 1959 amounted to 423 tons. Ore in the mine of Eldorado Mining and Refining Limited at Port Radium on Great Bear Lake is nearly exhausted and the mine is expected to close by the end of 1960. In July, Rayrock Uranium Mines Limited suspended operations at its Marian River mine owing to lack of ore.

The reserves of measured, indicated, and inferred uranium ore in Canada as of Nov. 1, 1959 were estimated at 321,000,000 tons grading 0.12 p.c.  $U_3O_8$ , considered to be the largest in the world. Those of the Elliot Lake camp constitute about 94 p.c. of the Canadian total. The Beaverlodge and Bancroft camps each contain about 3 p.c. of the country's reserves.

**Nickel.**—Canada has long been the leading producer of nickel and in 1959 had 72 p.c. of the Free World production capacity. Canadian production in 1959 amounted to 185,123 tons valued at \$257,173,340, a gain in quantity of 33 p.c. over 1958 and close