

Flow diagram of typical regasification terminal.

will carry 140,000 m³ of gas through Arctic ice that can be 2.5 m thick and ridges that can be as much as 20 m thick and 120 m wide.

The ships will be 335 m long, the size of three-and-a-half football fields, while the full power level of 150 megawatts in each is five times that of standard LNG carriers of comparable size.

Marketing

While Petro-Canada intends to deliver Arctic gas to eastern Canadian consumers, it also hopes to sell it, by exchange and displacement, to customers in the United States, where it will provide an alternative, competitive source in a region that is dependent on expensive imported oil. Gas from the project can be sold anywhere in North America because of the interconnections of pipeline transportation systems.

At least three possible locations for a regasification plant site are under study. They are on the St. Lawrence River, Quebec; Lorneville, New Brunswick; and the Strait of Canso, Nova Scotia.

The southern terminal of the LNG carriers will provide for off-loading into two



100,000 m³ storage tanks. After regasification, the gas will be fed into a pipeline for delivery to eastern markets.

Besides developing Canadian expertise in ice-breaker technology, the project will lead the way in development of the substantial resources of Canada's North.

Route and environment

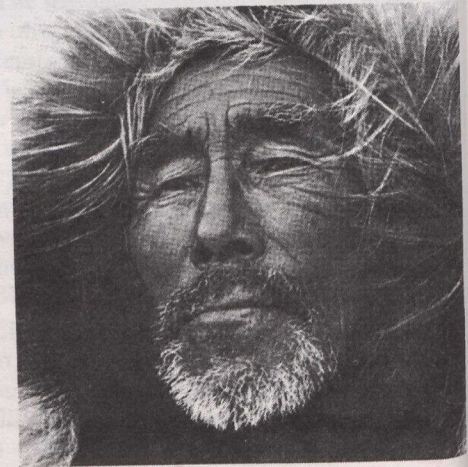
The LNG tankers, each costing an estimated \$250 million, would use a route which swings near Greenland in the Davis

Strait, cutting between the northern tip of Newfoundland and Labrador during the summer and around Newfoundland in the winter. The round trip would take 12 days.

The Arctic Pilot Project will be operated with minimal disruption to the Arctic environment, says Petro-Canada. Melville Island has limited precipitation, intense cold and very short growing seasons. Local areas of any significant productivity will be avoided. The carrier route has been chosen to minimize encounters with highly productive marine ecosystems.

Cumulative impacts on birds, ringed seals, caribou, muskoxen and whales will be minor.

Petro-Canada accepts an obligation to be an industry leader in socio-economic and environmental programs. The implications of the Arctic Pilot Project for northern people are an integral component of project planning. The four communities of Resolute Bay, Grise Fiord, Arctic Bay and Pond Inlet, and the surrounding area, provide the regional setting for the socio-economic evaluation of the Arctic Pilot Project effects. Petro-



Canada has assessed employment and training opportunities, impacts to resource harvest, small business development, population distribution, transportation, health services, communications, housing, and municipal services.

In recognition of the need for good working relations and understanding between northerners and project personnel, a community liaison program has been developed, allowing for participation through an informed community. The liaison program, which has already begun, will continue during the life of the project.

