

PIPELINE

Planning and Design Continue on Alaska Segment

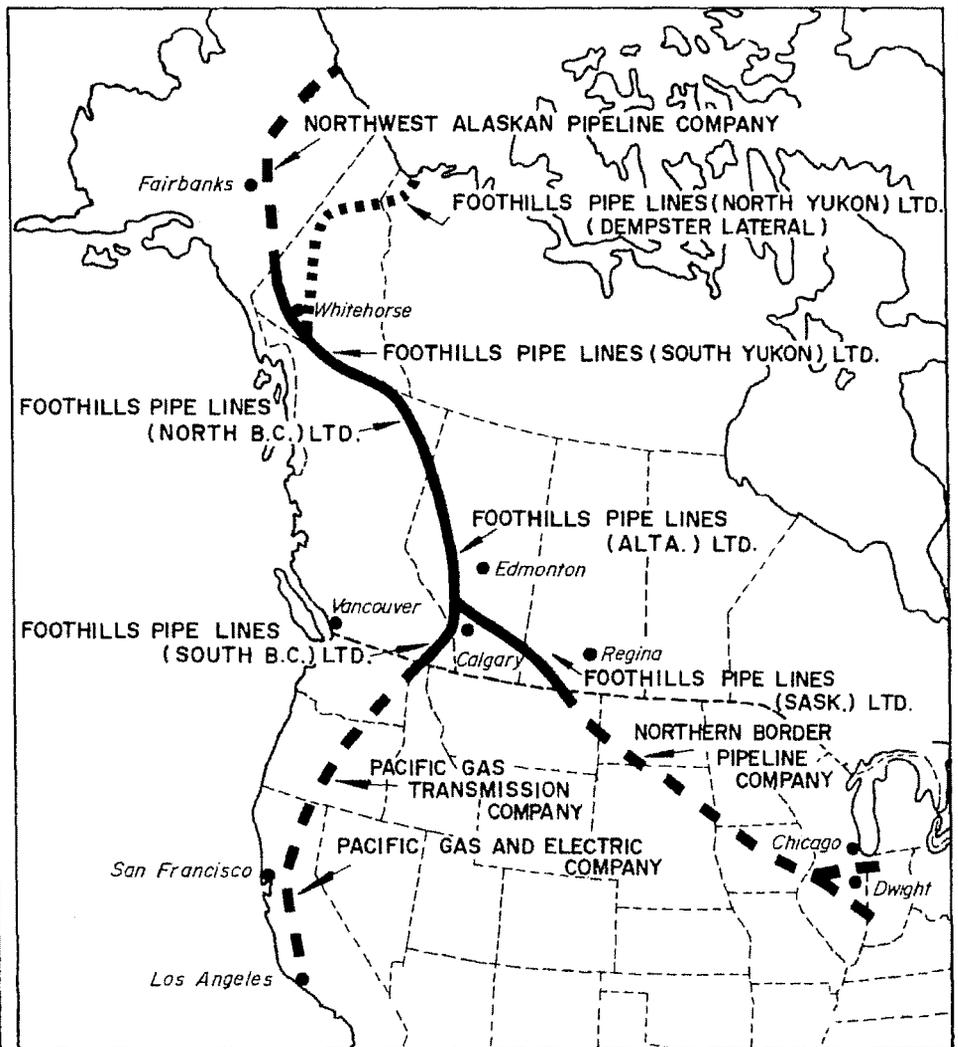
Planning and design of the Alaska Highway gas pipeline are continuing to assure the project can move ahead at an appropriate time, says Joe Vallely, spokesman for Northwest Alaskan Pipeline Company.

By the end of June, the project sponsor in Alaska expects to complete the first phase of a \$3 million (U.S.) study on an alternative process for removing carbon dioxide from natural gas. The new process has the potential to reduce by about 20 to 25 percent both the construction and operating costs of the gas conditioning plant to be built at Prudhoe Bay, Alaska. The estimated cost of the plant is \$3.6 billion (U.S. 1980). The alternative treatment process could also reduce the number of modules for the plant from 150 to 100. This would, in turn, reduce from three to two the number of sea lifts (barging seasons) required to transport the modules north.

Northwest Alaskan is also completing a report on methods to mitigate the impacts of frost heave in permafrost soils.

The company has spent about \$6.3 million (U.S.) this year, out of an approximate \$10 million (U.S.) budgeted for 1983. Staff has been reduced to 85 from the 220 employees Northwest Alaskan had a year ago, when the decision was made to delay completion of the project to 1989. By September, the company expects to be down to 45 staff members and will maintain its personnel in the low forties through 1984.

At the last partnership meeting held in early June, the nine member-companies and three producers that comprise the Alaskan Northwest con-



sortium discussed budget, work and staffing plans for the remainder of 1983 and 1984.

The Canadian sponsor, Foothills Pipe Lines (Yukon) Ltd., has decided to cut back staff involved in Phase II planning and design from 100 to 19 by September 1. One hundred em-

ployees continue to work in the operations and maintenance of Phase I. The number is expected to be reduced as the work concludes.

NEB Supports Lower Minimum Gas Purchases

The National Energy Board has agreed in principle to a proposal by Pan Alberta Gas Ltd. to accept lower minimum gas purchases from United States buyers through the southern sections of the Alaska Highway gas pipeline.

The company announced a plan in May to give U.S. purchasers an optional "take or pay" provision, rather than a fixed "take and pay" position, for contract volumes of gas. The purchasers would be obliged to take and pay for an annual minimum of 40 percent of contract volumes for each year of the interim arrangement, which Pan Alberta proposes will cover the 1982-83 and 1983-84 contract years, ending October 31.

However, the proposal would allow the purchaser to make an advance

payment, in place of physically taking the gas, for volumes not taken between the 40 percent minimum and 70 percent of the sales contracts. Up to \$452 million (Cdn) could be provided interest-free by the U.S. purchasers to Canadian producers to cover these take-or-pay obligations.

At present, Pan Alberta has an 85 percent "take and pay" contract agreement to sell gas to Northwest Alaskan Pipeline Company, sponsors of the American segments of the Alaska Highway Gas Pipeline Project. Total contracts for up to 29.5 million cubic metres (1.04 billion cubic feet) a day require the purchasers to take at least 85 percent of that amount.

As a result of substantial losses of their gas markets, Northwest Alaskan invoked *force majeure* in February to

reduce its purchases to one-third of the contracted volumes. The *force majeure* provision is a clause normally included in commercial contracts that can excuse the parties from performing under the terms of the contract due to specified actions which are considered beyond the power of the parties to control.

The National Energy Board has requested complete contract amendments be submitted by September 15. The changes are still subject to approval by government and regulatory bodies in the U.S. and the financial arrangements by institutions involved in the financing of the pipeline facilities. The proposal must also be agreed to by Pan Alberta's gas producers.

Commissioner Now Part-time With Agency



The Hon. Mitchell Sharp, Commissioner of the Northern Pipeline Agency

The Honourable Mitchell Sharp is now employed on a half-time basis as Commissioner of the Northern Pipeline Agency. Following delays encountered in proceeding with the second stage of the Alaska Highway gas pipeline, the federal Cabinet on April 14 re-appointed Mr. Sharp as Commissioner

at 50 percent of his previous salary.

Since the sponsors of the project in the United States decided in April 1982 to delay completion of the pipeline until 1989—two years later than previously planned—Agency staff employed on a full time basis has been reduced by about 55 percent. From a peak strength of 104, 23 people have been seconded through the Public Service Executive Interchange Program on a full-time basis to other federal government departments and agencies. Fifteen employees are on partial secondment, with more than 10 percent of their time spent on Agency affairs. A total of 26 people has left the Agency as a result of layoffs and attrition.

The projected budget of the Agency for the fiscal year 1983-84 is approximately \$5.3 million. Net expenditures after reimbursements from secondments are estimated at \$3.9 million. This represents a \$2.1 million or 35 percent reduction from the previous year's net expenditures.

Over the next several months, Agency environmentalists will continue to monitor the results of revegetation and land restoration along the Eastern and Western Legs and oversee the

clean-up and revegetation that remains to be done on the Eastern Leg. Other Agency staff members are involved in work related to outstanding damage claims by landowners following Phase I construction, a final review of the "as built" drawings of the Eastern Leg and an analysis of the cost of extra work associated with construction of the four Eastern Leg compressor stations.

Pat Patterson

Former Northern Pipeline Agency employee Albert Philip (Pat) Patterson of Coquitlam, British Columbia, died on May 27, 1983, after a lengthy illness. Mr. Patterson worked from 1980 to 1982 as a member of the Agency's field surveillance team overseeing construction of Phase I of the Alaska Highway gas pipeline. A welder by profession, he had over 30 years experience in pipelining in Canada, Britain and the Middle East. He is survived by his wife, three children and two grandchildren.

NPA Approves Pipeline Route in Yukon

Approval of the final route of the 830-km (515-mi.) section of the Alaska Highway gas pipeline through Yukon was announced on March 1 by Sen. H.A. (Bud) Olson, Minister responsible for the Northern Pipeline Agency.

The Minister, who also serves as Government Leader in the Senate, said that he had agreed to the route approved by William Scotland, the Designated Officer of the Agency.

The approval was issued subsequent to representations, received by the Designated Officer on February 16 at Whitehorse and Takhini Hotsprings, relating to objections made to the proposed pipeline route.

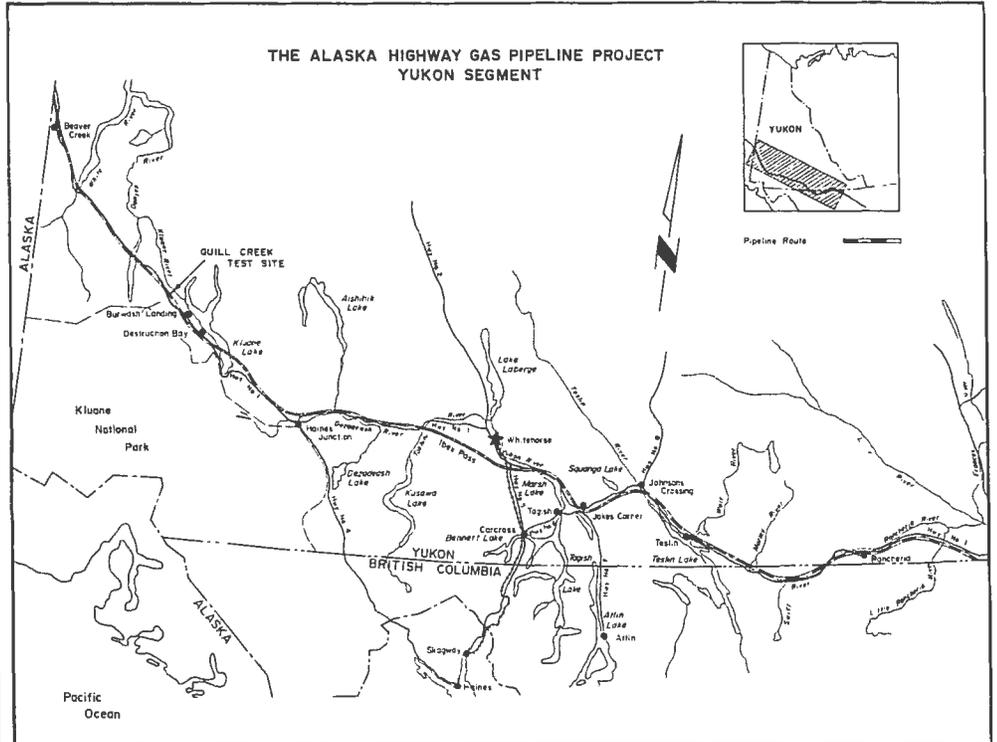
The holders of three groups of quartz mineral claims expressed concern that the proposed pipeline route could affect exploration and exploitation of their claims. Two of the groups of claims are located immediately east of the Ibx Pass, approximately 16.5 km (10 mi.) southwest of Whitehorse, while the third group would be crossed by the pipeline at a point lying approximately 10 km (6 mi.) south of the city.

In his summation, Mr. Scotland stated that, as Designated Officer, he was empowered to approve the route despite objections. However, after approval he could require the sponsor, Foothills Pipe Lines (South Yukon) Ltd., to make changes and a re-routing compromise might be possible. He also noted that compensation was a matter the claim-holder and the company would have to resolve.

The establishment of the final pipeline route through Yukon paves the way for the lifting of the freeze on development placed in 1977 on an eight-km (five-mi.) corridor that straddles the entire length of the route originally proposed by Foothills (South Yukon). It will also allow for a grant of easement of Crown lands for the pipeline right-of-way, which will be 240 m (787 ft.) in width originally and reduced to 40 m (122 ft.) once construction of the system is completed.

Approval of the pipeline route, which generally follows the Alaska Highway, will enable Foothills (South Yukon) to complete detailed design and engineering plans for the system in Yukon.

In an interim report to the Minister of the Environment in 1979, the Environmental Assessment Panel, review-



ing plans for the pipeline in Yukon, underlined concerns that had been expressed by the public with respect to four areas in which the proposed route departed significantly from the Alaska Highway—Kluane Lake, the Ibx Pass west of Whitehorse, the Mt. Michie-Squanga Lake area and Rancheria Valley.

In a final report last September, following further public hearings, the Panel accepted the proposed routing across Kluane Lake and through the Rancheria Valley. It also endorsed the company's revised decision to follow the highway route in the Mt. Michie-Squanga Lake area.

In a July 1981 report, the Panel concluded that construction of the pipeline through the environmentally sensitive Ibx Pass area could be undertaken without undue adverse impact. The report recommended against adoption of this route, however, because of the increased access to the area that might be provided by the pipeline right-of-way following construction. The Panel also expressed concern that the choice of the Ibx route would foreclose alternative locations for the linking up of the Dempster Lateral from the Mackenzie Delta with the mainline.

In response to the concerns express-

ed by the Panel, the Yukon Territorial Government, with financial assistance from the Northern Pipeline Agency, commissioned a consultants' study on possible means of protecting the Ibx environment regardless of whether the pipeline was routed through the pass.

Sen. Olson noted that following consideration of the study, the Yukon Government announced its intention of designating the Ibx Pass as a special management area in order to protect the land and the wildlife inhabiting it. At the same time, the YTG also endorsed the routing of the pipeline through the pass.

The Yukon Advisory Council had earlier supported the routing of the pipeline through the Ibx Pass provided special measures similar in nature to those proposed by the YTG were adopted to control public access to the area. Foothills (South Yukon) has always preferred the route from an engineering and economic standpoint.

Sen. Olson also noted that officials of the Agency had concluded the installation of the pipeline through the Ibx would not restrict the alternatives open with respect to the point of connection of the Dempster Lateral with the mainline.

News in Brief

A Leave to Open order issued by the National Energy Board on May 9 for the compressor station at Richmond, Saskatchewan completed all construction approvals for the Eastern Leg of the Alaska Highway gas pipeline in Canada. Successful testing and commissioning of the equipment at Richmond concluded in late March, while the compressor facilities at Piapot and Monchy, Saskatchewan were completed a month earlier.

As of mid-May, the electrical unit at Jenner, Alberta was the only compressor in operation along the Eastern Leg. The other three gas compressors were shut down because of the low volume of gas exports to the United States.

In May, a total of 165.7 million cubic metres (5.85 MMMcf) and 102.9 10⁶m³ (3.63 MMMcf) flowed to the U.S. through the Eastern and Western Legs respectively. This represents 21.4 percent and 44.4 percent of the amounts authorized under existing licences.

The latest cost estimate for the Eastern Leg of the Alaska Highway gas pipeline in Canada, as of the end of April, is \$733 million in current as-spent dollars, reports Foothills Pipe Lines (Yukon) Ltd. The amount is approximately \$44.6 million or 5.7 percent below the approved estimate and includes charges associated with extra work orders.



Foothills and contractor personnel monitor testing of high-pressure discharge piping at Richmond compressor station.

In the United States, Northern Border Pipeline Company filed the estimated final cost of the Eastern Leg at \$1,130,642,000 (U.S.). This is about \$107.3 million, or nine percent, less than the project control estimate as approved by the Federal Energy Regulatory Commission.

The Agency's regulatory counterpart in the U.S., the Office of the Federal Inspector, is now down to 45 staff members from a total of 159 a year ago. Staff will be further cut back by year's end and maintained in the low thirties through 1984.

Changing financing and market conditions make it open to question whether the Alaska Highway gas pipeline can be completed by 1989, con-

cludes the General Accounting Office of Congress in a study released in May. The study commissioned by Alaskan Republican Senator Ted Stevens cites natural gas surplus in the United States—as a result of increased discoveries, reduced consumption, and the competitiveness of other fuels—the chief obstacle to an overland pipeline or the alternative of shipping the gas south in a liquified state.

While this project is faced with major financial and marketing problems, the report stated alternatives to the overland pipeline system are no more viable because of the uncertainty of future gas markets. Continued reinjection of Alaskan natural gas may be its only near-term use, the authors concluded.

Advisory Council Update

Frank Oberle, Member of Parliament for Prince George-Peace River, attended the April 16th meeting of the Northern British Columbia Advisory Council held in Fort St. John.

Discussion focused on training, local employment and business opportunities and the application of a benefitting-area tax on the pipeline. This would involve setting up a system to tax the Alaska Highway gas pipeline in the region to provide revenues for social and municipal services.

The Council's next meeting is scheduled for July 21 in Fort Nelson.

At the last meeting of the Yukon Advisory Council, held on March 8 in Whitehorse, members were briefed on the resource and management study of the Ibex Pass area funded by the Yukon Territorial Government and the Northern Pipeline Agency.

The Council will hold its next meeting in September.

Pipeline

The Northern Pipeline Agency was created by Parliament in April 1978 to oversee planning and construction of the Alaska Highway gas pipeline project in Canada. Inquiries or suggestions regarding the Agency's publication, *Pipeline*, may be directed to:

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