

Alberta

Calgary Power Limited completed and placed in service on 4 October a second unit at its Cascades plant. The new unit, to be used mainly for peak load purposes, consists of a 23,000-hp. Francis-type turbine which operates under a head of 320 feet and is connected to a 20,000-kva. generator. The Company has begun construction of extensions to its Spray and Rundle plants in the Spray Lakes development which will approximately double the capacity of the existing development. A second 62,000-hp. unit is being added to the Spray plant and a 40,000 hp. unit to the Rundle plant, both of which are scheduled for completion in October 1959. Preliminary investigations are being continued by the Company for a possible development at its Big Bend site on the Brazeau River where a gauging station has been established. At the Big Horn site on the North Saskatchewan River below Terkishner Creek and at other nearby sites on that river, investigations for power development were suspended when exploratory drilling revealed disappointing foundation conditions. In thermal power development, the Company is adding to its Wabamun plant a second 66,000-kw. unit which is scheduled for operation in October 1958. Transmission line network was increased by 22.2 circuit miles of 132-kv. line, 90.2 circuit miles of 66-kv. line and 40.3 miles of 22-kv. line. A total of four 5,000-kva. substations were constructed, two at Calgary and one each at Edson and Niton, Alberta.

Northland Utilities Limited installed at its thermal-electric station at Jasper a 1,250-kw. gas engine generating unit which brought the total capacity of the plant to 2,720 kw. At the Fairview thermal plant, which is operated jointly with Canadian Utilities Limited, a new 3,000-kw. gas engine generating unit was brought into operation. A 500-kw. diesel generating unit was removed from the Fairview plant and installed in the Athabasca plant of Northland Utilities Limited. The Company constructed about 40 miles of 69-kv. transmission line between Valleyview and Triangle, Alberta, and will extend this line to Fairview via the Town of Peace River in 1958.

The City of Lethbridge is installing a new 7,500-kw. gas turbine generating unit in its steam plant for operation early in 1958. During the year it completed a 13-kv. line connecting its generating plant with the centre of the city.

The City of Edmonton constructed about four miles of underground transmission cable connecting its thermal-electric station to a bulk substation. The 72-kv. line consists of copper cable conductors insulated by impregnated paper and encased in a 5 9/16-inch diameter steel pipe line carrying oil at 220 psi. pressure. The city also constructed a 40,000-kva. bulk substation and two 10,000-kva. distribution substations.