

There are three private utility services in the Province, the Calgary Power, Limited, Canadian Utilities, Limited, and Northland Utilities, Limited. A short synopsis of these services is given below.

*Calgary Power Limited.*—This Company has five hydro-generating plants on the Bow River and its tributaries, west of Calgary. These plants are: the Horseshoe Falls, Kananaskis Falls, Ghost River with a storage reservoir capacity of 74,000 acre-feet of water, Cascade and Barrier plants, total 105,000 h.p., which capacity will be increased to almost 200,000 h.p. when Spray—now under construction—is completed. The Barrier plant, completed in 1947, is operated by remote control. In addition to the Ghost storage, the Company has reservoirs at Lake Minnewanka and the Upper Kananaskis Lake, and Spray Lakes when completed.

Power from these plants together with that received under interchange agreements with the cities of Lethbridge and Edmonton, the East Kootenay Power Company, Limited, and the 14,000 h.p. steam plant at Calgary, is fed into a transmission network which supplies the entire electrical requirements of the cities of Calgary and Red Deer, and 180 towns, villages and hamlets in central and southern Alberta. Calgary Power, Limited, transmission system, comprising 4,000 miles of lines of all voltages, extends from the International Boundary to Westlock, 60 miles north of Edmonton, and in the central part of the Province extends west to the Brazeau coal fields at Nordegg and east to Macklin, Sask. Calgary and Lethbridge and the towns of Ponoka, Macleod and Cardston are supplied upon a wholesale basis and own their own distribution systems. All other points upon the system are supplied on a retail basis.

The Company has 3,800 miles of transmission lines and 431 miles of distribution lines. An extensive farm electrification program is in progress and at Apr. 1, 1949, the Company was supplying approximately 4,000 farms. Under a co-operative arrangement, 2,500 to 3,000 farms will be added each year in this program, the company doing all engineering, construction and operation through a non-profit subsidiary, energy being supplied to the farm co-operative customers at cost. Alberta's sparse farm population presents an enormous problem to a farm electrification program of any type.

The Company's transmission systems are designed with a view to future expansion. Expansion of power generating facilities is presently under way. The Spray Lakes project, scheduled for completion in 1950, will develop ultimately a total of 89,000 h.p., the largest hydro installation in the Province. Immediate construction of two hydro plants, to be known as Spray and Three Sisters, will add 62,000 h.p. and 3,600 h.p., respectively. The third, the Rundle plant, is a future project, and will have a capacity of 23,000 h.p. Five dams will impound water in three storage reservoirs, developing a total head of 1,285 ft. when the system is complete.

*Canadian Utilities Limited.*—Towns and villages northeast of Drumheller are supplied from a 13,500 kw. steam plant in that city, by Canadian Utilities, Limited, while towns and villages north and east of Vegreville are served from a new gas-fired 7,500 kw. steam plant at Vermilion. There are also diesel stand-by plants at Lloydminster and a tie-line with Calgary Power, Limited, near Holden. This utility also serves the areas around Grande Prairie from a 2,300 h.p. diesel-engine plant located in that centre. The Company serves over 16,000 customers, in approximately 100 towns, villages and hamlets in the Province, through a network of approximately 1,080 miles of transmission lines.