

region is interconnected with the northern Ontario system and plans were being made to purchase energy from Ontario by 1977.

Projects under consideration include hydro sites on the Saint-Maurice River and a pumped storage site at Lac Saint-Joachim, 30 miles (48 km) below Quebec. Preliminary studies have been made of other pumped storage sites and of undeveloped hydro sites along the north shore of the St. Lawrence River (Magpie, Sainte-Marguerite, Moisie rivers) and in the Lac Saint-Jean area.

Hydro-Québec estimates that the demand for electric energy will increase by 7.8% a year during the 1974-85 period. Financing for over 12 000 MW of new capacity to meet this demand will require large capital investment and to ensure adequate internal generation of funds, a three-year plan of rate increases was submitted to the Quebec government. Subject to export licensing an agreement has been developed involving supply of surplus energy to the Power Authority of the State of New York (PASNY) up to 14.4 billion kWh during the period 1977-81 via a proposed 765-kV interconnecting transmission system. Construction began in 1976. The agreement provides the right to recall any energy needed for Quebec's own use. From 1982-97, according to the agreement, PASNY may make annual purchases of 3 billion kWh with provision for purchase of an equal amount during the winter by Hydro-Québec. This exchange recognizes the seasonal differences in demand between Canadian and US utility systems.

Ontario. Most of the electric power produced in the province is generated by The Hydro-Electric Power Commission of Ontario. The province's largest hydro-electric generating station is located on the Niagara River at Queenston, where the Sir Adam Beck-Niagara generating stations Nos. 1 and 2 and the associated pumped storage-generating station have a combined capacity of 1 815 MW.

Ontario has more thermal capacity than any other province in Canada; total installed capacity in 1975 was 11 537 MW, about 53% of the national total. Ontario Hydro's Lakeview station at Toronto is Canada's largest thermal generating station with an installed capacity of 2 400 MW. The Lambton station near Sarnia reached its designed capacity of 2 000 MW in 1970. Except for the oil-fired Lennox (near Kingston) and Wesleyville stations, Ontario's fossil-fuelled thermal plants were all built for coal-firing. The R.L. Hearn plant in Toronto was subsequently converted to burn natural gas.

The East and West Systems, formerly separate operating entities, were fully integrated in 1970 and, although the capacity of the interconnection is a limiting factor in the exchange of power, the combined facilities form a unified provincial network. For general day-to-day operations the province is divided into seven regions, with regional offices in major municipalities.

The primary concern of Ontario Hydro is the provision of electric power by generation or purchase to more than 350 electric utilities for resale in municipalities having "at cost" contracts with the commission. The commission also supplies power in bulk to direct customers, mostly industrial consumers whose requirements are so large or so unusual as to make service by local municipal utilities impracticable; these include mines, industries in unorganized areas, and certain interconnected systems. These operations represent about 90% of its energy sales. The commission also delivers electric power to retail customers in rural areas and in a small group of 15 municipalities served by commission-owned local distribution facilities. However, retail service is generally provided by municipal electric utilities, owned and operated by local commissions which supply consumers in most cities and towns, many villages and certain populous township areas. In addition to administering the enterprise over which it has direct control, the commission, under the Power Commission Act and the Public Utilities Act, exercises certain regulatory functions, particularly with respect to the group of municipal electric utilities it serves.

Expansion of Ontario Hydro's capacity in 1975 was limited to installation of the fifth 500-MW unit at Nanticoke. One 573.75-MW unit at the new Lennox oil-