

power and the construction of lines over which such power is exported falls within the jurisdiction of the National Energy Board.

Power is generated in Canada by publicly and privately operated utilities and by industrial establishments. Of the total electric power generated in 1973, 72.5% was produced by publicly operated utilities, 13.1% by privately operated utilities and 14.4% by industrial establishments. However, ownership varies greatly in different areas of the country. Although Quebec power installations were at one time privately owned, almost all were transferred to public ownership in 1963. In Ontario almost all electric power has been produced by a publicly owned utility for over 60 years.

Because the determination of market prices and regulation of services is limited to inter-fuel competition with oil, gas and coal, there is some regulation of electric utilities in all provinces. In all but two provinces major generation and main transmission of power is the responsibility of a provincial Crown corporation. Investor-owned electric utilities are prominent in Alberta, Newfoundland and Prince Edward Island and continue to play a significant role in Ontario and British Columbia; they contributed about 13.1% of the total power generated in Canada in 1973. Non-utility generating facilities in industrial establishments represented 10.7% of installed capacity at the end of 1973 and generated 14.4% of the total electric energy produced in Canada in that year; however, on a percentage basis, there is a continuing decline in industrial generation as it becomes increasingly attractive to purchase power from utilities which can take advantage of larger unit sizes and operational flexibility. Even when process steam is required for an industrial operation, there are instances when it is advantageous to purchase both steam and power from the electric utility.

13.5.8 Provincial developments in 1974

Newfoundland. The water power resources of Newfoundland and Labrador are very substantial. On the island, although the rivers are generally not long, topography and run-off favour hydro-electric power development and there are several potential hydro sites in Labrador in addition to sites on the Churchill River (Labrador), downstream of the Churchill Falls development.

The Newfoundland and Labrador Power Commission was established in 1954 to supply power wherever needed throughout the province. The Commission began large-scale production of electric energy in 1967 when the Baie d'Espoir plant began operating and the provincial transmission grid was established. Power is supplied from this grid directly to several industries and to investor-owned electrical distribution companies for urban distribution. The Newfoundland Light and Power Company is the principal distributor. Bowater Power Company Limited supplies the Bowater Newfoundland Pulp and Paper Mills Limited and several mining operations. Electricity is provided to isolated areas by the Newfoundland and Labrador Power Commission through a Rural Electricity Authority and through Power Distribution Districts, principally by means of diesel generating facilities.

During 1974 the development of the hydro-electric potential of the lower Churchill River at Gull Island and the transmission of its output over an HVDC system to the island of Newfoundland was considered. On April 25, 1974, the Government of Canada announced a grant of \$350,000 for a feasibility study on electrical interconnection with the Canadian mainland.

In February 1975 the federal government agreed to provide loans to the Newfoundland and Labrador Power Corporation, at Crown corporation rates, of up to \$343 million for the Gull Island hydro-electric development in Labrador. The loans will represent 50% of the estimated cost of HVDC transmission facilities between the Gull Island site and load centres in Newfoundland and will include a tunnel cable crossing under the Strait of Belle Isle. Also included is an alternating current transmission link with the Churchill Falls power project to connect the Newfoundland power system to that of Quebec. Federal grants toward the cost of extensive preliminary studies totalled \$450,000. The proposed installation would have an installed capacity of 1,800 MW and an annual energy output of 11.7 billion kilowatt hours a year. The transmission system to Newfoundland would extend nearly 640 miles to a terminal station near St. John's. Present plans call for an 800-kV HVDC system capable of delivering 1,600 MW to the island of Newfoundland. Development of the Gull Island site, together with