The British Columbia Electric Company Limited completed the installation of the fourth unit of 62,000 h.p. in its Bridge River plant, with a total capacity of 248,000 h.p. The work of raising the crest of the LaJoie storage dam was continued. Work was commenced on the Seton Creek development near Lillooet to consist of a single unit of 58,500 h.p. operating under 147 foot head for operation in 1956. Construction of a 60 kv. transmission line was completed between Lillooet and Ashcroft, a distance of 60 miles, and work began on the building of a second 100 mile transmission line from Bridge River to Vancouver to operate at 345 kv., the highest voltage on this Continent. To provide additional power for Vancouver Island an order has been placed for a submarine cable to be laid across the Strait of Georgia with a length of 77 miles and a capacity of 120,000 kva., operating at 132 kv.

The British Columbia Power Commission continued work on the redevelopment of the Puntledge River site near Courtenay, the plant to consist of a single unit comprising a 35,000 h.p. turbine under 355 foot head, driving a 30,000 kva. generator, with operation expected early in 1955. Good progress was made on the Spillimacheen River project and completion of the first stage, comprising 5,250 h.p. in three units, is anticipated in the spring of 1955; later an additional unit of 3,000 h.p. may be installed. Investigations have been completed covering a 70,000 h.p. development at Ladore Falls on the Campbell River and construction is planned for 1955. A 60 kv. transmission line from Whatshan to Nakusp was completed and a 33 kv. line from Spillimacheen River to Golden is under construction.

The Shawatlans hydro-electric plant of Northern British Columbia Power Company Limited at Woodworth Lake, comprising a 1,650 h.p. turbine and 1,125 kva. generator, was destroyed by fire in August 1954. It is expected that replacement will be undertaken in 1955.

Additions to existing diesel powered generating stations of the British Columbia Power Commission include 1,000 kw. at Williams Lake, 1,000 kw. at Terrace, 1,136 kw. at Burns Lake and 1,000 kw. at Quesnel.

Yukon Territory.—In southern Yukon and northern British Columbia, Northwest Power Industries Limited continued investigations towards a major hydro-electric development similar to Kitimat but with an even higher ultimate capacity of about 4,300,000 h.p. The scheme involves the conversion of the large lakes in the headwaters of the Yukon River into a huge storage reservoir by the building of dams near Whitehorse and at other locations. The flow of the main Yukon River and of adjacent rivers and streams would then be diverted to the Nakonake Valley, providing a head of 1,100 ft. and allowing the development initially of 880,000 h.p. and ultimately of 2,800,000 h.p. Later a third tunnel would convey the water to the Taku River for further power generation. The proposed industrial site would be on the Taku River in British Columbia where smelters and refineries for various metallurgical purposes could be located.

The Yukon Hydro Company Limited plans to build in 1955 a new plant of 800 h.p. involving the diversion to McIntyre Creek of water from the tailrace of the present Porter Creek plant.

Section 2.—The Central Electric Station Industry

Central electric stations are companies, municipalities or individuals selling or distributing electric energy whether generated by themselves or purchased for resale. Stations are divided into two classes according to ownership, viz.: (1) private—those privately owned and operated by companies or individuals, and (2) public—those owned and operated by municipalities or governments. These are subdivided according to the kind of power used into (*a*) hydraulic, (*b*) fuel, and (*c*) non-generating. This last group purchases practically all the power it resells and a few of these stations have generating equipment that is held for emergencies. The hydraulic stations contain water turbines and wheels