

fuelled station became operational late in 1975 and was scheduled for commercial service early in 1976. Following repair of extensive damage resulting from a fire in 1974, the No. 2 unit at Nanticoke was restored to service in December 1975. Peak demand in that month was 15 742 MW, an increase of 15.3% from the previous year, a growth partially attributable to increased demands in the residential and commercial categories, both of which are weather-sensitive. Total electrical energy made available in the province was 0.6% above 1974 with indications that reduced industrial demand or economic constraints were the main cause of the unusually low growth.

Plans for future additions to the Ontario Hydro system are somewhat uncertain. The only hydro additions currently scheduled are two 39-MW units at Arnprior and one 24-MW unit at Andrew's Falls. Fossil-fuelled additions include sixth and seventh 500-MW units at the Nanticoke coal-fired station in 1976 followed by the eighth unit in 1977. Two of the remaining three oil-fuelled 573.75-MW units at Lennox were planned for service in 1976 and the final unit in 1977. An oil-fired station at Wesleyville, near Port Hope, of similar design to Lennox, is scheduled to come into service in 1981-82.

In northwest Ontario, extensions to the coal-fired Thunder Bay plant are expected to add a 150-MW unit in 1980 and a second unit in 1981. A new coal-fuelled generating station in Atikokan is being planned for 1983-85 when four 200-MW units will be installed. Both the Thunder Bay and Atikokan units will be designed to use coal from western Canada.

Preliminary planning has been undertaken for a third thermal power plant in northwestern Ontario to be located along the north channel of Lake Huron. This is tentatively scheduled for initial service in 1987 and would consist of four 750-MW fossil-fuelled units.

An extensive program of nuclear generation is expected to add 11 760 MW of new capacity in the period 1976-88. This program consists of four unit stations, three employing 800-MW units and one, Pickering B, with 540-MW units. Bruce A was scheduled to have one 800-MW unit added each year (1976 to 1979). Other nuclear additions are scheduled from 1981 through 1988: Pickering B (1981-83); Bruce B (1983-86); and Darlington (1986-88).

Future electricity plans and rates for electrical energy in Ontario are being reviewed by several groups. The Ontario Energy Board completed a review of bulk power rates for 1976 after a series of hearings completed in September 1975. A committee of the Ontario Legislature established to review electricity rates recommended a 22% increase for 1976. During 1975 the Ontario government established a Royal Commission on Electric Power Planning with a mandate to explore long-term aspects of electric power development.

Gas is burned to a limited extent (less than 6% of generation), primarily to meet environmental constraints. Lennox oil-fired capacity will give an added flexibility in fuel sources and help ensure an adequate supply of electrical energy. However, coal imported from the US is still the most significant fuel, producing about 25% of the electricity in Ontario and serving the needs of the steel industry there. In 1974-75 the cost of this coal more than doubled and difficulties arose in getting full deliveries or in making contracts for future requirements. Canadian stockpiles have been adequate to meet the situation but have been severely depleted partly because of strikes in the transportation and US mining industries. Alternate Canadian sources of both thermal and metallurgical coal to supplement US supplies may be available after some years but in the immediate future Ontario must remain dependent on US supplies. There is increasing and urgent interest in securing future supplies of both metallurgical and thermal coal from western Canada. Meeting these requirements will require an expansion in production and, particularly, in transportation facilities. The present transport system could probably handle up to 1 million tons (900 000 t) a year by rail to the Lakehead and by ship to the plants. Construction of a 12 million-ton-capacity (11 million t) coal terminal is projected for Thunder Bay. Rail facilities from BC and