

The second longwall was scheduled to go into operation early in 1975 and the third by the middle of the year. DEVCO started on a new 600,000-ton-a-year mine in 1975 to replace the 99-year-old Princess Colliery. The new mine, to be called Prince Mine, will produce relatively high-sulphur coal for power generation, will employ over 300 miners and will initially use the room and pillar method of coal extraction. During 1974 construction began at the new DEVCO preparation plant at Grand Lake, located midway between the Lingan and No. 26 mines, which is expected to be operating by late 1976 and is designed to reduce the sulphur content of coal at a rate of 3.5 million tons a year.

Outlook for 1975. Strong demand for Canadian coking and thermal coal reflects expanding foreign requirements and projected growth of the domestic electric utility industry. Japanese steel companies could double imports from Canada in the next 10 years to approximately 25 million tons annually. Other countries are also interested in this resource, including Britain and the Federal Republic of Germany where steel interests sought Canadian coking coal. In 1974 the industry operated at its productive limits, a situation that was expected to continue as all indications are that demand will exceed supply for the near term. It is questionable whether additional capability can satisfy all available markets before the end of this decade. Problems facing Canada's coal industry include longer lead times for mine development, introduction of new and more stringent regulatory requirements, short supply and lengthening delivery times for mining and processing equipment, the need to upgrade transportation and terminal handling capacities, higher construction, development and operating costs, and even tighter supplies of skilled labour. Despite these problems, Canada's total coal production should reach 27 million tons in 1975. Of this amount 13 million will be exported primarily to Japan.

13.5 Electric power

13.5.1 Electric power development

Additions to generating capacity during 1974 raised the total installed capacity at year-end by 5.1% to 57,149 MW (megawatt = 1,000 kilowatts). The 2,773 MW added during the year included 2,246 MW of hydro-electric generation and 500 MW of conventional thermal generation together with some minor changes in gas turbine and internal combustion installations.

Hydro-electric installations provided 79.4% of new capacity added in 1974, compared with 40% in 1973, largely as a result of the completion of the final four 475-MW units at Churchill Falls which raised the installed capacity of that plant to 5,225 MW in 11 units. Other hydro additions included a 275-MW unit at the G.M. Shrum Station on the Peace River in British Columbia and the final three 102-MW units at the Kettle Station on the Nelson River in Manitoba.

Conventional thermal generation additions were primarily in Ontario where a fourth 500-MW unit was added at the coal-fired Nanticoke Station. There were no new nuclear additions in 1974.

Electric power generation in 1974, at 278,969 GWh (gigawatt-hours = millions of kilowatt-hours), was 6.4% above the previous year entirely as a result of increased generation from renewable hydro-electric sources. Hydro generation increased by 9% over 1973 to a total of 210,187 GWh and contributed 75.3% of total generation (73.6% in 1973). Non-nuclear generation was 0.2% lower and nuclear generation 2.5% below 1973.

Primary and secondary energy used in Canada increased 7.5% to 266,013 GWh, down from a growth of 7.9% a year earlier. The percentage increase exceeded that of the generation increase as a result of reduced exports. For the first nine months of 1974, growth in the general category under 5,000 kW, which included the former commercial category, increased by 9.5% and domestic and farm use grew by 10.4%. The general category over 5,000 kW and "energy used in own plant", both largely industrial users, grew by 3.5% and 4.3% respectively compared with the same period in 1973.

Exports of electricity to the US decreased nearly 9% to 15,398 GWh and net exports fell 12% to 12,957 GWh representing 4.6% of total generation for 1974. Most exports to the US occur during peak load periods of the summer, but sales were down in 1974 because of moderate weather conditions and the availability of more equipment in the US. Trade in