

B. Arctic Islands

It is the prospect of a transportation corridor being opened up that is very threatening to us . . . As far as we are concerned not enough environmental assessment has been carried out to ensure that our lifestyle will be protected . . . To participate in further research . . . is a matter of consultation. (Mrs. F. Williams, Labrador Inuit Association, Issue 26:14-15, 18-5-1982)

At present, it is not anticipated that crude oil will be produced from the Arctic Islands until the turn of the century, although this is a function of future discoveries and domestic demand. Gas could be produced by the late 1980s if the Arctic Pilot Project application is reactivated successfully before the National Energy Board. The Arctic Pilot Project group has chosen tankers as the mode of transport to bring LNG from the Arctic Islands to market; they will nevertheless be utilizing arctic pipeline technology on Melville Island to link the natural gas field at Drake Point to the LNG loading facility at Bridport Inlet.

The LNG carrier route from Bridport Inlet would be easterly through Viscount Melville Sound, Barrow Strait and Lancaster Sound, across Baffin Bay and then southerly off the west coast of Greenland and through Davis Strait and the Labrador Sea (Figure 11). This route through the Northwest Passage is also the one favoured for the transport of oil from the Beaufort Sea Region. The terminal location remains undecided pending the identification of a market for the natural gas.

Two Class 7 icebreaking tankers would make 16 trips per ship per year over the 5,200 kilometre journey if terminals in Eastern Canada were involved. The flexibility of ship transportation would also allow European markets to be served, where LNG receiving facilities already exist. Cargo capacity would be 140,000 cubic metres (approximately 5 million cubic feet) and the carrier would be 372 metres long by 43 metres wide. Depth of the vessel would be 29 metres with a draught of 11 metres. The tanker would be operated by a crew of 42. The propulsion system would employ three fixed-pitch propellers, each driven by a separate turbo-electric unit capable of delivering 135 megawatts (180,000 horsepower) at full power, five times that of standard LNG carriers of comparable size. The tankers would exceed arctic shipping standards, utilizing a strengthened hull, special cargo containment features and a powerful propulsion system. Sophisticated sensing, positioning and communication equipment would also be a part of the ship's design.

The LNG carriers have been designed to enter ports at a number of locations on the east coast of Canada and the United States. At this time there is no market in the United States for surplus exports of Canadian gas and this situation is expected to continue for three to six years. The price of Canadian gas is also not competitively favourable at present. Although the proponents are investigating potential markets in Europe, the project is stalled pending market developments.

Although proven natural gas reserves are well beyond the threshold levels required for a tanker operation, this mode is seen as providing more flexibility to change production levels or delivery points. With the fate of the Polar Gas Pipeline from the Arctic Islands undecided, Panarctic told the Committee the Arctic Pilot Project provided a favourable means of proceeding to transport LNG immediately on a relatively small scale.