

supplies Inland Natural Gas Co. which operates an extensive distribution system serving communities in southern and central BC. Westcoast's export sales are made to the El Paso Natural Gas Co. for distribution in the Pacific northwest region of the US.

### Transportation of oil

13.6.2

Canadian oil moves to markets through an intricate network of oil pipelines extending from the producing fields west to Sumas, BC, near Vancouver, and east to the Niagara area of Ontario. This network serves Canadian refineries in British Columbia, Alberta, Saskatchewan, Manitoba and Ontario, and US markets in the Puget Sound, mid-west, Chicago and upper New York state areas. At year end 1976, the length of the entire pipeline system was 32 703 km.

Prime components are the trunk lines of Interprovincial Pipe Line Ltd., Canada's largest oil pipeline, and the Trans Mountain Oil Pipe Line Co. Both lines start in Edmonton and are fed by a network of gathering lines transporting oil to the main trunk lines at that point. Outside Alberta, the Interprovincial pipeline receives and transports Saskatchewan and Manitoba crude oil.

Trans Mountain operates a pipeline system which carries crude and natural gas liquid from Edmonton and other points in Alberta and British Columbia to Burnaby, BC, and a subsidiary operates branch lines to refineries in the state of Washington.

The other prime mover of oil from Alberta, the Aurora pipeline, with a length of only 1.6 kilometres within Canada, receives crude oil and equivalent from the Rangeland gathering system and moves it to Billings, Montana, both for refining and further shipment to points in the US mid-west.

The oil embargo of the winter of 1973, coupled with frequent price increases of offshore oil, led the federal government to decide on a policy of an all-Canadian coast-to-coast pipeline network for security of supply, self-reliance in oil and oil products and to further economic development throughout the country.

In May 1975, the government approved the company's application to extend the Interprovincial system from Sarnia to Montreal to provide consumers in eastern Ontario and western Quebec with access to more secure domestic supplies of Canadian crude oil. Pipeline construction at 872 km increased in 1976 largely owing to completion of this Sarnia-Montreal link. Elsewhere pipeline construction continued the decline that began in 1973. The lack of new oil discoveries and regulated cutbacks in crude oil production were responsible for this decrease in activity.

Interprovincial Pipe Line Ltd.'s 76-cm oil pipeline from Sarnia to Montreal was completed in June 1976 and was the only large-diameter project finished during the year. The line will eventually have a capacity of 55 643 cubic metres a day and initial throughput is 39 745 m<sup>3</sup>/d. Fully powered with 16 pumping stations, capacity of the line could approach 109 696 m<sup>3</sup>/d if necessary, and flow in the line can be reversed.

In product pipelines, construction commenced on the 321-km, 30.4-cm \$300 million natural gas liquids pipeline from Edmonton to Sarnia via the US. After receiving approval from the NEB to export ethylene and ethane to the US, Dome Petroleum Ltd., one of the principals in the system, began work on 12 river crossings in 1976. The 11 925 m<sup>3</sup>/d project had been planned for more than five years and was to be completed early in 1978. Canadian portions of the system are called the Cochin pipeline and in the US the Dome segment. The system primarily will carry ethane, ethylene and propane from plants near Edmonton and Red Deer, Alta., crossing the border near Sherwood, North Dakota, and again at Windsor, Ont. A spur line will supply Columbia Gas System's synthetic natural gas plant at Green Springs, Ohio, with 6 360 m<sup>3</sup>/d of gas liquids.

In Ontario, Trans-Northern Pipe Line Co. has completed looping a 22-km stretch of its products pipeline south of Ottawa. It is also planning to reactivate two pumping stations to move more products from Toronto area refineries to the Ottawa market.

In October 1976, Alberta Oil Sands Pipeline Ltd. received approval from Alberta's energy resources conservation board to build an oil line for transmission of synthetic crude oil from the Mildred Lake extraction plant of Syncrude Canada Ltd. to the International Pipe Line Ltd. terminal in Edmonton. The proposed line will comprise some 434 km of 58-cm pipe and 11 km of 53-cm pipe with four pumping stations along