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UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Yukon Pacific Corporation

)

Docket No. GP87-16-000

MOTION TO INTERVENE AND PROTEST
AND ANSWER OF ALASKAN NORTHWEST
NATURAL GAS TRANSPORTATION COMPANY

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Dated: February 13, 1987

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TRANSPORTATION COMPANY

Alaskan Northwest Natural Gas Transportation Company ("Alaskan Northwest"), pursuant to Rules 211, 213, and 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. §§ 385.211, 385.213 and 385.214, moves to intervene in this proceeding. For the reasons described herein, the Commission should dismiss or hold in abeyance Yukon Pacific Corporation's ("Yukon Pacific") Petition for Declaratory Order. If the Commission nonetheless acts on the Petition at this time, it should exercise jurisdiction over Yukon Pacific.^{1/}

COMMUNICATIONS

All pleadings and communications concerning Alaskan Northwest's motion to intervene should be addressed to the following persons:

^{1/} Pursuant to Rule 203(c), Alaskan Northwest has combined its Motion to Intervene and Protest and Answer in this filing.

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MOTION TO INTERVENE

Alaskan Northwest is a partnership designated by the President and Congress to construct and operate the Alaska pipeline segment and Alaska Gas Conditioning Facility ("AGCF") segment of the Alaska Natural Gas Transportation System ("ANGTS").^{2/} An international project, the ANGTS, as designated by the President, will initially be capable of delivering 2.4 Billion cubic feet ("Bcf") per day of Alaskan North Slope natural gas to the lower 48 states. Alaskan Northwest holds a

^{2/} The Partnership is composed of Northwest Alaskan Pipeline Company, an affiliate of The Williams Companies; Calaska Energy Company, an affiliate of Pacific Gas & Electric Company; TransCanada Pipeline Alaska, Ltd., an affiliate of TransCanada Pipelines Ltd.; United Alaska Fuels Corp., an affiliate of Midcon Corp.; and TETCO Four, Inc., an affiliate of Texas Eastern Transmission Corp.

conditional certificate of public convenience and necessity issued by the Commission, pursuant to the Alaska Natural Gas Transportation Act ("ANGTA"), Natural Gas Act, and Waiver of Law ("Waiver"), Public Law No. 97-93, to construct and operate the AGCF and a 745-mile, high pressure, chilled, buried pipeline from Prudhoe Bay, Alaska to the Alaska-Canadian border, where it will connect with the Canadian segment of the ANGTS. According to Yukon Pacific's Petition, it has been formed to construct and operate the Trans-Alaska Gas System ("TAGS"). TAGS will be a 796.5-mile, buried, chilled, high pressure pipeline capable of delivering 2.3 Bcf per day of North Slope gas to Port Valdez, for conversion to liquefied natural gas ("LNG") and export to Asia. Pet. at 2. TAGS would parallel the ANGTS from Prudhoe Bay to Delta Junction, Alaska and utilize the AGCF.

Alaskan Northwest has a substantial interest in this proceeding, because Yukon Pacific is proposing to construct a competing project for the transportation of North Slope gas, is proposing to utilize facilities to be constructed and operated by Alaskan Northwest and would cross or parallel the ANGTS Alaska pipeline segment in many places. Alaskan Northwest's interests cannot be adequately represented by any other party to this proceeding.

PROTEST AND ANSWER

I. Summary of Position

Yukon Pacific's Petition presents an incomplete and premature basis for the Commission to determine the nature and extent of its jurisdiction over TAGS. The Commission should therefore dismiss the Petition or hold it in abeyance. Yukon Pacific has not demonstrated that it will be viable purely as an export project and therefore would be engaged solely in foreign commerce. Yukon Pacific has not even addressed the jurisdictional consequences of its intention to utilize the AGCF, a jurisdictional facility, as part of its operations. Yukon Pacific also has not identified the gas supplies that will support its project. Nor has Yukon Pacific explained at any time since its genesis in 1982 how it will satisfy ANGTA's requirement that Alaskan North Slope gas can only be exported pursuant to an exchange arrangement whereby U.S. consumers receive an equivalent amount of comparably priced energy from a foreign source. Only Congress can otherwise permit the transportation of North Slope gas out of Alaska except through the ANGTS. Yukon Pacific's Petition simply has not presented the necessary factual basis to permit the Commission to conclude TAGS is more than a hypothetical project at this time or to define the scope of its jurisdiction over that project. Accordingly, the Commission should dismiss Yukon Pacific's Petition or defer action on it pending further definition of the TAGS project as currently envisioned.

Alternatively, if the Commission decides not to dismiss or defer action on the Petition, it cannot disclaim jurisdiction until after Yukon Pacific has been required to come forward with the facts necessary to support its claim that its activities will be completely non-jurisdictional. Yukon Pacific has not yet supplied sufficient information to support its asserted non-jurisdictional status. Only after Yukon Pacific has furnished such information, for example, under what arrangements volumes will be conditioned for transport through TAGS, will the Commission be able to fashion appropriate hearing procedures to consider material factual questions concerning Yukon Pacific's status.

To the extent the Commission may nonetheless decide to act on Yukon Pacific's Petition at this time, without requiring further information from Yukon Pacific or establishing further proceedings, the Petition must be denied. Such facts as have been laid out by Yukon Pacific indicate that the Commission has jurisdiction over TAGS, under its delegated authorities over export projects and pursuant to Section 7 of the Natural Gas Act, the President's Decision and Report to Congress on the Alaska Natural Gas Transportation System, and the Waiver of Law. Moreover, Yukon Pacific is openly attempting to undermine the ANGTS. Congress, however, has already determined that the public interest lies in the delivery of Alaskan North Slope gas to the lower 48 states through an international pipeline, the ANGTS.

Disclaimer of jurisdiction would violate the Commission's duty to protect the public interest and assure that Yukon Pacific does not interfere with the construction of the ANGTS, prevent U.S. consumers from benefitting from Alaskan gas or cause the abrogation of international commitments with Canada relating to the ANGTS.

II. Background

Because of the complexity of the ANGTS project, a brief summary of some of the significant points in its development may be of help in understanding Alaskan Northwest's interest and position in this proceeding.^{3/}

A. Selection of the ANGTS

The North Slope of Alaska is believed to contain vast natural gas reserves. Proven reserves have been estimated to be in the range of 26 to 29 Trillion cubic feet.^{4/} Three competing

^{3/} A history of the ANGTS project is also described in the Senate Report on the Waiver of Law. S. Rep. No. 97-272, 97th Cong., 1st Sess. 3-13 (1981). See also, The President's Alaska Natural Gas Transportation Act Waiver Recommendation, Hearings Before the Senate Comm. on Energy and Natural Resources on S.J. Res. 115, 97th Cong., 1st Sess. 965-1046 (1981) (prepared statement of John G. McMillian, Chrmn, Alaskan Northwest) (hereinafter cited as "Waiver Hearings").

^{4/} For example, according to the public notice of the environmental impact statement to be prepared on TAGS, the State of Alaska currently estimates proven North Slope reserves as 28.7 Tcf. (Appendix I). See also, e.g., H.R. Rep. No. 97-350 (Pt. 2), 97th Cong., 1st Sess. 2 (1981) (26 Tcf).

proposals were presented to the Commission's predecessor to construct and operate a system for transporting these reserves to the lower 48 states. Two were overland pipelines through Alaska and Canada. The third project, like Yukon Pacific, would have transported gas by pipeline to tidewater, following the route of the Trans Alaska Oil Pipeline ("TAPS"), where the gas would be liquefied and transported to markets in LNG tankers.

Because Congress found that the Alaska gas reserves were vital to the nation's economic and domestic security interests, it enacted in ANGTA a unique framework to guarantee the construction of the most economical means to deliver these reserves to the rest of the nation. Congress there stated its purpose "to provide the means for making a sound decision as to the selection of a transportation system for delivery of Alaska natural gas to the contiguous States" 15 U.S.C. § 719a.

Congress in ANGTA also placed restrictions on the export of Alaskan gas beyond those contained in existing law. Section 12 prohibited the export of Alaskan gas to countries other than Mexico or Canada unless the President first found that such exports would "not diminish the total quantity or quality nor increase the total price of energy available to the United States." 15 U.S.C. § 719j. The legislative history of Section 12 makes clear that Congress, by this limitation, intended that Alaskan gas could be exported only in the context of an exchange resulting in the delivery of an equivalent amount of comparably

priced energy to the United States. For example, the Senate Report on ANGTA explained that "[t]his provision is designed to assure that if the export of Alaska natural gas is in the national interest, it may be done only under an exchange arrangement whereby U.S. consumers would not be faced with increases in energy prices nor a reduction in the total quantity or quality of energy." S. Rep. No. 94-1020, 94th Cong., 2d Sess. 22-23 (1976) (emphasis added). See also H.R. Rep. No. 94-1658 (Pt. 1), 94th Cong., 2d Sess. 32 (1976).

ANGTA suspended the then pending competitive Commission proceedings, 15 U.S.C. § 719c, and placed responsibility for the selection of a system to transport Alaskan gas in the President and the Congress. Id. §§ 719e, 719f. The Commission, together with other agencies, was still to make recommendations to assist the President and Congress. Id. § 719c. Once an approved system was selected, ANGTA also provided for the expeditious issuance of regulatory approvals, including the creation of the Office of the Federal Inspector, who was charged with general regulatory oversight over any designated system. Id. § 719e(a)(5).

The Commission recommended an overland route for the transportation of Alaskan gas, but was divided 2-2 between the two overland alternatives. Federal Power Commission, Recommendation to the President on a Alaska Natural Gas Transportation System (1977).

The President selected the route and facilities proposed by Alaskan Northwest's predecessor, Alcan Pipeline Company, to be the ANGTS in his Decision and Report to Congress on the Alaska Natural Gas Transportation System (Sept. 1977) (hereinafter "Decision"). Decision at 4-11. The ANGTS will be a 4700-mile international pipeline, commencing at Prudhoe Bay and paralleling TAPS to Fairbanks, where it angles southeast, following the Alcan Highway to the Alaska-Yukon border. In Canada, the pipeline continues south and east to James River Station in the Province of Alberta, where it splits into two legs. The Eastern Leg proceeds southeast, crossing the U.S.-Canada border at Monchy, Saskatchewan and terminating near Chicago. The Western Leg proceeds southwest, crossing the U.S.-Canada border near Kingsgate, British Columbia and in the U.S. is comprised of expanded facilities of Pacific Gas Transmission Company ("PGT") and Pacific Gas and Electric Company, terminating at a point near Antioch, California.

The President's Decision designated Alaskan Northwest's predecessor to construct and operate the Alaska pipeline segment of ANGTS, which will be a 745-mile, 48-inch, chilled, high pressure pipeline, commencing at the discharge side of Prudhoe Bay gas conditioning facilities and interconnecting at the Alaska-Canada border with the Canadian segment of ANGTS.

The President's Decision was ratified by joint resolution of Congress, Pub. L. No. 95-158, and has the force and effect of a

statute. Midwestern Gas Transmission Co. v. FERC, 589 F.2d 603, 611 (D.C. Cir. 1978). In accordance with ANGTA and the Natural Gas Act, the Commission issued conditional certificates of public convenience and necessity to Alaskan Northwest's predecessor for the Alaska pipeline segment and to Northern Border Pipeline Company and PGT for, respectively, the Eastern and Western Legs in the U.S. Alcan Pipeline Co., 1 FERC ¶ 61,248 (1977). Transfer of the Alaska segment certificate to Alaskan Northwest was approved in Alaskan Northwest Natural Gas Transportation Co., 3 FERC ¶ 61,290 (1978).

B. Canadian Involvement

It was recognized early on that the delivery of Alaskan gas to the lower 48 states would require the cooperation and participation of the Canadian government and Canadian firms. As early as 1973, Congress, in enacting the Trans Alaska Pipeline Authorization Act to facilitate construction of TAPS, directed and requested the President to enter into negotiations with Canada over "the willingness of the Government of Canada to permit the construction of pipelines or other transportation systems across Canadian territory for the transport of natural gas . . . from Alaska's North Slope to markets in the United States" Pub. L. No. 93-153, § 301(a). Negotiations led to the Transit Pipeline Treaty, which was signed on January 28, 1977 and ratified by the U.S. Senate on October 1, 1977. The treaty is

designed to facilitate the construction of oil and gas pipelines in the two countries.

Contemporaneous with the ratification of the treaty, the U.S. and Canada signed on September 20, 1977 the Agreement on Principles Applicable to a Northern Natural Gas Pipeline. The Agreement on Principles established the terms and conditions upon which the two countries would cooperate on a joint pipeline for the transportation of Alaskan and Canadian gas to the lower 48 states. The Agreement on Principles was incorporated in the President's Decision. Decision at 3.

On April 12, 1978, the Canadian Parliament enacted the Northern Pipeline Act, which ratified the July 4, 1977 decision of the Canadian National Energy Board certificating the Canadian segments of the ANGTS. That Act also established the Northern Pipeline Agency to facilitate construction of the Canadian segments, implement the Agreement on Principles, and monitor and minimize the social and environmental impacts of construction and operation of the ANGTS in Canada.

C. Prebuild

The President's Decision had suggested that southern portions of the ANGTS in Canada and the lower 48 might be built in advance of the entire system and be utilized to transport additional imports of Canadian gas. The Canadian government was unwilling to authorize the additional export volumes necessary to

support what came to be known as the ANGTS "pre-build" facilities or the pre-building of ANGTS facilities in Canada, unless it were assured the entire ANGTS, including the Alaska segment, would be built. Such assurances were provided by President Carter and the Congress. Congress, by a concurrent resolution passed in the summer of 1980, affirmed that "it is the sense of the Congress that the system remains an essential part of securing this Nation's energy future" S. Con. Res. 104, 96th Cong., 2d Sess. (1980).

Based on these assurances, the Canadian government approved the necessary exports and facilities. This Commission issued certificates to Northern Border Pipeline Company and Pacific Gas Transmission Company for the pre-building of, respectively, the U.S. portions of the Eastern and Western Legs of the ANGTS in April and June 1980. Northwest Alaskan Pipeline Co., 11 FERC ¶ 61,088 (1980) and 11 FERC ¶61,279 (1980). The pre-build facilities were completed in 1981 and account for approximately one-third of the ANGTS mileage. They represent an investment of approximately \$1.43 billion and \$770 million by the sponsors of, respectively, the U.S. and Canadian pre-build.

D. Waiver of Law

Because of the magnitude of the Alaska pipeline segment, Alaskan Northwest held discussions with the North Slope producers

in 1980 about joining in the financing of the ANGTS.^{5/} The producers were willing to do so if the President's Decision were modified to permit them to have an ownership interest in the project and to include the AGCF as part of the ANGTS. The AGCF will remove liquefiabiles and impurities, including carbon dioxide, from the raw gas, and initially refrigerate and compress the gas to meet pipeline operating specifications. In April 1980, the Alaskan Northwest Partnership and North Slope producers entered into a Cooperative Agreement providing for joint funding of the design, engineering and cost estimation for the Alaska pipeline and AGCF. To date, the Partnership and producers have incurred approximately \$1.09 billion, including allowance for funds used in construction, on this effort.

In addition to producer ownership in the project and inclusion of the AGCF in the ANGTS, the Partnership identified several other legal requirements that would have to be modified in order to remove regulatory impediments to private financing of the ANGTS. Section 8(g)(1) of ANGTA authorized the President to propose waiver of laws whose application could prevent completion of the ANGTS. On October 15, 1981, President Reagan submitted his waiver recommendation to Congress. In his statement accompanying that recommendation, he expressed support for the ANGTS

^{5/} Exxon Co., U.S.A., Standard Oil Company of Ohio, and Atlantic Richfield Company.

and recognized its material benefit to the U.S. and Canada, our largest foreign trading partner:

I believe that this project is important not only in terms of its contribution to the energy security of North America. It is also a symbol of U.S.-Canadian ability to work together cooperatively in the energy area for the benefit of both countries and peoples. Reprinted in H.R. Rep. No. 97-350 (Pt. 2), 97th Cong., 1st Cong. 30 (1981).

The Waiver was approved by joint resolution of Congress. S.J. Res. 115, Pub. L. No. 97-93, 97th Cong., 1st Sess. (1981). The Waiver of Law, inter alia, designated the AGCF as part of the ANGTS, to be included in any final certificate issued by the Commission for the Alaska segment of the ANGTS. In approving the Waiver, Congress reaffirmed the importance of Alaskan reserves and the ANGTS to the nation. For example, Senator McClure, Chairman of the Senate Energy Committee, explaining the need for the Waiver, stated that "[i]t is without question then, that the completion of the Alaska Natural Gas Transportation System is in this Nation's economic and national security interests." 127 Cong. Rec. S11603 (Oct. 19, 1981) (daily ed.). See also, e.g., S. Rep. No. 97-272, 97th Cong., 1st Sess. 29 (1981) ("The [Senate Energy] Committee remains convinced that the project is in the national interest").

The Commission subsequently amended the conditional certificate issued to Alaskan Northwest to include the AGCF, by order issued January 4, 1982. Alaskan Northwest Natural Gas Transportation Co., 18 FERC ¶ 61,002 (1982).

III. Argument

A. Yukon Pacific's Petition Should be Dismissed or Held in Abeyance

Under Rule 207 of the Commission's Rules of Practice and Procedure, the purpose of a declaratory order is to "remove uncertainty." The TAGS project, however, is too undefined at this time for the Commission to determine with any certainty the nature and extent of its jurisdiction. In addition, Yukon Pacific's Petition leaves unaddressed significant questions relating to Commission jurisdiction, including the identity of resale markets, use of the AGCF and source of gas supply. In view of the incomplete nature of the TAGS project as a whole and Yukon Pacific's Petition in particular, the Commission should dismiss the Petition or hold it in abeyance.

1. TAGS Is Too Hypothetical for a Jurisdictional Determination

The TAGS project is still in an early conceptual stage. Yukon Pacific has not identified any committed markets or gas supply to support its project; nor has it done any detailed engineering or planning. Since the TAGS concept originated in 1982, it has gone through a continuing metamorphosis. TAGS was initially proposed to parallel the TAPS and ANGTS pipelines to a point north of Fairbanks and then proceed to the Cook Inlet area. Trans Alaska Gas System, Economics of an Alternative for North

Slope Gas (Jan. 1983) (excerpts attached as Appendix A). In that version, TAGS would deliver raw, unconditioned gas to a tidewater location. In mid-1984, Yukon Pacific proposed a different concept, the so-called "Y-line".^{6/} Under this proposal, Yukon Pacific would share a 48-inch diameter pipeline with the ANGTS to Fairbanks, where the ANGTS would swing east toward Canada. TAGS would continue south to tidewater in South-Central Alaska as a 36-inch diameter pipeline. Yukon Pacific's latest proposal, the subject of its Petition, is to use the AGCF to condition North Slope gas and transport conditioned gas through a pipeline paralleling the ANGTS and TAPS to Delta and then paralleling TAPS to Port Valdez, Alaska. According to a recent public relations piece on this TAGS concept, "pre-feasibility" studies under way by its sponsors are not due to be completed until later this year.^{7/} TAGS sponsors will then decide whether to proceed with further

^{6/} Yukon Pacific's May 1984 Application for a federal right of way explained this proposal as follows:

It is Yukon Pacific's belief that an export market will demand gas from Prudhoe Bay first, but the Company has stated its willingness to build a 48 inch O.D. pipeline from Prudhoe Bay to Fairbanks for the purpose of supplying gas for the overland route to U.S. markets. Sponsors of the [ANGTS] have not yet accepted the "Y-line" option pending further definition of Asian and U.S. markets. Yukon Pacific App. for Federal Right-of-Way (filed May 1984) at 8. (Excerpts attached as Appendix B).

^{7/} "Alaska's Incredible Shrinking Gas Line Project," Alaska Business Monthly at 25 (Jan. 1987) (attached as Appendix C).

studies, as a result of which TAGS could very well undergo further revision.

At this point, Yukon Pacific has presented the Commission with a completely hypothetical project. It is asking the Commission to assume with it that it will find sufficient export markets and uncommitted gas supplies to support its project and obtain special authorizations to export Alaskan gas. This is too speculative a basis for the Commission to render a meaningful jurisdictional determination. Any Commission determination, like the assumptions presented to it, would be purely hypothetical and would not remove uncertainty as to Yukon Pacific's jurisdictional status.

2. There Is No Basis to Assume Yukon Pacific Will be Engaged Only in Foreign Commerce

Yukon Pacific claims TAGS will not be involved in interstate commerce, because it will only transport Alaskan gas for delivery to export markets. Pet. at 9-10. However, although Yukon Pacific's Petition speaks in vague terms of "marketing participants" and "potential" Asian purchasers for Alaskan LNG, Pet. at 5, there are no contracts with foreign purchasers for any volume of Alaskan gas to be shipped through TAGS. In fact, TAGS has always been envisioned as being capable of delivering Alaskan gas to U.S. as well as foreign markets. The genesis of TAGS was a report prepared by a committee appointed by then Alaska Governor Hammond, Trans Alaska Gas System, Economics of an Alternative for

North Slope Gas (Jan. 1983) (hereinafter "Governor's Report").^{8/}

That report explained that one of TAGS' virtues was its ability to serve both domestic and export markets:

More flexible markets: The Trans-Alaska Gas System makes North Slope gas and its respective components available to the world market because of its terminus at tidewater. Thus, if national security concerns dictate that uncommitted natural gas from Alaska must be used in the United States, it can be. If that gas finds a market elsewhere in the Pacific Rim, it can answer those needs too. Over the real life of the project, which is likely beyond the commitment term necessary for financing, the pipeline could serve many different markets. 1983 Hearings at 338.

Elsewhere, the Governor's Report stated that potential markets to be served by TAGS include "the West Coast of the United States." Id. at 409. The Report identifies two possible points for the delivery of LNG to the lower 48 states, Point Conception, California and Bellingham, Washington. Id. at 22-23. Indeed, the cover of the Report itself illustrates these as points for the delivery of gas transported through TAGS. In a December 8, 1983 letter to the Chairman of the Federal Energy Regulatory Commission, Walter J. Hickel, Yukon Pacific's Chairman of the Board, who also co-chaired the Governor's Committee on TAGS, explained that Yukon Pacific "will essentially implement the above

^{8/} The entire Governor's Report is reprinted as Appendix II in Marketing Alternatives for Alaska North Slope Natural Gas: Hearing before the Subcomm. on Energy Regulation of the Senate Comm. on Energy and Natural Resources, 98th Cong., 1st Sess. (1983) (hereinafter "1983 Hearings").

described proposal of the Governor's Committee" (p. 3) (attached as Appendix D). Yukon Pacific's Y-Line concept, sharing a 48-inch diameter pipeline with the ANGTS to Fairbanks, would also have depended on domestic markets for support.

While Yukon Pacific now claims, for purposes of its Petition, that it will only transport gas destined for foreign markets, the possibility that TAGS will actually deliver some gas to U.S. purchasers cannot be dismissed until Yukon Pacific shows firm contractual commitments by foreign purchasers for sufficient volumes to make TAGS economically viable over its life. Indeed, North Slope producers studying the economic feasibility of exporting North Slope gas as LNG to Asia have concluded that such exports may not be viable and that the lower 48 is still the natural market for this gas.^{9/}

3. Yukon Pacific's Operations Have Not Been Shown
"Wholly Intrastate" in Nature

Yukon Pacific's Petition also describes TAGS' nature as "wholly intrastate." Pet. at 6. Yet, Yukon Pacific contemplates that gas would first be conditioned in the AGCF, a facility clearly within the jurisdiction of the Commission by virtue of

9/ See North American Natural Gas Reserves and Resources, Hearings before the Subcomm. on Energy Regulation of the Senate Comm. on Energy and Natural Resources, 98th Cong., 2d Sess. 281-83 (1984) (testimony of C.B. Wheeler, Sr. V.P. Exxon Co. U.S.A.); 1983 Hearings at 204 (testimony of Frank E. Mosier, Sr. V.P., The Standard Oil Co.) (TAGS "is a very long shot at best"). See also Statement of W. Ray Booth, Asst. Gen. Mgr., Natural Gas Dept., Exxon Co., U.S.A. before the Joint Oil and Gas Comm. of the Alaska State Legislature (March 7, 1984) (attached as Appendix E).

the Waiver of Law. Yukon Pacific's Petition seeks to deemphasize the importance of these conditioning facilities with the following statement:

The proposed TAGS Project does not currently include development of a natural gas conditioning facility on the North Slope. Responsibility for construction and operation of gas conditioning facilities, if necessary, will be the subject of future negotiations between Yukon Pacific and North Slope gas producers. Pet. at 3.

Yukon Pacific's Petition here suggests doubt that North Slope conditioning facilities will be necessary. Its contemporaneous Amended Application for a federal right-of-way grant, filed with the Bureau of Land Management on December 5, 1986 (hereinafter "ROW App.") (excerpts attached as Appendix F), is more forthcoming and clearly indicates otherwise. TAGS, like the ANGTS Alaska pipeline segment, is proposed to be a chilled pipeline where it traverses areas of permafrost in northern and central Alaska. ROW App. at 5-1. Absent refrigeration, the pipeline will be warmer than the soils around it and cannot be safely buried. Yukon Pacific also proposes a high pressure system, with a maximum operating pressure of 2220 psig. Id.; Pet. at 2. The first compression and refrigeration facilities on TAGS, however, will be 66 miles south of its starting point. ROW App. at 5-8. The gas will also have to be conditioned to remove impurities. For example, like the ANGTS, the feed gas composition for TAGS calls for removal of essentially all carbon dioxide. Id. at 5-37. This compression, conditioning and refrigeration obviously must be done

before the gas can be introduced into TAGS. Yukon Pacific has indicated it will seek to use the AGCF to perform these functions:

The proposed TAGS project does not currently include development of a natural gas conditioning facility on the North Slope. Existing and authorized gas conditioning facilities in Prudhoe Bay can provide the quantity and quality of pipeline gas needed to operate TAGS. Therefore, YPC is not requesting authorization for similar facilities at this time. Responsibility for construction and operation of gas conditioning facilities will be the subject of future discussions among YPC, North Slope gas producers, and the Northwest Alaskan Pipeline Company.[10/] ROW App. at 1-4.

It has been assumed that pipeline feed gas will be discharged to the TAGS system from conditioning facilities at Prudhoe Bay. Id. at 5-38.

There are no existing North Slope facilities capable of preparing the 2.3 Bcf per day of throughput proposed for Yukon Pacific, and the only gas conditioning facility authorized for the North Slope is the AGCF designed by Alaskan Northwest and North Slope producers. Yukon Pacific's intention to use the AGCF was stated most recently in its draft Project Overview for the TAGS environmental impact statement, where it stated "[a] gas conditioning facility has been previously sited and the associated environmental permits have been evaluated and issued through the FERC and EIS process." (excerpts attached as Appendix G).

10/ Northwest Alaskan Pipeline Company is the operator for the Alaskan Northwest Partnership. Yukon Pacific has not approached Northwest Alaskan about using the AGCF.

The only such facility is the AGCF. See FERC, Prudhoe Bay Project Draft Environmental Impact Statement (1979).

The AGCF, however, only has a design capacity for one project, the ANGTS. Yukon Pacific does not explain under what arrangements it would utilize the AGCF, and its Petition ignores the regulatory consequences of utilizing a jurisdictional mainline transmission facility to make gas to be transported through TAGS pipeline quality, having TAGS commence at the discharge side of that facility, and transporting gas that has been commingled with gas committed to the interstate market.

4. Yukon Pacific Has Not Demonstrated a Gas Supply

While Yukon Pacific alludes generally to discussions with North Slope producers, Pet. at 6 n.4, it has failed to identify any proven reserves to support TAGS. Witnesses at 1983 congressional hearings on the transportation of Alaskan gas, including Yukon Pacific officials, testified that proven North Slope reserves were in the 26 to 29 Tcf range.^{11/} In those same hearings, North Slope producer representatives testified that this amount of proven reserves could not support both the ANGTS

^{11/} Mr. Hickel testified that "the record is going to have to state there is 26 and 29 trillion cubic feet of proven reserve." 1983 Hearings at 193. Pendleton Thomas, President of Yukon Pacific similarly testified "I do not have any disagreement with the fact that at the present time the proven gas reserves of Prudhoe Bay are somewhere probably in the 26 to 29 trillion cubic feet area." Id. at 161. See also id. at 32 (testimony of Jan W. Mares, Asst. Sec'y, Fossil Energy, DOE).

and TAGS projects.^{12/} Yukon Pacific has not indicated that current proven North Slope reserves are in excess of prior estimates. The current proven reserves are required to support the ANGTS and can only be transported from Alaska through the ANGTS, as explained in Part C.3 infra. If Yukon Pacific is relying on other reserves, it has failed to identify them, and its entire project is too ephemeral for a declaratory order. If Yukon Pacific is relying on the reserves required to support the ANGTS (as it apparently is), then it is seeking to divert to Asia gas which must, by law, be transported through the ANGTS.

5. The Commission Should Dismiss Yukon Pacific's
Petition or Hold It in Abeyance

Whether to grant a petition for a declaratory order is within the discretion of the Commission. See, e.g., 5 U.S.C. § 554(e); United Gas Pipe Line Co., 27 FERC ¶ 61,015 (1984); Stowers Oil and Gas Co., 27 FERC ¶ 61,001 (1984). Given the indefinite nature of the TAGS Project and the significant jurisdictional issues not even addressed by Yukon Pacific's Petition, the Commission should dismiss that Petition or hold it in abeyance. The Commission has dismissed requests for regulatory action as unripe when they lacked necessary supporting information. See, e.g., Texas Eastern Transmission Corp., 34 FERC ¶ 61,120 (1986). See also, e.g., Yale Broadcasting Co. v. FCC, 478 F.2d 594, 602 (D.C. Cir.

^{12/} Id. at 228.

1973) (refusal to issue declaratory order upheld because of "Commission's long standing policy of refusing to issue interpretative rulings or advisory opinions whenever the critical facts are not explicitly stated or there is a possibility that subsequent events will alter them."). Certainly, the Commission should not act until after Yukon Pacific has made application to and received from the Economic Regulatory Administration ("ERA") export authorization under Section 3 of the Natural Gas Act and obtained findings from the President pursuant to, respectively, Section 103 of the Energy Policy and Conservation Act, 42 U.S.C. § 212, and Section 12 of ANGTA, 15 U.S.C. § 719j, that the export of Alaskan gas is consistent with the national interest and will not diminish the total quantity or increase the total price of energy available in the U.S. Withholding action until after export authorizations have been obtained would be in keeping with Commission practice where such authorization would define the scope of the project before the Commission. Boundary Gas, Inc., 24 FERC ¶ 61,003 at 61,010 (1983) (application should be held in abeyance until all information necessary to evaluate a proposal in its entirety, including ERA authorizations, is available). The Commission will also know how its jurisdiction is affected by any conditions imposed by ERA or the President. Of course, if Yukon Pacific does not secure the necessary export authorities, its Petition will be moot. In that regard, Yukon Pacific's project on its face cannot meet the requirements of Section 12 of ANGTA, because Yukon Pacific is not proposing an exchange of energy with Asian countries.

B. If the Petition Is Not Dismissed or Held in Abeyance,
a Hearing Is Necessary

If the Commission decides not to dismiss or hold Yukon Pacific's Petition in abeyance, it should direct Yukon Pacific to supplement its Petition with the necessary facts upon which to make the requested jurisdictional findings. For example, Yukon Pacific should first be required to file evidence of commitments or contracts with foreign purchasers, its plans for conditioning TAGS' feed gas, and the source of its gas supply. After Yukon Pacific has filed the complete basis upon which it is seeking a jurisdictional determination, the Commission will be in a position to prescribe further proceedings to consider the factual issues raised by Yukon Pacific's Petition. Since it is Yukon Pacific which is seeking Commission action, the burden would be on Yukon Pacific at such hearing to demonstrate that it will be engaged in purely non-jurisdictional activities. Factual issues would include: (1) whether Yukon Pacific's markets are solely in foreign commerce; (2) under what arrangements Yukon Pacific will utilize the AGCF; (3) what changes in design to the AGCF would be required to handle TAGS volumes; (4) whether TAGS' use of the AGCF is compatible with the ANGTS; (5) whether the fact that the AGCF is subject to the Commission's jurisdiction will render all of Yukon Pacific's facilities downstream from the AGCF jurisdictional; and (6) whether Yukon Pacific is depending upon gas supplies required for the ANGTS. The Commission clearly has

authority to conduct such an inquiry to determine its own jurisdiction. See, e.g., Consolidated Oil & Gas, Inc. v. FERC, No. 85-1191 (D.C. Cir., Dec. 5, 1986) slip op. at 12 n.5; CAB v. Deutsche Lufthansa Aktiengesellschaft, 591 F.2d 951, 952 (D.C. Cir. 1979).

C. If the Commission Decides Jurisdiction Based on Yukon Pacific's Petition, It Should Exercise Jurisdiction Over Yukon Pacific's Proposed Facilities

If the Commission decides to act on Yukon Pacific's Petition at this time, without further proceedings, the Commission should exercise jurisdiction over Yukon Pacific based on the facts as alleged in its Petition. Contrary to Yukon Pacific's erroneous legal analysis, the Commission has jurisdiction over Yukon Pacific's proposed facilities pursuant to the authorities delegated to it by Delegation Order No. 0204-112. In addition, the Commission also has jurisdiction over Yukon Pacific pursuant to Section 7 of the Natural Gas Act, the Waiver of Law and the President's Decision.

1. The Commission Has Jurisdiction Over Yukon Pacific's Export Facilities

a. The Commission Has Jurisdiction Over the Siting of Yukon Pacific's Facilities

Regulatory authorities over gas export facilities contained in Section 3 of the Natural Gas Act and Executive Order No. 10485, formerly exercised by the Commission's predecessor, have been vested in the Secretary of Energy by the Department of

Energy Organization Act. 42 U.S.C. § 7151(b). The Secretary has delegated to the Commission in Delegation Order No. 0204-112 his authority over the siting and construction and operation of export facilities. Yukon Pacific argues that Executive Order No. 10485, and Executive Order No. 8202 before it, limit and effectuate the Secretary's authority under Section 3 of the Natural Gas Act. Pet. at 10. According to Yukon Pacific, since those Executive Orders do not reference siting, the Secretary, and therefore the Commission, is without jurisdiction over the siting of its facilities. As a preliminary matter, Yukon Pacific's argument is a collateral attack on the authority of the Secretary. The Commission, however, is governed by the Secretary's delegations, Alabama Power Co., 31 FERC ¶ 61,287 at 61,593 (1985), until such time as they are changed by the Secretary or invalidated by a Federal Court. Delegation Order No. 0204-112 expressly confers on the Commission jurisdiction over "the site at which [export] facilities shall be located" Yukon Pacific does not cite any authority for the Commission unilaterally to ignore this delegation.

Yukon Pacific's argument is also wrong. Executive Order No. 10485 and Natural Gas Act Section 3 are separate and independent grants of authority. The Executive Order flows from the President's constitutional powers to conduct foreign affairs and secure the borders of the nation. Section 3 is a delegation by Congress of its constitutional authority to regulate commerce.

The President chose to delegate his authority to the Commission (now to the Secretary) for administrative convenience in order to provide a "systematic method in connection with the issuance and in signing of permits" 18 Fed. Reg. 5397 (1953). The two sources of authority are thus supplementary and do not limit each other.

Moreover, the fact that siting is not expressly referenced in either Executive Order No. 10485 or Section 3 is not dispositive. Both authorities give broad authority to attach necessary conditions to carry out their purposes.^{13/} In fact, prior to the DOE Organization Act, Executive Order No. 10485 and Section 3 of the Natural Gas Act were construed to include siting responsibility. During 1976 congressional hearings on ANGTA, the Senate Committees on Interior and Insular Affairs and on Commerce submitted the following question to the Commission: "What subjects should such legislation address?" Consider and comment on such matters as: establishment of a consolidated administrative process for the siting of LNG facilities." The Transportation of Alaskan Natural Gas, Joint Hearing Before the Senate Committees on Interior and Insular Affairs and on Commerce, 94th Cong., 2d Sess. 450 (1976). The Commission responded:

13/ Executive Order No. 10485, for example, provides that "[t]he Commission shall have the power to attach to the issuance of the permit and to the exercise of the rights granted thereunder such conditions as the public interest may . . . require." 18 Fed. Reg. 5397 (1953).

No special legislation for the establishment of a consolidated hearing process for the siting of LNG facilities is necessary. At present the Federal Power Commission exercises jurisdiction over LNG siting and facilities under Section 1(b), 3, 7(c) and 7(e) of the Natural Gas Act (15 U.S.C. Sections 717(b), 717(f)(c), and 717(f)(e)). In cases of border facilities for the export or import of natural gas to or from a foreign country, Executive Order 10485, issued September 3, 1953, directs the Federal Power Commission to consult with the Secretary of State and the Secretary of Defense when reviewing applications for permits for the construction, operation, maintenance or connection of such facilities. 3 C.F.R. 66 (1953). No other agency or department of the Federal Government has jurisdiction over the siting of LNG facilities. Id.

If Congress disagreed with this interpretation, it has had ample subsequent opportunity to legislate a different one. Thus, the Commission has authority over the siting of Yukon Pacific's export facilities.

b. The Commission Has Jurisdiction Over the Construction and Operation of Yukon Pacific's Facilities

Yukon Pacific also argues that the Commission is without jurisdiction under Section 3 of the Natural Gas Act over the construction and operation of its facilities, because they will not be "at the border," citing the Commission's decision in Phillips Petroleum Co., 37 F.P.C. 777 (1967). Pet. at 18. However, the "at the border" language relied upon by Yukon Pacific appears in Executive Order No. 10485, not in Natural Gas Act Section 3 or Delegation Order No. 0204-112, and relates only

to the requirement for a Presidential permit. The scope of authority conferred by Section 3 has been construed broadly. For example, the D.C. Circuit defined that authority in Distrigas Corp. v. FPC, 495 F.2d 1057, 1064 (D.C. Cir.), cert. denied, 419 U.S. 834 (1974) (hereinafter "Distrigas") as being:

plenary and elastic . . . In short, we find it fully within the Commission's power so long as that power is responsibly exercised, to impose on imports of natural gas the equivalent of Section 7 certification requirements . . . as to facilities Indeed, we think that Section 3 supplies the Commission not only with the power necessary to prevent gaps in regulation but also with flexibility in exercising that power -- flexibility far greater than would be the case were we to hold that imports are interstate commerce, automatically and compulsorily subject to the entire panoply of Section 7's requirements.

Although Distrigas involved a natural gas import, its reasoning is equally applicable to exports, and the Commission has followed it in both types of cases. See, e.g., Inter-City Minnesota Pipelines Ltd., 29 FERC ¶ 61,105 (1984) (import); Valero Transmission Co., 27 FERC ¶ 61,152 at 61,274 (1984) (export). As the Distrigas court noted, the distinction in Section 3 is "not between imports and exports, but between foreign and interstate commerce." 495 F.2d at 1063. Thus, the Commission's authority under Delegation Order No. 0204-112 encompasses the construction and operation of Yukon Pacific's export facilities.

The Phillips decision does not require a different result. Yukon Pacific mischaracterizes the Commission's action there, erroneously asserting that "the FPC found in that case that it had no jurisdiction over the construction, operation, or maintenance of facilities used in the exportation of natural gas to Japan." Pet. at 16. The Commission made no such finding. The Phillips decision does not even analyze Section 3. The Commission merely determined that no Presidential permit was required by Executive Order No. 10485 on the facts presented. It certainly did not hold it was without Section 3 authority; to the contrary, it exercised continuing jurisdiction to specify that the applicants could not "materially change or alter their export operations without first obtaining the permission and approval of the Commission." 37 F.P.C. at 778.

The factual circumstances of Phillips were also quite different than Yukon Pacific's. The Commission in Phillips was presented with a complete factual record, including export contracts, volumes and prices. There was no question that the facilities would be used solely for the export of gas or that the producer-applicants had a gas supply. That is not the case here. Yukon Pacific has not furnished any contracts for the sale of gas in foreign commerce, nor has it shown a gas supply to support its project. Moreover, Yukon Pacific intends to utilize jurisdictional facilities to transport gas to its liquefaction facility. The Commission obviously has jurisdiction over facili-

ties that will be involved in both interstate and foreign commerce. See, e.g., Border Pipe Line Co. v. FPC, 171 F.2d 149, 151 (D.C. Cir. 1948) ("Of course, if a company be in both interstate and foreign commerce, one might burden the other and so produce the result which the burden of intrastate or interstate commerce causes."). Therefore, the Phillips decision provides no basis for disclaiming jurisdiction over Yukon Pacific's planned project.

2. The Commission Has Jurisdiction Under Section 7 of the Natural Gas Act, the Waiver of Law, and the President's Decision

If Yukon Pacific is not feasible as a purely export project and transports gas destined for lower 48 markets, as it has previously stated it would, then the Commission will, of course, have Natural Gas Act jurisdiction over Yukon Pacific.

Yukon Pacific's intended use of the AGCF also raises significant jurisdictional issues. The AGCF was made subject to the Commission's jurisdiction and authority under the Natural Gas Act and the President's Decision by the Waiver of Law. The Waiver amended the President's Decision "to include the gas conditioning plant in the approved transportation system and in the final certificate to be issued for the system." The Commission has accordingly included the AGCF in the conditional certificate issued to Alaskan Northwest. The legislative history of the Waiver makes clear that the Commission has jurisdiction to review the cost estimates, design, ownership, tariffs and allocation of

costs of the AGCF. See S. Rep. No. 97-272, 97th Cong., 1st Sess. 33-34; H.R. Rep. 97-350 (Pt. 2), 97th Cong., 1st Sess. 15-16 (1981). The House Report stated at page 16 that "[t]he Commission must carefully review the plant design and cost and allow to be included in the tariff only those which are clearly allocable to functions necessary for transportation of hydrocarbons through the approved system". Because Alaskan Northwest and the North Slope producers have only designed the AGCF for the ANGTS, Yukon Pacific's use of the facility would require modification of its design and capacity. Such modification to handle TAGS' volumes would clearly be within the Commission's jurisdiction. For example, if Yukon Pacific were to seek an ownership interest in the AGCF, the Commission would have direct jurisdiction over Yukon Pacific. The Commission's Section 7 jurisdiction over the AGCF would also give it authority to condition a certificate for the AGCF to assure that TAGS' utilization of ANGTS facilities would not burden the ANGTS, increase costs to interstate consumers, or otherwise interfere with the completion of the ANGTS.

Moreover, the fact that Yukon Pacific will begin at the discharge side of mainline ANGTS jurisdictional facilities and the fact that all TAGS feed gas will have been commingled with gas committed to the interstate market in those facilities prior to its introduction into TAGS raises significant questions whether Yukon Pacific's entire facility is subject to Commission jurisdiction under the co-mingling doctrine pursuant to Section 7

of the Natural Gas Act. See, e.g., California v. Lo-Vaca Gathering Co., 379 U.S. 366 (1965); Louisiana Power & Light Co. v. FPC, 483 F.2d 623, 627 (5th Cir. 1973), cert. denied, 416 U.S. 974 (1974).

3. A Disclaimer of Jurisdiction Would Violate the Commission's Duty to Protect the Public Interest

There is no question that Yukon Pacific's TAGS project is intended to be competitive with the ANGTS. At this time, sufficient proven North Slope reserves have only been shown to support one large diameter pipeline project. This has been the testimony of the North Slope producers. Yukon Pacific has itself indicated it is a competing project. Pendleton Thomas, then President and Chairman of the Board of Yukon Pacific, testified before Congress in 1983 that the ANGTS and TAGS "may be in conflict in the sense that both of us are vying for the same gas." 1983 Hearings at 161. In perhaps an unguarded moment, later at that same meeting, he admitted the projects would be competitive:

After the [Governor's] report was released, and I and some others became involved, we got into a conversation as to how we could make an accommodation, for ANGTS, because we didn't feel it was in the best interest of either one of us and we wanted to work out an accommodation where both of us could live in the right kind of atmosphere if at all possible. I feel they are competitive projects, so we came up with a concept of a common line from Prudhoe to Fairbanks, and it has been discussed with a number of various people. Id. at 192.

In this same vein, Mr. Hickel's December 8, 1983 letter to the Commission Chairman made clear that Yukon Pacific was being proposed as "an alternative system for transporting North Slope gas to market." (p.2)

The Federal Inspector has also determined that Yukon Pacific is attempting to compete with the ANGTS. Yukon Pacific, which evidently has done no significant engineering of its own, attempted under the Freedom of Information Act ("FOIA") to gain free access to confidential ANGTS engineering and design work funded by Alaskan Northwest and the producers. In denying Yukon Pacific's appeal from an adverse FOIA ruling, the Federal Inspector found as follows:

I wish to emphasize that despite YPC's protestations to the contrary, it is a competitor of NWA, and release of information, over and above that already provided, would subject NWA to substantial competitive injury.

YPC has itself on prior occasion acknowledged that it is a competitor of ANGTS. It has initiated action to dismantle NWA's Federal "franchise" to transport and market North Slope natural gas in an effort to promote its own project. (Letter from John T. Rhett, Federal Inspector, to Jeffrey B. Lowenfels, counsel to Yukon Pacific (Aug. 30, 1985) at 5 (hereinafter "OFI Decision") (attached as Appendix H)).

The Federal Inspector agreed that Yukon Pacific was seeking to compete with the ANGTS, not only for gas supplies, but also markets:

Moreover, while YPC claims that the respective companies markets are in disparate geographical regions, it appears that the West Coast of the United States is a market common to both projects.

YPC ignores the fact that it and NWA are competing pipeline proposals; the former, a prospective enterprise, has done virtually no planning or design, and the latter, has gone to considerable expense in planning and design activities. NWA has something of great value to YPC, the "technical data and know-how required to construct a large diameter arctic gas pipeline and gas conditioning plant at Prudhoe Bay." OFI Decision at 5-6.

Most recently, the project description included in the public notice of the environmental impact statement to be prepared in connection with Yukon Pacific's amended right-of-way application shows clearly that the gas supply upon which the TAGS project would rely is the same known North Slope reserves upon which the ANGTS is predicated. (BLM, Notice of TAGS Environmental Impact Statement, Attachment at 4) (excerpts attached as Appendix I).

Congress, however, has already selected among competing proposals for the delivery of North Slope gas to market, first in ANGTA and then in Public Law No. 95-158 ratifying the President's Decision. Congress there determined that the public interest lay in the delivery of this gas to the interstate market. The Congressional commitment to the ANGTS for delivery of Alaska North Slope gas to the lower 48 is made clear by an unbroken series of legislative enactments.

In Title III of the Trans Alaska Pipeline Authorization Act, Congress directed that steps be taken to assure delivery of Alaskan gas to the rest of the nation. In ANGTA, Congress declared that "the expeditious construction of a viable natural gas

transportation system for delivery of Alaska natural gas to United States markets is in the national interest" 15 U.S.C. § 719(3). "Alaska gas" was defined to mean "gas derived from . . . the North Slope of Alaska. . . ." Id. § 719b(1). Congress further provided that such a system must "assure delivery of Alaska natural gas to points both east and west of the Rocky mountains in the United States." Id. § 719e(a)(1). Thus, North Slope gas was to be shared as much as possible with the entire country. The legislative intent that North Slope gas be delivered to the lower 48 states is also evidenced by ANGTA Section 12's additional restriction on its export. Congress there made clear its intent that U.S. consumers benefit from Alaskan gas directly, by its transportation to the lower 48, or indirectly, by the delivery of equivalent Btu's of energy at equivalent prices in an exchange of Alaskan gas for a foreign supply of energy.

The President's Decision was also premised on the availability of North Slope reserves to the ANGTS, stating that "[t]he expected volume of gas to be available initially from the Prudhoe Bay field is 2.0 to 2.5 billion cubic feet per day (bcfd). The system described herein is designed to handle this throughput volume." Decision at 6. See also Decision at 89. The initial design capacity of 2.0 to 2.5 Bcf per day equates to the 26 Tcf of proven North Slope reserves. Similarly, the Decision's requirement for private financing of the ANGTS was based on the

availability of proven North Slope reserves to support the project. Id. at 101.

Congress reaffirmed its commitment to the ANGTS in a joint resolution enacted on July 1, 1980, providing that "it is the sense of Congress that the [ANGTS] remains an essential part of securing this nation's energy future and, as such, enjoys the highest level of Congressional support for its expeditious construction and completion" S. Con. Res. 104, 96th Cong., 2d Sess. (1980).

This legislative commitment has been recognized in congressional testimony. R. Tenney Johnson, then General Counsel of the DOE, testified before Congress on the Waiver of Law that "[w]e believe there would have to be a legislative act to permit the exportation of natural gas from Alaska." Waiver Hearings at 143. Even persons who have given some encouragement to Yukon Pacific have recognized this legislative commitment. Then Secretary of Interior William Clark wrote on March 20, 1984 to Mr. Hickel that "[a]s you know, there is an existing legislative commitment to ANGTS for delivering North Slope gas reserves to the domestic market." (attached as Appendix J).

Yukon Pacific is trying to evade the ANGTS selection process by resurrecting proposals foreclosed by the President's Decision: the export of North Slope gas and construction of a LNG system for the delivery of Alaskan gas to market. Indeed, Yukon Pacific is openly critical of the ANGTS process, stating as follows:

There is something wrong with a process which requires a license holder, such as NWA, to spend millions upon millions of dollars to "not build a project". In preparing its project, Yukon Pacific Corporation seeks to avoid falling into the same trap. Yukon Pacific Corporation does not, and indeed will not, develop its project to the level and the degree which NWA has developed its project until such time as Yukon Pacific is assured of its market, has gas contracts in hand, and can guarantee that the project will be built. (Letter from Jeffrey B. Lowenfels, attorney for Yukon Pacific, to Rhodell G. Fields, OFI at 9 (July 22, 1985)).

As expressed in Yukon Pacific's own words, it is not so much a project at this time as a concept in search of endorsement by some governmental entity to lend it credibility. By its Petition for Declaratory Order, Yukon Pacific is asking this Commission to become that entity. The Commission, however, should not let its procedures be used to further a project fundamentally at odds with the public interest as expressed in ANGTA and the President's Decision, with the many actions taken by this Commission and other federal agencies in furtherance of the ANGTS, and with international covenants with Canada. Alaskan Northwest is not here saying there can never be another energy project on the North Slope. At some future period, sufficient reserves may be proven to support other large projects. For now, though, if Yukon Pacific is seeking to change the "basic nature and general route" of the ANGTS, consistent with ANGTA, 15 U.S.C. § 719g(e), it must do so through legislation, not through a petition for disclaimer of jurisdiction.

CONCLUSION

For the reasons stated herein, the Commission should dismiss Yukon Pacific's Petition. If the Commission acts on Yukon Pacific's Petition, it should find jurisdiction over Yukon Pacific under the Natural Gas Act, including Sections 3 and 7, the Waiver of Law, and the President's Decision.

Respectfully submitted,

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Dated: February 13, 1987

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, D.C. this 13th day of February 1987.

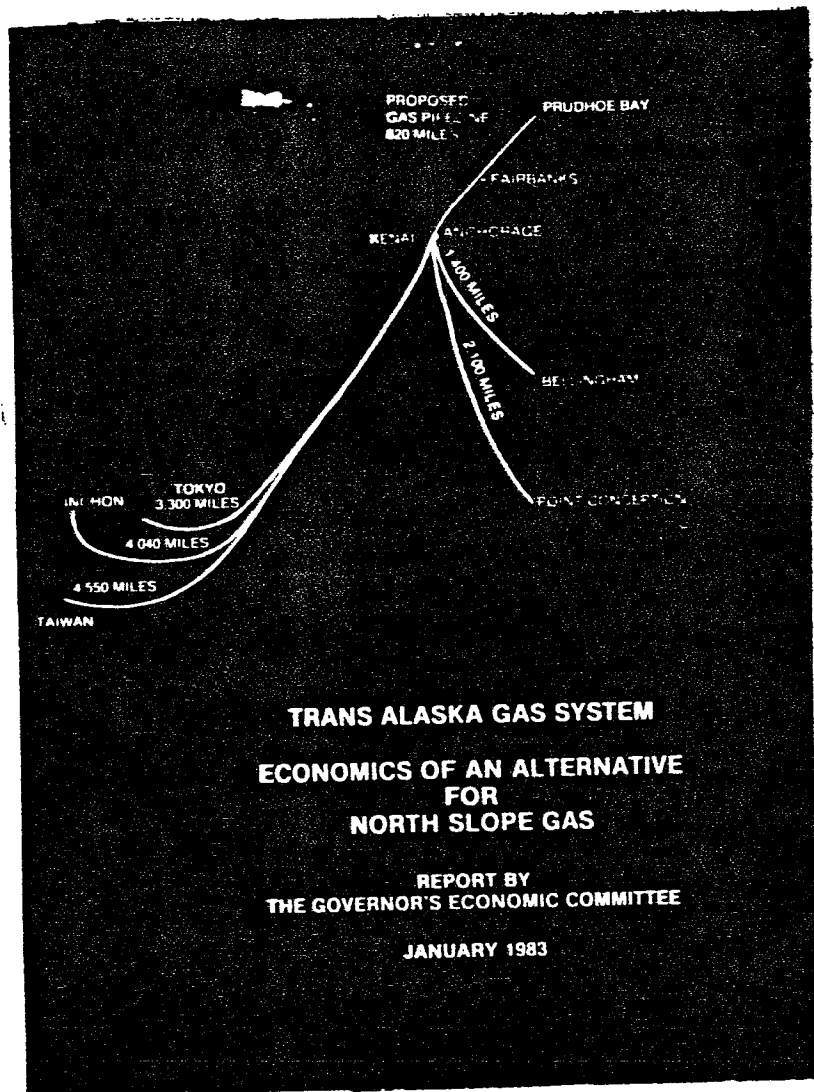
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APPENDIX A

APPENDIX II

Trans Alaska Gas System: Economics of an Alternative for North Slope Natural Gas Report by the Governor's Economic Committee on North Slope Natural Gas



**TRANS ALASKA GAS SYSTEM:
ECONOMICS OF AN ALTERNATIVE
FOR NORTH SLOPE NATURAL GAS**

**REPORT
BY THE GOVERNOR'S ECONOMIC COMMITTEE
ON NORTH SLOPE NATURAL GAS**

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ANCHORAGE, ALASKA

JANUARY 1983

**ALASKA GAS SYSTEM:
AN ALTERNATIVE
PIPE NATURAL GAS**

**REPORT
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JULY 1983

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- III. Economic Analysis**
- IV. Marketing**
- V. Legal Analysis**

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Executive Summary and Conclusions

I. Introduction

This Committee report offers three major considerations for action:

First, the lack of prompt development of a transportation system for moving Prudhoe Bay natural gas and liquids is resulting in a lost opportunity for the nation, state of Alaska and producers of the gas to gain economic benefits and new energy supplies.

Second, the Japanese market for liquefied natural gas will double, at least, by the end of the decade. Anticipated Japanese demand has caused owners of natural gas in Canada, Australia, Indonesia and the Soviet Union, among other nations, to plan and build gas transportation systems to meet this market.

Failure on the part of all owners of Prudhoe Bay gas to act expeditiously in meeting a portion of Japan's needs may irrevocably eliminate any future participation in Alaska's most natural market and could prevent sale of North Slope gas in market through the end of the century.

Third, the Committee's report outlines a Trans Alaska Gas System which can be built, may compete in world markets, is flexible in its ability to respond to changing markets, and offers the nation and Alaska substantial benefits as it responds to the problems cited above.

Fourteen years ago, the largest quantity of oil and gas known to exist in a single North American field was discovered at Prudhoe Bay, Alaska. In 1977, oil began flowing south through the trans-Alaska pipeline. Efforts of the state, the federal government, and private industry to bring that natural gas to an American market have, so far, been unsuccessful.

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used within the state of Alaska as a petrochemical industry feedstock. Thus, a separate \$3 billion pipeline needed to carry the liquids from the Slope (although some liquids could be carried in the Alyeska pipeline), as projected by the Dow-Shell Petrochemical Feasibility Study in 1981, would not be necessary.

- C. More flexible markets: The Trans-Alaska Gas System makes North Slope gas and its respective components available to the world market because of its terminus at tidewater. Thus, if national security concerns dictate that uncommitted natural gas from Alaska must be used in the United States, it can be. If that gas finds a market elsewhere in the Pacific Rim, it can answer those needs too. Over the real life of the project, which is likely beyond the commitment term necessary for financing, the pipeline could serve many different markets.
- D. Ownership of the gas: Traditionally, oil producers have sold gas at the wellhead in the United States because, among other reasons, gas is more highly-regulated than oil. Under the TAGS concept, gas producers could own the gas at tidewater as well as at the North Slope. The advantage to this concept is that a "beachhead" rather than "wellhead" price could be established under certain system ownership and regulatory scenarios. This, combined with the flexible market consideration outlined above, allows negotiated sales terms throughout the life of the project which could provide owners of the gas higher returns.
- E. Flexible financing: The Trans-Alaska Gas System is made up of several discrete components which can be owned and financed separately or together. Possible advantages here include use of lower cost financing on some system components through tax exempt debt instruments or import-export financing of a foreign supplier or buyer. Different owners may require different equity returns due to varying financial risks of construction completion. Finally, simply because of the large magnitude of the project, it may be advisable to distribute risks among several different parties.

ECONOMIC ANALYSES

The information and assumptions contained herein are based in part on the advice of and information supplied by the Staff of the Committee and its advisors. The information contained herein is believed reliable but Dillon Read makes no warranty or representation with respect to the accuracy or completeness of the information or that of the opinions based thereon, nor does Dillon Read assume any liability with respect to the use of or for damages resulting from the use of any information, method, process or opinions disclosed in the analyses.

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transporting the NGL products through the System's pipeline it is possible to avoid the financing and construction of a separate liquids pipeline or an alternative transportation and processing system for NGL removed and conditioned on the North Slope.

Conditioning Facilities in South Alaska. Pipeline transportation of all gas products allows conditioning of the products on the South Coast of Alaska. Construction of the conditioning facilities including the gas treating plant to remove the CO_2 , and the extraction, fractionation and loading and storage facilities for the NGL, on the South Coast is expected to result in substantial construction and operating and maintenance cost savings as compared to North Slope construction and operation.

Shared Cost Savings. The potential cost savings resulting from the integrated nature of the System's design enabling common transportation and South Alaska conditioning and liquefaction is shared by all System gas products and not just the methane and ethane products.

Potential Markets. System LNG and NGL products would be available in South Alaska for shipment to markets. Shipping costs, however, will significantly affect the costs of System products, and from an economic perspective the natural markets, at least for LNG products, could be expected to be the Far East, principally Japan, and the West Coast of the United States. Demand for LNG in Japan has provided higher price levels for natural gas than in the U.S. In addition, Japanese political and economic

policies have promoted the importation of LNG products in substitution for crude oil imports. As a consequence, System LNG output could be expected in the first instance to be directed towards the Japanese market as well as the markets of other industrialized Pacific rim nations. These markets will also be subject to competition from other Pacific area gas producers. Exports of Alaskan natural gas to Japanese or other foreign markets will require the political support and approval of the U.S. government.

Regulation. The legal advisor to the Committee, Birch, Horton, Bittner, Monroe, Pestinger and Anderson, believe that a project which transports and processes gas solely in Alaska and exports gas products to foreign markets may be exempted from the purview of the Natural Gas Act insofar as pipeline tariffs are concerned. It is believed, therefore, that exportation of gas may result in a minimum of federal regulation.

The absence of Federal Energy Regulatory Commission (FERC) rate-making authority in connection with the System would mean that the System would not have the benefit of the regulatory procedures and authority for passing on mandated price levels in the form of tariffs for its gas products to consumers. Conversely, absent such regulations, the System would not be constrained by regulated maximum tariffs and could negotiate tariffs which reflect the System's economic value in the market place rather than its historic costs. Under any circumstances, however, the jurisdictional nature of the System will have a major impact on System economics and must be determined at an early stage.

While the legal advisor believes that, absent FERC regulation, the System may need a certificate of public convenience and necessity from the

MARKETING

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Other cities and towns in the state could potentially be served by either the Alaska Power Authority's proposed intertie between Anchorage and Fairbanks or through shipments of less volatile North Slope gas products such as propane in rail tank cars, ships along the coast, or barges in the river system.

B. The Lower 48 States

Two possible sites to bring LNG from Alaska into the West Coast have been brought to the Committee's attention as having potential to receive large scale ships and to hook into currently existing U.S. pipeline systems. Overall demand in the short term from each of these areas looks small today, but eventual changes in the U.S. demand picture for LNG could be met in this manner.

1. Point Conception

Pacific Alaska LNG Associates has spent a total of almost 400 million dollars to design, engineer and gain permits for a project which would establish an LNG receiving terminal with connection to existing natural gas trunk lines, near Point Conception, California.

Although the company recently received a final siting approval from the California Public Utilities Commission (CPUC), it has filed with the CPUC to have the project "preserved for future use". The company indicated that California's natural gas needs are currently being met from lower 48 sources, along with some Canadian and Mexican supplies. It reported the project is scheduled to begin construction in 1986 for completion in 1990 and that sources of LNG in addition to those contracted from Alaska's Cook Inlet will be sought to feed into the California receiving terminal.

Currently PacAlaska LNG has secured 144 million cubic feet per day or slightly over two thirds of the reserves necessary to cover the first phase of 200 MMCFD. The second phase is scheduled to process an additional 200 MMCFD. No contracts

have been signed to supply any part of the phase two demand. In addition to the scheduled Alaska supply, Pac Alaska LNG has signed a letter of agreement (due to expire in 1983) with Indonesian sources for approximately 555 MMCFD.

The proposed terminus has a processing limit, under California law, of 1.3 billion cubic feet per day. Of this total limit, supply commitments total 644 MMCFD.

Assuming Indonesian commitments hold, therefore a window of 656 mmcfD would exist for North Slope gas or other supplies to reach the limits of the facility. Uncertainty continues, however, as to whether the California market will present prospective demand in 1986 to bring about any financing and construction of the PAC Alaska project.

2. Port of Bellingham

Bellingham, Washington has, for the past 20 years, sought to serve Alaska as a southern terminus for a major transportation system joining Alaska and Washington.

In connection with the committee's work authorities of the Port of Bellingham have requested that it be considered as a potential terminus in the Lower 48 to receive LNG shipments from the proposed Trans-Alaska Gas System.

The Port's Cherry Point area has several features necessary for the siting of a major receiving terminal. Those features include deep water close ashore, large upland sites, heavy impact industry zoning in place, and industrial utilities. As a primary additional feature, the site is currently served with a 16" diameter high pressure natural gas pipeline connecting to the natural gas grid system serving much of the Pacific Northwest.

APPENDIX B

YUKON PACIFIC CORPORATION

Application for
Right of Way

SUBMITTAL OF

YUKON PACIFIC CORPORATION

BEFORE THE
UNITED STATES OF AMERICA
DEPARTMENT OF INTERIOR

PROPOSAL FOR 36 INCH AND/OR 48 INCH [O.D.] PIPELINE
WITH APPURTENANT REFRIGERATION AND METERING SITES,
FOURTEEN (14) COMPRESSOR STATION SITES, AND TIDEWATER
PROCESSING FACILITIES.

TRANS-ALASKA GAS SYSTEM

May 1984

1. Name and Address of Applicant

The name and address of the Applicant is Yukon Pacific Corporation, an Alaskan corporation, with its principal place of business at P.O. Box 10-1700, Anchorage, Alaska 99510.

2. Name, Title, and Address of Authorized Agent

The name of the authorized agent of the Applicant is Jeffrey B. Lowenfels of the law firm of Birch, Horton, Bittner, Pestinger & Anderson, 1127 West Seventh Avenue, Anchorage, Alaska 99501. All inquiries regarding this application should be directed to him at the above address.

3. Telephone Numbers

The telephone number of the Applicant is (907) 279-1596. Applicant's authorized agent's telephone number is (907) 276-1550.

4. Corporate Application

The Applicant is applying for this right-of-way permit as a corporation. Applicant meets the requirements of 30 U.S.C. Section 181 and is a corporation organized under the laws of the State of Alaska. Attached hereto as Exhibit A is a copy of the Articles of Incorporation of Yukon Pacific Corporation, duly certified by the Commissioner of the Department of Commerce and Economic Development.

Attached hereto as Exhibit B is the certificate of good standing by the Commissioner of Commerce and Economic Development

for the State of Alaska, indicating Yukon Pacific Corporation has complied with the laws of the State of Alaska governing domestic corporations to the extent required to entitle it to operate and do business in that state.

Attached hereto as Exhibit C is a copy of the Resolution of the Board of Directors of Yukon Pacific Corporation authorizing the filing of this Application.

Attached hereto as Exhibit D is a copy of the Bylaws of Yukon Pacific Corporation.

Yukon Pacific Corporation is a private corporation. Attached hereto as Exhibit E is a listing of shareholders owning more than three (3) percent of the corporation. There are presently no affiliates.

Applicant will apply for temporary use permits as their need becomes apparent through additional surveys and studies. There have been no applications for temporary use permits filed previously.

Applicant will provide the Bureau of Land Management with lists of all federal lands impacted by agency as those agencies are identified.

5. Authorization

Applicant files this right-of-way permit application for a new authorization.

6. Citizenship

As Applicant is filing as a corporation, citizenship is not applicable.

7. Project Description

(a) Type of system or facility

Applicant hereby applies for a right-of-way permit for the construction and operation of 820± miles of natural gas pipeline, 415 miles of which crosses Federal lands in the State of Alaska. These lands are administered by the Department of the Interior, the Department of Defense, the Department of Transportation and the General Services Administration. Some of these lands are adjacent to the Denali National Park and the Kenai Moose Range.

(b) Related structures and facilities

Applicant applies for rights-of-way for fourteen (14) compressor stations to be individually and separately located on fifteen (15) acre tracts, one (1) refrigeration unit and metering site to be located at Prudhoe Bay on state land, and tidewater processing facilities at Nikishka, Alaska, on the Kenai Peninsula.

We know of no alternative being considered which will make North Slope gas available for export markets in the Pacific Rim. Alternative technologies which have been discussed include LNG submarine and ice-breaking tankers, but the technology is unproven and highly speculative in the context of our projected market.

13(b) Why Alternative Was Not Selected

The Alaska Natural Gas Transportation System is not proceeding at this point in time due to financing and market conditions. It is Yukon Pacific's belief that an export market will demand gas from Prudhoe Bay first, but the company has stated its willingness to build a 48 inch O.D. pipeline from Prudhoe Bay to Fairbanks for the purpose of supplying gas for the overland route to U.S. markets. Sponsors of the Alaska Natural Gas Transportation System have not yet accepted the "Y-line" option pending further definition of Asian and U.S. markets.

Alternative approaches to tidewater have been studied on the basis of cost, environmental impact, and the projected needs, short and long-term, of shore-based processing facilities. Of the alternatives available, we feel Nikishka is the best due to the common infrastructure of gas processing already in place or likely to be built, the relative ease of pipeline construction to that point in comparison with mountain crossings in other

APPENDIX C

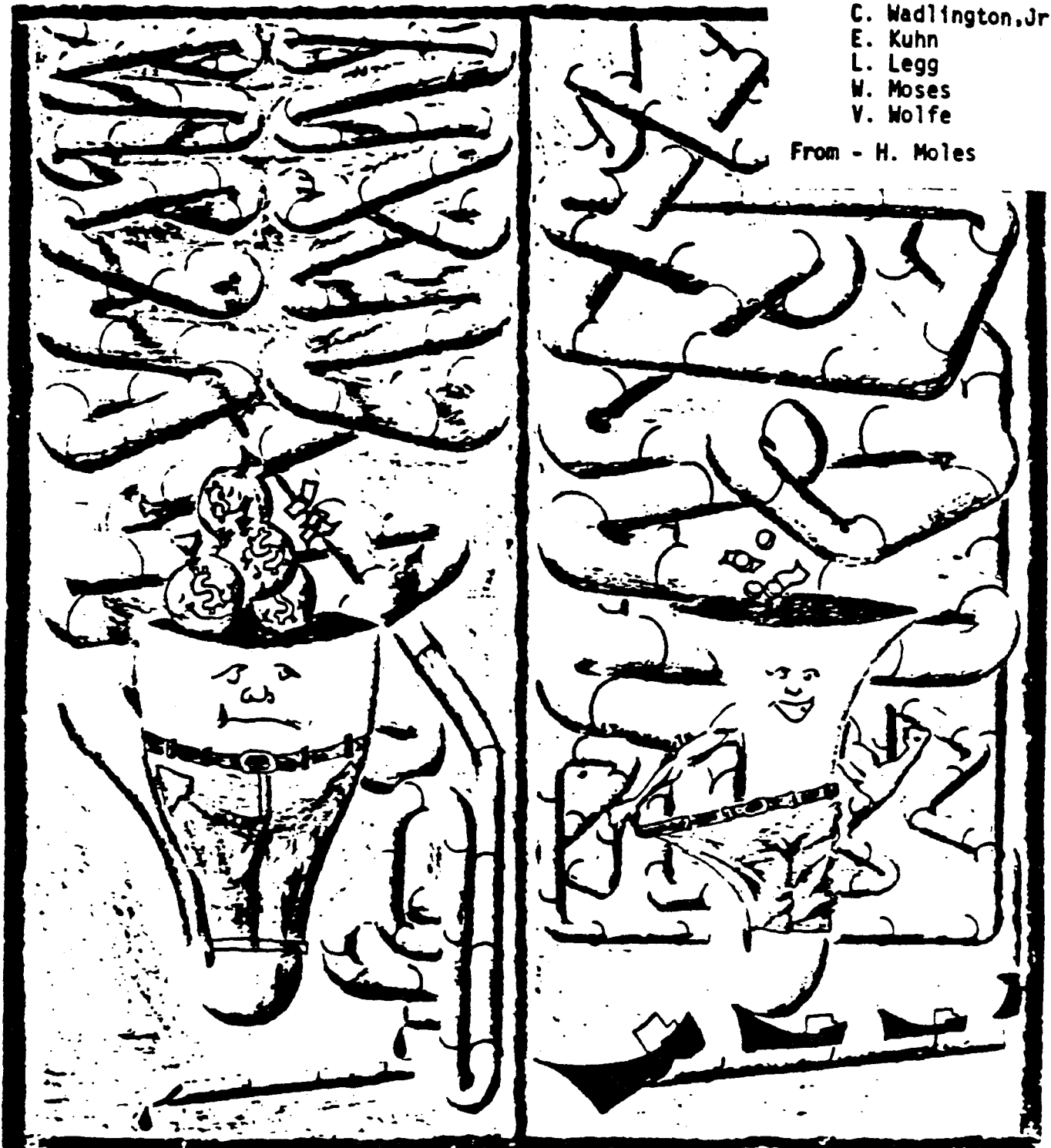
**Alaska's
Incredible
Shrinking
Gas Line
Project**



THE INCREDIBLE SHRINKING PROJECT

To - C. LaGrone
C. Wadlington, Jr
E. Kuhn
L. Legg
W. Moses
V. Wolfe

From - H. Moles



Promoters say the pricetag of the proposed Trans-Alaska Gas System has shriveled from more than \$17 billion to less than \$10 billion. It may be in imminent danger of losing its status as the largest private project in the history of mankind . . . and shrinking itself right into reality.

"BIG PROJECTS," declares Walter Hickel Sr. "That's what the world needs today."

For the last few years, the former Alaska governor and U.S. Interior secretary has been spearheading a crusade to bring North Slope natural gas to tidewater, liquefy it and transport it by the tankerful to East Asian markets.

Big? You betcha. The biggest. With an initial pricetag of \$17.2 billion, the Trans-Alaska Gas System was twice the size of the largest private project ever built. And even then left enough spare change on the table to underwrite, say, a few dozen surimi plants and a handful of four-lane expressways from inland lead-zinc mines to port.

But ever since the idea of developing infrastructure to sell liquefied natural gas to the Pacific Rim was conceived, the bottom line's been shrinking. And shrinking. An engineering breakthrough here. A pipeline route refinement there. The net result: a project that's now conservatively estimated to cost \$10 billion. And falling.

"If we aren't careful, we'll end up not being the biggest," quips Mead Treadwell, vice president and treasurer of Yukon Pacific Corp., the company at the forefront of the Trans-Alaska Gas System (TAGS) effort.

Truth is, however, that despite prevailing, widespread skepticism about the prospects for any plan to deliver North Slope gas to any domestic or export market, Yukon Pacific just might be closer than ever to shrinking TAGS into reality.

"The biggest stumbling block at this point is not financing, and it's not our (price) competitiveness," states Hickel, the chairman of Yukon Pacific. "It's bringing all the end users together (under a single purchasing entity) to get the project off the ground. As soon as we tie up the markets, we'll have a project."

Challenges to tying up those East Asian markets have been numerous and multifaceted, but most fit neatly into two simple categories: convincing decision makers in those markets they'll be able to use TAGS's 14.5 million-ton annual LNG capacity by the turn of the century and convincing them to make long-term commitments to satisfy that new demand with gas from Alaska's North Slope instead of other Pacific Rim, Canadian or Middle East sources.

Most significant in cutting costs:

maximizing use of existing infrastructure, cost controls at the construction phase, better Arctic construction and engineering techniques, minimizing the length of the pipeline from Prudhoe Bay to tidewater, construction competition and low inflation in recent years.

Most of the \$7 billion-plus shaved off TAGS's pricetag so far has been attributable to tangibles. Intangibles like labor costs, construction cost savings as compared to the oil pipeline and regulatory compliance have yet to be addressed.

While ongoing cost reductions have played a central role in Yukon Pacific's progress toward clearing both hurdles, a number of global considerations will shape the outcome as well: the growing trade imbalance between the United States and other Pacific Rim countries, uncertainty over how long the current oversupply and low prices of oil and natural gas will last and the future of nuclear energy, to name a few.

Net impact of all of these factors should become clearer early this year when Yukon Pacific, ARCO Alaska (one of the three possible sources of North Slope natural gas) and a consortium of potential Japanese investors and end users finalize an 24-month "pre-feasibility" engineering and market study of the project. Parties are scheduled to meet this month in Tokyo and in April in Anchorage to wrap up the study and determine whether commercial prospects for TAGS are encouraging enough to proceed with further studies. A con-

sortium of seven Korean firms has been conducting its own study of the project as well.

"The project actually looks better today now that we've raised all the issues than it did when we had oil at \$30 a barrel," says Hickel. "Five years ago no one took it seriously. Three years ago people started to look at it a little, and today they're looking at it very seriously."

The lure of Alaska North Slope natural gas: known reserves in excess of 26 trillion (26,000,000,000,000) cubic feet. Trillions more yet to be discovered. The snag: finding a cost-effective way to get it to market, especially in a climate of declining oil and natural gas prices. So far, the vast majority of the North Slope natural gas extracted in conjunction with oil production has been reinjected.

Not that there's been a shortage of project proposals: the Arctic Gas proposal to build a gas pipeline across northern Alaska and Canada and then south to the U.S. Midwest. The El Paso plan to build a pipeline from Prudhoe Bay to Gravina Point south of Valdez, liquefy the gas and transport it in tankers to California, where it would be fed into existing pipeline infrastructure. The Alaska Natural Gas Transportation System concept of building a 4,800-mile pipeline following the Trans-Alaska Pipeline System (oil) south from Prudhoe Bay to Fairbanks and then following the Alaska Highway across Canada and into the Lower 48.

How about a fleet of submarines to

How much is 26,000,000,000,000 cubic feet?

The 26 trillion cubic feet of known natural gas reserves on Alaska's North Slope would fill Anchorage's Enserch Center Building - formerly known as the Hunt Building - 600,000 times. It would satisfy current natural gas demand in Southcentral Alaska from Homer to Talkeetna for the next 578 years.

Before compression and liquefaction, the amount of natural gas that would be shipped to Pacific Rim markets each day under current plans for the Trans-Alaska Gas System would fill the Enserch Center 53 times. Twenty days of production at full TAGS capacity would satisfy a year's worth of natural gas demand in Southcentral Alaska.

How about the estimated \$10 billion pricetag for the TAGS project? If it were paid off with one lump-sum payment in \$100 bills, the bills - attached end-to-end - would reach from Valdez to Tokyo. And back. And back again. And still have enough left at the end of the line to fund Alaska's 1987 capital budget. Twice.

transport LNG from the Slope under the ice of the Beaufort Sea 12 months a year?

Williams Cos.' Alaska Natural Gas Transportation System proposal got further than the rest. It even got an official nod over the other two from President Jimmy Carter. While it spent \$800 million seeking permits, however, it never secured the necessary rights of way. It now appears dead if not buried because of prohibitive costs and lack of financing. Concludes a 1985 Massachusetts Institute of Technology study of North American gas markets and projects, "The possibility of Alaska natural gas entering the domestic U.S. market appears remote."

Yukon Pacific's Trans-Alaska Gas System proposal is the first that's targeted the Pacific Rim—specifically, Japan, Korea and Taiwan. North Slope gas exports aren't restricted, and they don't require federal sanctioning.

Unlike the Lower 48 of the United States, Japan, Korea and Taiwan are almost entirely import-dependent for their energy needs. Japan currently imports 28 million tons of LNG annually from six Middle East and Pacific Rim projects, including the Phillips-Marathon LNG plant on the Kenai Peninsula.

Other sources: Brunei, Abu Dhabi, Indonesia (two projects) and Malaysia. It's under contract to begin importing 6 million tons a year from Australia, starting in 1989 or 1990.

Korea is scheduled to begin buying 1.5 million tons of LNG annually from Indonesia; Taiwan is due to begin importing 1 million tons a year from Indonesia beginning in 1990.

According to government and industry projections in the three countries, their collective LNG imports by the turn of the century will increase to between 50 and 55 million tons. TAGS promoters are quick to point out that new demand for LNG among Japan, Korea and Taiwan will exceed TAGS's capacity. But barely.

Another M.I.T. study of world gas markets concludes there are two groups of LNG consumers in East Asia: the Japanese and "The Rest." Even with the current projections of modest growth in LNG demand in Japan for the remainder of the century and dramatic demand increases projected for Korea and Taiwan, Japan still would account for about 80 percent of the LNG consumption among the three in the year 2000.

Problem is, Japan's projections of new LNG demand have been on a steady

slide since the early '80s. In April 1982, its Ministry of International Trade & Industry pegged annual demand by 2000 at 51.9 million tons; by late 1983 it had downgraded the projection to 43 million tons, and in a later revision it estimated 41.5 million. In June 1984, the Petroleum Association of Japan (whose members import oil) forecast turn-of-the-century demand at 40.9 million tons; by August 1985, its projection had shriveled to 35.1 million—a mere 1 million tons more than the country already is under contract to purchase by then, assuming current contracts due to expire during the '90s are renewed.

Reason: Because of its vulnerability in a climate of soaring oil prices or shortages, Japan has committed itself to an aggressive program of nuclear energy development, and it says it will be satisfying fully 50 percent of its new generation needs with nuclear by the turn of the century. LNG would compete with coal (including Usibelli and Beluga coal from Alaska) and oil to satisfy the remaining 50 percent. At one point, Japan depended on oil for 80 percent of its energy needs; by 1984, oil dependence had been cut to 58 percent and LNG accounted for 10 percent.

While TAGS promoters have cut the cost of the project almost in half since its inception, they've faced an uphill struggle convincing the Japanese that LNG demand could be cost-sensitive.

Says Treadwell, "Discussions got hung up on the issue of delivered price; every time we met with the Japanese, they'd say the LNG was still too expensive. So we took a Rip Van Winkle approach that gave the Japanese the freedom to speculate how much they could use if they got it at certain prices." While official projections of future demand haven't changed, he adds, there are indications that demand forecasts may be increased in view of this new approach. "We've had to sell the idea of elasticity of demand," says the Yukon Pacific vice president and treasurer.

Aside from the push to convert to nuclear—said to be running behind schedule already—the potential for additional demand in Japan is apparent. Hickel maintains Japan's nuclear energy goals are unattainable, and projections of 50 percent dependence on nuclear for new generation needs by the turn of the century are bargaining chips more than real expectations.

Three-quarters of Japan's LNG is used in power generation, and none is used in industry. The country still uses kerosene for the majority of its home cooking and heating, in part because of an inadequate pipeline distribution network for natural gas. Says Doug Perry, industrial analyst in the U.S. Department of Commerce in Washington D.C., "In 1986, it's a rather anomalous situation for one of the most industrialized



Mead Treadwell, vice president and treasurer of Yukon Pacific Corp. shows a map of the pipeline route to Howard Griffith, (left), president of the firm.

PROMISE: YOU'LL NEVER be driving along the Richardson Highway between Fairbanks and Valdez with an out-of-state visitor, point out across the landscape at the Trans-Alaska Gas System pipeline and say, "There it is."

Reason: If the project is built, the 36-inch pipeline will be buried almost the entire 796-mile route between Prudhoe Bay and the gas liquefaction plant on Anderson Bay in Valdez. The only places the gas pipeline will be above ground are a handful of major seismic faults and at major river crossings.

Unlike the oil that must be heated to flow through the Trans-Alaska Pipeline System, natural gas flows cold. The colder the gas, the less space it occupies. Therefore, there's no danger of the line thawing the permafrost. Quite the opposite. One engineering challenge with TAGS is making sure the chilled line doesn't freeze runoff water on the ground's surface and cause a buildup.

Generally speaking, the gas will travel at temperatures below freezing through the northern portion and at temperatures just above freezing in the southern portion.

About 2.3 billion cubic feet of natural gas will flow from Prudhoe Bay each day; between compression and the use of gas to operate the line and the LNG tankers, the amount will diminish to 2.1 billion cubic feet by the time it reaches the tankers. Ten compression stations are planned.

The TAGS gasline will follow the existing oil pipeline corridor from Prudhoe Bay to Valdez. A separation of at least 200 feet generally will be maintained because of the temperature variations between the two lines. Between Prudhoe and Delta Junction, there will be about a 200-foot separation from the proposed Alaska Natural Gas Trans-

portation System pipeline route. It's anticipated that construction, scheduled to begin later this decade, will take about four years.

While TAGS promoters initially had considered a corridor that would have had the pipeline terminus and LNG plant in Nikiski, that route since has been abandoned because of environmental and cost considerations. Ending the line on the Kenai Peninsula would have required right-of-way through Denali National Park and other wildlife areas.

Mead Treadwell, vice president and treasurer of Yukon Pacific Corp., says other important factors in choosing Valdez over the alternatives were its deep and ice-free port, its proximity to the Pacific Ocean, land availability, existing community infrastructure, the fact that it offered the shortest possible pipeline route and minimal environmental impact from using the existing oil pipeline corridor. The LNG plant is planned for acreage about 3.5 miles west of the Alyeska Pipeline Service Co. terminal for TAPS.

Once natural gas enters the LNG facility, it will be cooled to minus 260 degrees Fahrenheit for liquefaction. That process reduces volume 600 times—600 cubic feet of natural gas will become a single cubic foot of LNG. There will be four 800,000-barrel holding tanks adjacent to the LNG facility to assure a five-day supply of LNG. Fifteen LNG tankers are planned to make 280 dockings a year.

Once gas arrives in Japan, Korea and Taiwan, it will be regasified for distribution.

Production is scheduled to be phased starting about 1993. By the turn of the century, it would increase to 14.5 million tons.

nations in the world."

On the other hand, natural gas markets in East Asia still are relatively immature. It wasn't until 1969 that Japan began to import its first LNG—960,000 tons a year from the Phillips-Marathon plant in Kenai. The next project—Brunei—came on line in 1973.

Initial interest in LNG was driven by Japan's need to find an environmentally acceptable fuel source that would enable its economy to expand without aggravating already poor air quality conditions in the 1960s. Because of environmental considerations, the Japanese even were willing to pay a substantial premium for Cook Inlet LNG—52 cents per million Btus for LNG versus 30 cents per million for oil.

The Arab oil embargo in the early '70s injected a new urgency into Japan's energy outlook. Between 1973 and 1978, LNG imports soared from less than 1 million tons to almost 16 million.

Oil prices that first stabilized and then plummeted in the '80s, however, dramatically have altered the equation. That's not to say that Japan and other East Asian countries aren't still interested in diversifying energy sources; they've simply lost their appetite for LNG at premium prices. Most current

contracts tie LNG prices to oil on a parity basis in terms of energy value—buyers pay the same amount for one Btu's worth of gas as they do for the energy equivalent of oil.

There are two schools of thought regarding future relationships between LNG prices and those of other energy sources: One says LNG won't sell if it costs more than the lowest-cost alternative (on an energy equivalent basis). Technological advances that enable easy and inexpensive conversion from one fuel to another, coupled with maturing global gas markets that will support spot pricing and progress in coal-burning technology, could lend new credence to this belief.

The other school says natural gas eventually will sell at a premium again because of environmental considerations. Says Hickel, "The only environmentally safe sources of energy are gas and nuclear. With them you have value added; with everything else, you have value subtracted."

As a rule of thumb, Treadwell says, a barrel of oil provides about the same amount of energy as 6,000 cubic feet of natural gas. Using that formula, \$15 oil would command a price of \$2.50 per 1,000 cubic feet of natural gas. Yukon

Pacific's goal is to deliver gas to Pacific Rim ports at a long-term pricetag of \$3 to \$4 per 1,000 cubic feet. Regasification of the LNG is not included in that price.

"With our costs where they stand right now, TAGS is viable with oil at \$24 a barrel. And that's a rather conservative assumption for oil prices in the early '90s," says the Yukon Pacific official. "We're not finished cutting costs yet. By the time we have a plan finalized, we could be viable at \$16 oil."

Even price parity with oil, however, now poses an obstacle for TAGS proponents. Industry and international trade experts say the Japanese may be unwilling to convert from oil to gas if they only can expect to break even on the cost of the fuel. Additional concessions may be necessary to make conversion cost-effective and attractive to the Japanese. In Korea, the challenge is more convincing to choose LNG to fuel growth than conversion of existing generation facilities.

Korea also has been swayed by falling oil prices. Late in 1986 it had yet to accept its first shipment of LNG from Indonesia under terms of a pact signed in 1983; it had been holding out for a 16 percent price reduction—from \$4.89

per million Btus to \$4.09. (1,000 cubic feet of natural gas produce about 1 million Btus.)

To fully appreciate the impact of falling oil prices on natural gas prices, consider the case of Phillips on the Kenai. Gas it was selling to Japan for close to \$5 per thousand cubic feet in August 1985 was selling for less than \$3 a year later, according to the Oil & Gas Division of Alaska's Department of Natural Resources.

Says Fred Storer, manager of international and utility sales for Phillips 66 Natural Gas Co. based in Bartlesville, Okla., "The Japanese recognize LNG is viable and valuable, and they're making long-term plans to purchase more of it. But if LNG continues to be priced on a crude oil parity basis, there will be no additional investments in LNG (in Japan)."

He declines comment on whether the gas has a positive wellhead value at less than \$3 per 1,000 cubic feet, but says Phillips does expect to renew its contract with the Japanese in 1989.

Other incentives that may be necessary to encourage additional LNG consumption: a pricing system within Japan that features lower unit costs for greater quantities instead of higher

costs, a more mature global gas market that will support spot pricing and more flexible terms for purchases outside the utility sector.

Japanese utilities and the "town gas companies" that distribute gas to residential and commercial customers are locked into take-or-pay contracts for gas, and they're prohibited from transferring their allotments if supply exceeds demand. Utilities simply can use LNG to satisfy base load when demand is low, but the town gas companies have found themselves in no-win situations when supply has exceeded demand. Since gas prices are tied to oil contract prices and not to spot prices, they've also been behind the power curve in benefiting from falling oil prices.

Some of the barriers to additional LNG consumption are internal. Natural gas is heavily regulated in Japan. Gas that was selling for \$5.94 per million Btus in 1984 at the residential level in the United States cost \$17.80 in Japan. Shipping and regasification account for a tiny fraction of the disparity.

Says one observer, "In that kind of a situation, it doesn't have a lot of impact if Alaska can deliver at a dollar less per thousand cubic feet." Adds economist Scott Hawkins of Alaska Pacific Bank,

"At least part of the key to moving ahead with TAGS will be a political decision on the part of the Japanese."

It's been widely assumed that the ban on exports of Alaska North Slope crude oil also is a stumbling block to additional LNG sales in the Pacific Rim—as well as additional timber sales, coal sales and other exports.

Hickel agrees, but he says the significance of the oil export ban to TAGS has been overstated. "The Japanese understand reality," says he. "They realize the United States still has to import oil, but the Pacific Rim is the only market for Alaska's natural gas and its timber. How much timber do you think we're going to get past Seattle? How much gas have we been able to sell in the Lower 48—even with the permits?"

Skeptics maintain neither TAGS nor any of the projects targeting domestic consumption can compete on a price basis with other foreign sources—Canadian gas in the Lower 48 and shut-in Indonesian gas at tidewater in East Asia. Says one observer, "The Japanese are good businessmen. Sure, they're looking to diversify their sources for practical and political reasons, but they want it to work on a commercial basis. They aren't willing to diversify at any cost."

"There are tremendous gas reserves in Canada and elsewhere in the Pacific Rim," adds economist Andrew Safir, president of Los Angeles-based RECON Research Corp. "Even though I hope (Alaska) can do it, I have serious doubts about getting it done in the immediate future. It's going to take a strong hook and a good lure—you'll have to have a lot more than borax on your salmon eggs."

Yukon Pacific's chairman, however, contends TAGS gas already can be priced within cents per 1,000 cubic feet of natural gas of other Pacific Rim producers. "As long as we're competitive, we don't necessarily have to be the cheapest," Hickel says. "We have a lot of other things going for us: We're a safe source, we have a large and reliable supply, we have a huge trade deficit that the Japanese want to correct, and we're in a good location. And remember, we're not looking at gas today; we're looking at gas in the mid-'90s. Prices will go up by then. It's a simple case of supply and demand, and gas can't be produced as cheaply as it's being sold today."

The Japanese have been exploring additional LNG projects in Indonesia, Qatar, Sakhalin (USSR), and Australia. Thailand and China also have been mentioned as possible sources. None has even half the capacity of TAGS, though. The Sakhalin proposal already is in jeopardy, and a project that would have initiated Canadian LNG exports to Japan was scrapped in 1986. "We're cost competitive with all the new prop-

ROOTS Origins of TAGS and Yukon Pacific Corp.

CONCEIVED BY FORMER GOV. AND U.S. INTERIOR SECRETARY WALTER Hickel nearly six years ago, the concept of exporting Alaskan LNG made from North Slope natural gas took root about a year later when organizers of the Alaska Natural Gas Transportation System announced their project "temporarily" was being shelved.

The ANGTS proposal called for construction of a 4,800-mile pipeline from Prudhoe Bay through Canada and into the Midwest, following the route of the Trans-Alaska (oil) Pipeline System between Prudhoe and Fairbanks and the Alaska Highway southeast through Canada. ANGTS had received presidential blessing over two other proposals targeting North Slope gas sales to the Lower 48 by Jimmy Carter.

When Northwest Alaska Pipeline Co.—later acquired by Williams Cos.—announced ANGTS was being shelved, then-Gov. Jay Hammond contacted Hickel about forming a governors' committee composed of the two of them and the late Gov. William Egan to study alternatives for North Slope gas. The state put up seed money, and private sources also contributed to the effort.

As a result of the study, President Ronald Reagan and Japanese Prime Minister Nakasone concluded during a 1983 summit that the two nations should foster a private study of the feasibility of joint development of North Slope gas.

Earlier in 1983, interest in North Slope gas spawned Yukon Pacific Corp. after the head of Supra Corp., a Houston-based energy venture capital firm, flew to Alaska to discuss with Hickel results of the Alaskan study and those of Supra's own independent study on bringing North Slope gas to market. The two men subsequently formed a partnership, and ARCO Alaska and policy makers in Japan and Korea agreed to participate in studies of Alaska North Slope gas potential.

About a year ago, CSX subsidiary Texas Gas Transmission Co. bought a one-third interest in Yukon Pacific, providing it with substantial gas transmission expertise. (The same month, CSX purchased SeaLand Services Corp.) The other two-thirds are owned by Supra and a group of Alaskan investors headed up by Hickel.

Gravina Bay	Valdez to	Valdez to	Valdez to	Valdez to	Cook Inlet to	Cook Inlet to	Mikiski
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Length of pipeline (miles)	808	821	797	787	783
Utilization of existing infra-structure	Good to Yukon R. Fair to LNG site	Good to Yukon R. Fair to LNG site	Good	Good	Good
Construction	Generally good	Generally good	Generally good	Generally good	Generally good
Conditions	Cook Inlet. Problem areas	Cook Inlet. Problem areas	Difficult areas	Difficult areas	Difficult areas
Pipeline Approach to LNG/Terminal Facility	Fair. Marine crossing	Fair. Problem area. City of Valdez	Good	Good	Good
Avoidance of Significant Conservation Units	Poor. Denali N. Park	Poor. Denali N. Park	Good	Good	Good

LNG Plant/Port

Issues	Fair	Poor Potential	Good	Good	Good
Land Availability	Poor	Good	Good	Good	Good
Safety	Fair	Good	Good	Poor. Airporon	Poor. Residental Area
Geohazards (Pipeline/LNG site)	Good. Some ice scour	Poor. Volcanoes, flooding and sediments	Fair. Landslides, avalanches and tsunamis	Poor. Soil instability and liquefaction, tsunamis	Poor. Mass wasting soil instability, tsunamis
Foundation	Soils. Coarse grained (fair)	Soils. Fine to coarse grained (poor)	Bedrock (good)	Coarse grained soils (fair)	Bedrock (good)
Conditions	Adjacent. Good	Adjacent. Good	Adjacent. Good	30,000. Poor	25,000. Poor
Distance of Ocean Dock from LNG Facility (feet)					
Length of Dock (feet)	7,000	8,000	500	1,000	1,000
Existing Com-munity infra-structure	Good	Poor	Good	Good	Good
Potential to Limit Environ-mental impacts (LNG site)	Good. Problem area. Sustains Fair. Trading Bay area	Good. Sustains Bay area	Good	Good	Good
Existing Naviga-tional Aids	Good	Good	Good	Good	Good

Good	Good	Good	Excellent	Poor. Mountain tunnel required	Bedrock (good)	Adjacent. Good	1,500	Poor	Fair. Through undeveloped national forest	Fair. Not in vessel traffic system
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ects being considered," says Treadwell. "When you roll in the other factors like the need for energy diversification, the trade deficit and the surplus dollars, we're the best."

Also working in TAGS's favor is the smooth record of Phillips and Marathon exports for the last 18 years. They've established Alaska as a reliable source of LNG while paving the way for another extension of Phillips' and Marathon's contract with Japan when the current pact expires in 1989.

TAGS promoters realize they'll have to attract substantial investment and backing from Japan and Korea to close a deal, and they say that will be crucial in assuring long-term markets as well. Japan is the largest source of project capital in the world, due to recent strengthening of the yen and its own surplus capital, coupled with declines of the U.S. dollar. According to one report, the Japanese are poised to invest more

It will be incumbent on the State of Alaska itself, however, to remove one of the important obstacles to finalizing financing arrangements. Yukon Pacific must secure rights-of-way from the state for most of the pipeline corridor between the Yukon River and Valdez. Under current state law, state rights-of-way can't be granted until financing is in place. North of the Yukon, rights-of-way primarily must come from the federal government.

Says Treadwell, "It's a Catch 22 situation. The state won't grant the right-of-way before the project has financing, and no one's going to put up the financing before we've secured the rights-of-way. It's putting the cart before the horse."

By all indications, that revision shouldn't meet with any resistance from Gov. Steve Cowper, who during the fall political season stated the future of TAGS or any other proposal for getting

•Another source of revenues from marginal North Slope oilfields that could make the difference between development and non-development.

If the project sticks fairly close to its current timetable – and Treadwell says that's happened so far – a final decision on whether to build TAGS could be forthcoming in 1988. Between now and then, efforts will focus on an environmental impact statement, right-of-way permitting and further efforts to cut costs and refine the project. Engineering and construction are scheduled for 1988 to 1992, and phased-in deliveries would begin shortly thereafter.

Hickel says the next step is finding an entity to serve as a clearinghouse and coordinate LNG purchases; none of the utilities or government entities involved in the current study has sufficient LNG demand to singlehandedly carry the project. "We need to bring all the end users together under one umbrella to get the project off the ground," says the Yukon Pacific chairman. One possibility: the Industrial Bank of Japan.

The recent appointment of R.O. Anderson, retired chairman and CEO of Atlantic Richfield Co. and a world leader in the petroleum industry, to the Yukon Pacific board has given the effort a fresh injection of visibility and expertise. Glenn Simpson, the first president of ARCO Alaska, also recently was named a Yukon Pacific director.

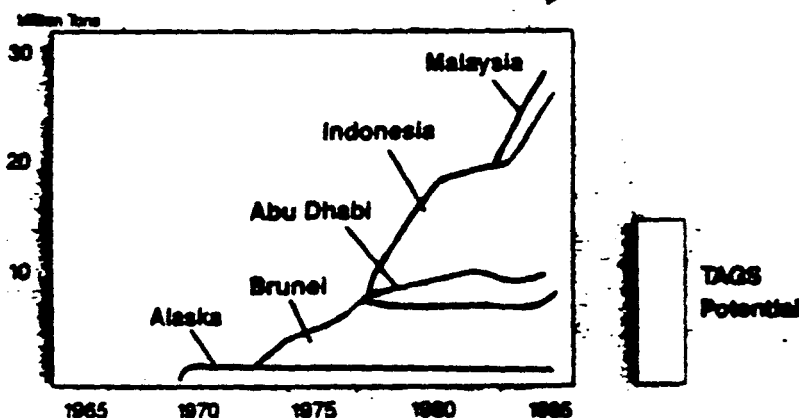
While numerous obstacles remain – some beyond the control of Yukon Pacific and other TAGS supporters – significant strides have been made in recent months to overcome the primary hurdles of creating a demand for additional LNG in East Asia and assuring that those markets will turn to the multi-trillion-cubic-foot natural gas reserves of Alaska's North Slope to satisfy the need.

"In simplest terms, all it takes to make the project work is someone willing to sell the gas, someone who'll buy it, rights-of-way from the landowners and financing," says Treadwell. "We think there's a window of opportunity in the early to mid-1990s that make all four possible."

The mood in Alaska continues to be one of widespread doubt. Fortunes of the proposed Trans-Alaska Gas System, however, won't hinge on public opinion; they'll hinge on the prowess of a small core of thick-skinned believers in convincing targeted Pacific Rim markets they'll use Alaska's LNG if they can get it at the right price and then relentlessly shrinking TAGS's capital costs until Yukon Pacific can deliver the product at that price.

"We're really not asking that much from people in Alaska," says the Yukon Pacific vice president. "We'd just like

LNG Import volume, Japan



than \$200 billion in projects outside the country.

"That kind of reverse investment assures that the Japanese and Koreans share the risks and share the profits," says one international trade expert. It also provides a lucrative market for Japanese and Korean manufactured goods.

Due to interest rate declines since the inception of the TAGS efforts, capitalized interest that isn't included in the \$10 billion figure also has been reduced substantially, which enhances prospects for financing.

Promoters hope to amortize TAGS infrastructure, reportedly over a 10- to 18-year period. While the project could not withstand wide fluctuations in flow during the amortization period, two options that may enter into negotiations are less rigid purchase requirements and lower prices once the pipeline and

North Slope gas to market should be dictated by market conditions and not other factors.

Treadwell maintains Alaska also must reassess its royalty and tax policies to enhance the competitiveness of North Slope gas in world markets. That's sure to raise a few more eyebrows.

Nonetheless, here's a taste of what the state has to gain if TAGS becomes a reality:

- Between \$1 million and \$2 million in new state revenues each day it's operating;

- About 550 direct full-time jobs split almost evenly among Yukon Pacific's headquarters in Anchorage, the gas liquefaction plant in Valdez and the 10 compressor stations and maintenance center in Fairbanks, not to mention all the indirect jobs the project will spawn;

•Between 5,000 and 7,000

APPENDIX D



YUKON PACIFIC CORPORATION

December 8, 1983

Chairman Raymond J. O'Connor
Federal Energy Regulatory
Commission
825 North Capitol Street
Washington, D.C. 20036

Dear Chairman O'Connor:

I am Chairman of the Board of Yukon Pacific Corporation. As you are aware, Yukon Pacific is planning to construct and operate intrastate natural gas pipeline and liquefaction facilities in Alaska for the purpose of exporting Alaska's North Slope gas reserves to the Pacific Rim nations that are Alaska's primary market area. The purpose of this letter is to inform the Federal Energy Regulatory Commission of Yukon Pacific's intent to proceed with this undertaking and to note the nonjurisdictional status of the project with respect to the FERC.

1. Introduction

Fully fifteen years have passed since the largest new reserves of natural gas in the United States were discovered on Alaska's North Slope. Since then, additional exploration of Alaska's natural gas potential has provided strong evidence that other Alaska reserves containing large quantities of natural gas may also exist. As of January 1, 1983, proven gas reserves equalled 32.4 Tcf 1/ and the current mean estimate of Alaska's undiscovered reserves -- both onshore and offshore -- exceeds 100 Tcf, with overall reserve estimates ranging as high as 172 Tcf. 2/ In short, Alaska's natural gas resources are vast.

The plain fact is, however, that these reserves cannot be developed without a transportation system to move them to market. At present, there is some Alaska gas produced from Cook Inlet (approximately 1,000,000 metric tons annually) 3/ that is liquefied and exported to Japan. Other proposals to transport

1/ See 1982 Statistical Report, Alaska Oil and Gas Conservation Commission, p. 29.

2/ See U.S. Department of Interior Geological Survey, Estimates of Undiscovered Recoverable Resources of Conventionally Producing Oil and Gas in the United States, Open File Report 81-192, Summary P. 6 (1981).

3/ See Phillips Petroleum Co. and Marathon Oil Co., 37 F.P.C. 777 (1967).

Alaska gas, principal among them the Alaska Natural Gas Transportation System, are stalled. While Northwest Energy Company generally envisioned a two-year delay in the ANGTS project as of last year, more recently the current owner of the ANGTS certificate described the project as "abandoned in 1982."
4/

Yukon Pacific is an investor-owned corporation organized under the laws of Alaska, with its principal place of business in Anchorage, Alaska. Yukon Pacific was formed in 1983 for the purpose of doing the job that has been left undone -- developing and implementing an economically feasible system for the transportation of Alaska natural gas from the wellhead to markets where the gas is in demand. Yukon Pacific's market research compels it to conclude that the markets with sufficient demand to accommodate the costs of transporting Alaska's gas are overseas -- principally Japan and Korea -- rather than domestic, and that a transmission system designed and scaled for transportation of gas to these overseas markets is economically feasible today.

Yukon Pacific therefore proposes to construct and operate natural gas transportation and liquefaction facilities, located wholly within the state of Alaska, for the export of liquefied natural gas to foreign countries in Alaska's Pacific Rim market area.

2. Description of TAGS

In June of 1982, Alaska Governor Jay Hammond appointed a committee of Alaska leaders (the Governor's Committee) to investigate an alternative system for transporting North Slope gas to market. In a report issued earlier this year the Governor's Committee concluded that a pipeline from Alaska's North Slope to the south central coast (the tidewater), with conditioning, liquefaction and LNG terminal facilities located at tidewater, presented the best opportunity for marketing North Slope reserves. The Committee's proposed system is known as the "Trans-Alaska Gas System" or "TAGS." (The Committee's report is Attachment A to this letter).

Fundamental to the Committee's recommendation was the conclusion that the Pacific Rim market -- and principally Japan -- is the primary market for Alaska LNG. In addition, the Governor's Committee concluded that TAGS would be the least costly export pipeline system. Another major advantage of the system is marketing flexibility -- the ability to respond to geographic shifts in LNG market demand. The Committee's report

4/ See Complaint p. 25, The Williams Companies v. Northwest Energy Co., No. C83-1052W (D. Utah, filed Sept. 12, 1983).

also recognized the considerable public benefits -- both to the Nation as a whole and to Alaska -- that TAGS will produce.

Brown & Root, Inc., the consulting engineers to the Governor's Committee, prepared an initial study of the routing and configuration for TAGS. The route selected runs approximately 820 miles from Prudhoe Bay to the village of Nikishka on the Kenai Peninsula. 5/ For much of its distance the pipeline will parallel the Trans-Alaska Pipeline System (TAPS) crude oil pipeline. This routing emphasizes lowest construction and operating costs and also brings the pipeline as close to Fairbanks as economically justifiable. The Governor's Committee recommended a single phase system, which will avoid the need for additional gas processing facilities on the North Slope, with 36-inch diameter pipeline and a maximum 2,160 psig operating pressure.

At completion, the pipeline's capacity will be 2,830 MMSCF/D of raw gas (1 MMSCF/D = one million standard cubic feet per day). All conditioning and natural gas liquids extraction and fractionation will be performed at tidewater. The tidewater LNG facilities will consist of dehydration, liquefaction, storage and loading sections. The projected cost for construction of the full TAGS system is \$14.29 billion in 1982 dollars. 6/

The Yukon Pacific pipeline system will essentially implement the above described proposal of the Governor's Committee, and will be privately financed. Yukon Pacific plans to vary from that proposal in the sizing of the pipeline itself. The Governor's Committee recommendation is for a 36-inch diameter line for the system's entire distance. Yukon Pacific's version of TAGS, however, contemplates a 48-inch diameter line to the Fairbanks vicinity and a 36-inch diameter line for the balance of the route to Nikishka. This configuration will add greater flexibility to the system.

Over the long term, Yukon Pacific's plans call for a parallel pipeline for the portion of the system below Fairbanks. The size of future parallel facilities will depend on the eventual size of the Alaska intrastate market, as well as the results of future gas exploration and development in Alaska. The

5/ Gas liquefaction and LNG shipping facilities have operated in the Nikishka area since 1969 as part of the Phillips-Marathon project certified in Docket No. CI67-1226, Phillips Petroleum Co., et al., 37 F.P.C. 777 (1967).

6/ (See Attachment A, Engineering, p. 32.)

development of that parallel facility may also depend on the future possibility that others will seek to take possession of gas at Fairbanks for overland transmission through Canada to the contiguous United States.

3. The Position of the Administration

It should be emphasized that as Yukon Pacific's export project has taken shape, the federal government has come to recognize not only that the export of Alaska gas furthers the national interest, but also the clear economic feasibility of the proposal. The recent joint statement of the President and Prime Minister Nakasone attached hereto (Attachment B) expresses the view that "further progress be made in both energy trade and cooperation in ... natural gas ... between Japan and the United States" In terms of the TAGS benefits for the Nation, Secretary of Commerce Malcolm Baldrige's recent statement in a letter to Alaska Governor William Sheffield is directly in point:

"The Administration views the development of Alaska North Slope natural gas as a major contribution to Western energy security. Whether the gas is marketed in the United States or abroad, it reduces demand of OPEC and Soviet energy and clearly results in significant benefits to the U.S. economy." 7/

See Attachment C.

Furthermore, the recent report to the Maritime Administration entitled "Alaska Natural Gas Development, An Economic Assessment of Marine Systems," candidly recognizes the

7/ The same theme was echoed just a few months ago in a report to Congress by the Department of Energy. See National Energy Policy Plan, October, 1983. That report explains:

"[A] principal concern of this Administration's international energy policy involves national security interests and the importance of cooperative efforts to find secure and economic alternatives to increased Western reliance on insecure and prospectively uneconomic Soviet supplies.

"Id. at 18.

economic feasibility of a project like TAGS. See Attachment D. That report, published just one year ago, concludes:

"[T]he most economically attractive system for developing Prudhoe Bay natural gas would pipe it to South Alaska, liquefy it ..., and ship LNG to Japan."

Id. at 57.

Yukon Pacific intends to proceed to develop just such a system. Because of the important role that your agency plays in many natural gas transmission projects, we felt it appropriate to notify you of this intent, although for reasons explained below, we believe that the FERC ought not and will not exercise any Natural Gas Act authority over this project.

4. The Project Will Be Regulated
By The ERA Under Section 3 of
The Natural Gas Act

The Department of Energy Organization Act vests all Natural Gas Act section 3 authority in the Secretary of Energy. 8/ The Secretary has delegated his section 3 authority and it is now shared by the Administrator of the Department of Energy's Economic Regulatory Administration and this Commission. 9/ Under this regulatory plan all section 3 issues that will arise in connection with Yukon Pacific's project -- such as the pricing of LNG exports and national and regional need for the gas to be exported -- will be addressed by the Administrator of the ERA. 10/

The section 3 issues that have been generally delegated to the Commission -- specifically, all functions under sections 4, 5 and 7 of the Natural Gas Act and authority "to approve or disapprove the construction and operation of particular facilities and the site at which they will be located" -- are not

8/ See DOE Act §§ 301 and 402(f), 42 U.S.C. §§ 7151 and 7172(f).

9/ See Department of Energy Delegation Order Nos. 0204-54 and 0204-55, 44 Fed. Reg. 56735 (October 2, 1979).

10/ See Delegation Order No. 0204-54, 44 Fed. Reg. at 56735.

germane to the TAGS. 11/ Most importantly, the project will not involve any interstate transportation or sale for resale of natural gas, nor will any gas involved in the project be sold to American consumers, except for incidental intrastate sales to Alaskans that will be thoroughly regulated by the Alaska Public Utilities Commission. 12/

In fact, wherever FERC may have some potential responsibility under section 3 there is some other regulator exercising jurisdiction over the project. Thus any FERC responsibility respecting the safety of the proposed facilities only duplicates the responsibilities of the Department of Transportation under the Natural Gas Pipeline Safety Act of 1968, 49 U.S.C. § 1671 et seq. In addition, under the Right-of-Way Leasing Act, 30 U.S.C. § 185(r), even pipeline siting and rates will have to meet with Department of Interior approval. 13/ As the lead agency for TAGS, the Department of Interior will coordinate all environmental reviews required under NEPA.

In short, despite the absence of Natural Gas Act section 7(c) authority in connection with Yukon Pacific's proposed TAGS, which is the point to which we turn next, the project will be fully regulated under section 3 of the Act by the Economic Regulatory Administration and by other state and federal agencies under other laws.

11/ The Commission's authority concerning the construction, operation and siting of facilities at the border for gas exports and imports grounded in Executive Order 10485 (see 18 Fed. Reg. 5397 (Sept. 9, 1953)) does not attach because LNG export facilities located on the Alaska coast are not the type of facilities contemplated by the Executive Order. Specifically, they are "not ... facilities at the border involving any physical connection between this country and a foreign country." Phillips Petroleum Co., et al., Docket No. CI67-1226, et al., 37 F.P.C. 777, 778 (1967); accord, Pacific Alaska LNG Co., et al., Docket No. CP75-140, et al., 17 FERC Reports (CCH) § 61,097 (1981).

12/ See AS 42.06.639(9) and AS 42.06.140(a)(1)-(a)(3) and AS 42.06.150.

13/ The Alaska Department of Natural Resources exercises siting authority over the intrastate line that fully complements DOI's. See AS 38.35 et seq.

4. The Project Is Not Subject To
Section 7(c) Of The Natural Gas Act

Section 1(b) of the Natural Gas Act, 15 U.S.C. § 717(b), establishes the scope of section 7(c)'s certificate requirement. The pertinent portion of section 1(b) provides that the Act "shall apply to the transportation of natural gas in interstate commerce [and] to the sale in interstate commerce of natural gas for resale." The statute defines "interstate commerce" as commerce between two states or between two points in the same state through a point outside the state. ^{14/} Section 7(c) applies only to these interstate transportations or sales.

As explained earlier, the TAGS will transport gas from Prudhoe Bay to Nikishka on Alaska's south central coast. Obviously, that movement of gas will take place entirely within Alaska and will not involve any interstate transportation. Following delivery at Nikishka, the raw gas will be conditioned and natural gas liquids removed. The gas will then be liquefied and stored in preparation for loading on cryogenic tankers for transport and sale to foreign countries in Alaska's Pacific Rim market area.

Nowhere in this course of movement will there be any transportation or sale for resale in interstate commerce, and, therefore, Yukon Pacific is not a natural gas company. While Yukon Pacific's export proposal involves foreign commerce, section 7(c) does not apply to exports or foreign commerce. That principle was firmly established more than thirty-five years ago.
^{15/}

5. Conclusion

Because of the FERC's responsibility regarding natural gas regulations, Yukon Pacific considered it appropriate that the

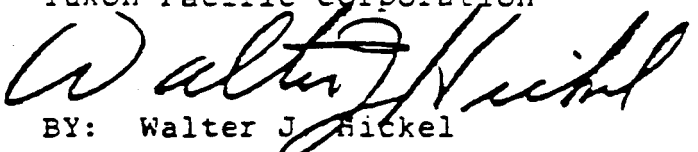
^{14/} See 15 U.S.C. § 717a(7).

^{15/} See Border Pipe Line Co. v. FPC, 171 F.2d 149 (D.C. Cir. 1948). A number of subsequent decisions have followed Border Pipe Line and recognized that section 7(c) does not apply to exports. See West Virginia Public Services Comm. v. U.S. Dep't of Energy, 681 F.2d 847, 856-57 (D.C. Cir. 1982); Compania De Gas De Nuevo Laredo v. FERC, 606 F.2d 1024, 1029 (D.C. Cir. 1979); Distrigas Corp. v. FPC, 495 F.2d 1057, 1063-64 (D.C. Cir. 1974), cert. denied, 419 U.S. 834; see also Union Texas Petroleum, et al., 32 F.P.C. 279, 308 (1964); St. Lawrence Gas Co., 28 F.P.C. 281 (1962).

FERC be informed of our intent to proceed with the TAGS project even though the FERC should not as a practical matter exercise any substantive Natural Gas Act jurisdiction with respect to that project. This letter is the first formal notice of that intent. When Yukon Pacific files with the ERA its application pursuant to section 3 of the Natural Gas Act for permission to export Alaska gas, it intends to inform the FERC of its progress by tendering a duplicate informational filing to this agency.

Respectfully,

Yukon Pacific Corporation



BY: Walter J. Hickel

WJH:1kr

cc: All Commissioners
General Counsel

APPENDIX E

STATEMENT OF W. RAY BOOTH,
ASSISTANT GENERAL MANAGER, NATURAL GAS DEPARTMENT,
EXXON COMPANY, U.S.A.,
BEFORE THE JOINT OIL AND GAS COMMITTEE
OF THE ALASKA STATE LEGISLATURE

March 7, 1984

TO THE CO-CHAIRMEN AND MEMBERS OF THE COMMITTEE:

I am W. Ray Booth, Assistant General Manager of the Natural Gas Department of Exxon Company, U.S.A. On behalf of Exxon, I thank you for the invitation to appear before this Committee and express our views concerning the transportation and marketing of Alaska's North Slope natural gas.

On November 16, 1983, Mr. S. J. Reso, Senior Vice President of Exxon Company, U.S.A., appeared before the Subcommittee on Energy Regulation of the Committee on Energy and Natural Resources of the United States Senate. Mr. Reso's statement and the answers which he submitted to Senator Murkowski by letter dated January 16, 1984, are submitted herewith for the Committee's consideration. I believe that Mr. Reso's statement and answers to Senator Murkowski express fully Exxon's views on the subject of this hearing.

Exxon is a major owner of gas reserves at Prudhoe Bay and, of course, has a vital interest in developing a means of marketing such large resource as soon as possible. We have studied many

alternative dispositions and we continue to study them. We have considered the marketing of methanol and the marketing of Prudhoe Bay gas as LNG. We have looked at bringing Prudhoe Bay gas to Tidewater and the installation of chemical facilities at Tidewater. We have reached several conclusions which I might summarize at this point.

The first conclusion is that the United States needs Prudhoe Bay gas. It represents 13 percent of the nation's proved gas reserves. We in the United States continue to consume more gas and oil than we are finding, and the nation's proved gas reserves have declined more than 30 percent in the past decade. To the extent that Prudhoe Bay gas is not delivered to domestic markets, those markets for the most part will have to be served by imported oil and gas.

Another conclusion is that all of the proved gas reserves at Prudhoe Bay are required for the ANGTS project. The ANGTS could not proceed with less than about 25 to 30 trillion cubic feet of gas reserves committed to it. Clearly, there are not sufficient reserves for two projects, and any current LNG export project would be in lieu of, not in conjunction with, the ANGTS. There is potential for additional gas discoveries on the North Slope, but no costly project such as an LNG export project can be based on yet undiscovered reserves. The gas must be found before

any project for its marketing can be developed. The disposition of any new discoveries will be decided based on markets available at the time of discovery and confirmation, and we believe that decisions on the disposition of such gas should be made by private participants. Such decisions should be made by those whose interests are at risk--the owners of the gas reserves. We producers are the ones who will have to live with the realities of the market after a project has been developed.

We seriously question the overall commercial viability of currently exporting Prudhoe Bay gas as LNG to Asian markets. Such LNG would be at a severe competitive disadvantage to LNG from other sources which would not be burdened with the additional cost of a multibillion dollar arctic pipeline. Competing LNG will come from LNG plants located in the producing gas fields, many of which are located closer to the Japanese market than the proposed Alaskan tidewater project.

As a matter of interest, our studies indicate that an LNG export project would require at least as much capital as would the ANGTS and would deliver less gas to market. We at Exxon believe that the ANGTS offers the best chance for commercially marketing Prudhoe Bay gas. Significant progress has been made in engineering, permitting, international arrangements and market analysis for the ANGTS project. Of course, timing for the ANGTS

is uncertain and will be controlled by the development of commercial arrangements that will assure that the gas can be marketed in competition with alternative fuels. We are working towards contractual arrangements addressing that issue.

It has been suggested that Exxon might be invited to participate in a joint prefeasibility study of the LNG export project as proposed by the Yukon-Pacific organization. The objective of such a joint study would be to determine whether North Slope gas exported from Alaska as LNG could be marketed successfully in Japan. Exxon will not participate in any such feasibility study. Because of U. S. antitrust laws, Exxon does not participate with potential competitors in joint studies concerning the marketing of oil or gas or their products.

As you may recall, Exxon declined to participate in the Dow-Shell petrochemical study made for the State of Alaska. Exxon made its own study of the prospects for using Prudhoe Bay gas for a petrochemical complex in Alaska and later supplied the results of that study to the State of Alaska. We have made our own studies of the alternatives for the transportation and marketing of Prudhoe Bay gas and we are convinced that an overland pipeline to the lower 48 states, such as the ANGTS, offers the best prospect for the marketing of North Slope gas. If requested to

do so, Exxon will share with the state of Alaska the results of our studies, provided the confidentiality of the information can be maintained.

In summary, we are committed to ANGTS. Our judgment, based on the conclusions of studies, indicates that ANGTS has the highest probability of being successful at the earliest time to bring Prudhoe Bay gas to a market that is commercially secure, where we can have the best chance of competing with alternate fuels.

APPENDIX F



YUKON PACIFIC CORPORATION

December 5, 1986

Mr. Mike Penfold, Director
Bureau of Land Management
Alaska State Office
701 C Street, Box 13
Anchorage, AK 99513

Dear Mr. Penfold:

Attached hereto is an amendment to the Right-of-Way Application filed with the Bureau of Land Management on May 7, 1984. The Application was previously serialized as AA-53559 in the BLM Anchorage District Office and as FF-83941 in the BLM Fairbanks District Office.

On July 24, 1984, Mr. Fred Wolf, Acting State Director, requested additional information in order to perfect our application and "in an anticipation of the requirements of the Alaska National Interest Lands Conservation Act (ANILCA)..." That letter also indicated that BLM was available to discuss any questions concerning the information requested.

As you know, we have met with virtually all of the interested state and federal agencies with regard to the TAGS project. Indeed, we accepted Mr. Wolf's invitation to discuss our application and the environmental process with you and members of your staff. As a result, we feel confident that the enclosed Amended Application and attached Project Description provides the BLM with the necessary information to enable it to move forward as lead agency for the NEPA process. Obviously, as a consequence of our meetings, the amendment to the Application was designed to satisfy the concerns raised at those meetings rather than the concerns raised by Mr. Wolf's letter.

TRANS-ALASKA GAS SYSTEM

PROJECT DESCRIPTION

DECEMBER 1986



**YUKON
PACIFIC
CORPORATION**
TRANS-ALASKA GAS SYSTEM

1.0 INTRODUCTION

Yukon Pacific Corporation (YPC) believes that a significant opportunity exists in the mid-1990's to market Alaskan North Slope natural gas^{1/} in the Asian Pacific Rim. To meet this opportunity, YPC proposes to develop the Trans-Alaska Gas System (TAGS). The TAGS project will transport Alaskan North Slope gas to a tidewater facility in the Valdez area where it will be liquefied for ocean transport to Asia. Prime markets for the liquefied natural gas (LNG) exist in Japan, South Korea, and Taiwan.

Project development may be phased over a period of years to allow controlled integration into the marketplace. When fully operational, the TAGS project will export 14 million tons of LNG per year. It is projected that new demand for LNG in Japan, South Korea, and Taiwan will exceed the 14 million ton capacity of TAGS by the year 2000. In view of this forecast, YPC expects that the total output of the TAGS project will be fully integrated into the Asian market before the turn of the century.

One of the first steps in making the proposed project a reality is the acquisition of environmental and land use permits. The permit process allows regulatory agencies to review the proposed project and aids in the determination of facilities siting. To initiate the process, this document will describe the proposed Trans-Alaska Gas System.

^{1/} This natural gas is a clean, colorless, odorless, nontoxic gas which is lighter than air (specific gravity approximately 0.6)

The TAGS project is comprised of:

- o Gas pipeline - A 796.5 mile (approximate), wholly intra-state, 36-inch outside diameter (O.D.), buried, chilled gas pipeline, designed to transport 2.3 billion cubic feet of gas per day from the North Slope to a tidewater site on Port Valdez.
 - o Compressor Stations - A total of 10, located along the pipeline to maintain operating pressures from 1,100 to 2,220 pounds per square inch gauge (psig) and operating temperatures compatible with ground temperatures.
 - o Liquefied natural gas (LNG) plant - To reduce the temperature of pipeline natural gas to -259°F (-161°C), condensing it to the liquid state for storage and shipping.
-
- o Marine terminal - To berth and load two LNG tankers and support vessels.

Yukon Pacific Corporation's preferred project alternative entails construction of an intrastate gas pipeline within an existing transportation/utility corridor from Prudhoe Bay to Port Valdez, generally parallel to the existing Trans-Alaska Oil Pipeline System (TAPS) and a segment of the authorized but unconstructed Alaska Natural Gas Transportation System (ANGTS).

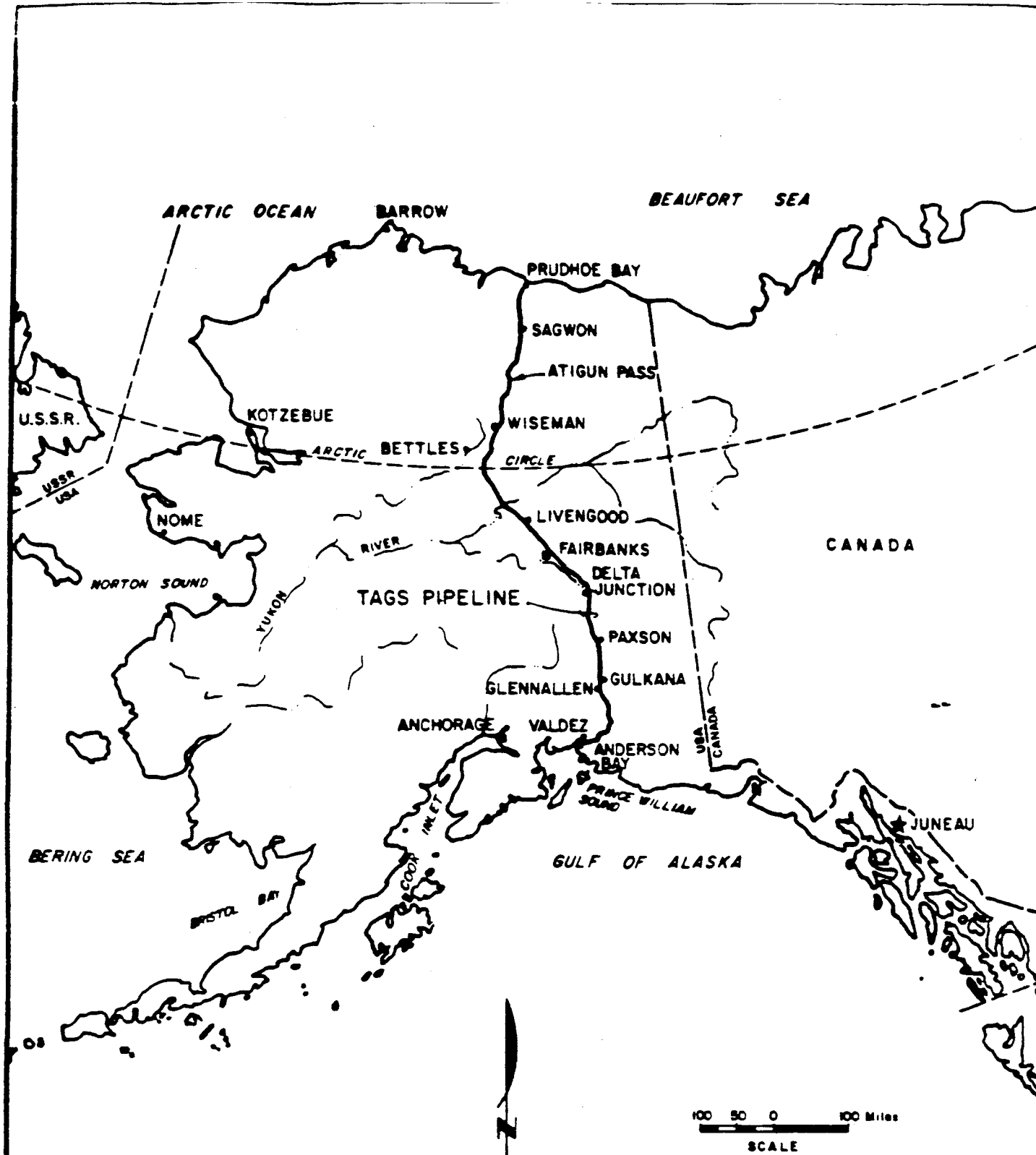
TAGS pipeline route deviations will take advantage of more favorable soil thermal conditions and avoid, where possible, areas of congestion. On the south side of Port Valdez, the TAGS pipeline will cross or bypass the existing TAPS oil terminal facilities and Alyeska Pipeline Service Company (APSC) property, and continue approximately 3.0 miles west to an LNG plant and marine terminal site at Anderson Bay. See Figure 1.1 for a map of the proposed project.

The proposed TAGS project does not currently include development of a natural gas conditioning facility on the North Slope. Existing and authorized gas conditioning facilities in Prudhoe Bay can provide the quantity and quality of pipeline gas needed to operate TAGS. Therefore, YPC is not requesting authorization for similar facilities at this time. Responsibility for construction and operation of gas conditioning facilities will be the subject of future discussions among YPC, North Slope gas producers, and the Northwest Alaskan Pipeline Company.

The purpose of this document is to provide a description of the proposed TAGS project. Facilities comprising the major components are defined and described. Other topics addressed include geotechnical considerations, construction plans, environmental and regulatory issues, and alternatives to the proposed action.

SCHEDULE

The projected schedule of development for TAGS calls for major permits to be issued by the first quarter of 1988. Detailed design, engineering, and construction permit acquisition would be complete by the last quarter of 1990. Construction of the project would require 5 years, with operation scheduled to begin the last quarter of 1995. A project schedule is presented in Figure 1.2.



**YUKON PACIFIC CORPORATION
TRANS-ALASKA GAS SYSTEM**

**PROPOSED
TRANS-ALASKA GAS SYSTEM**

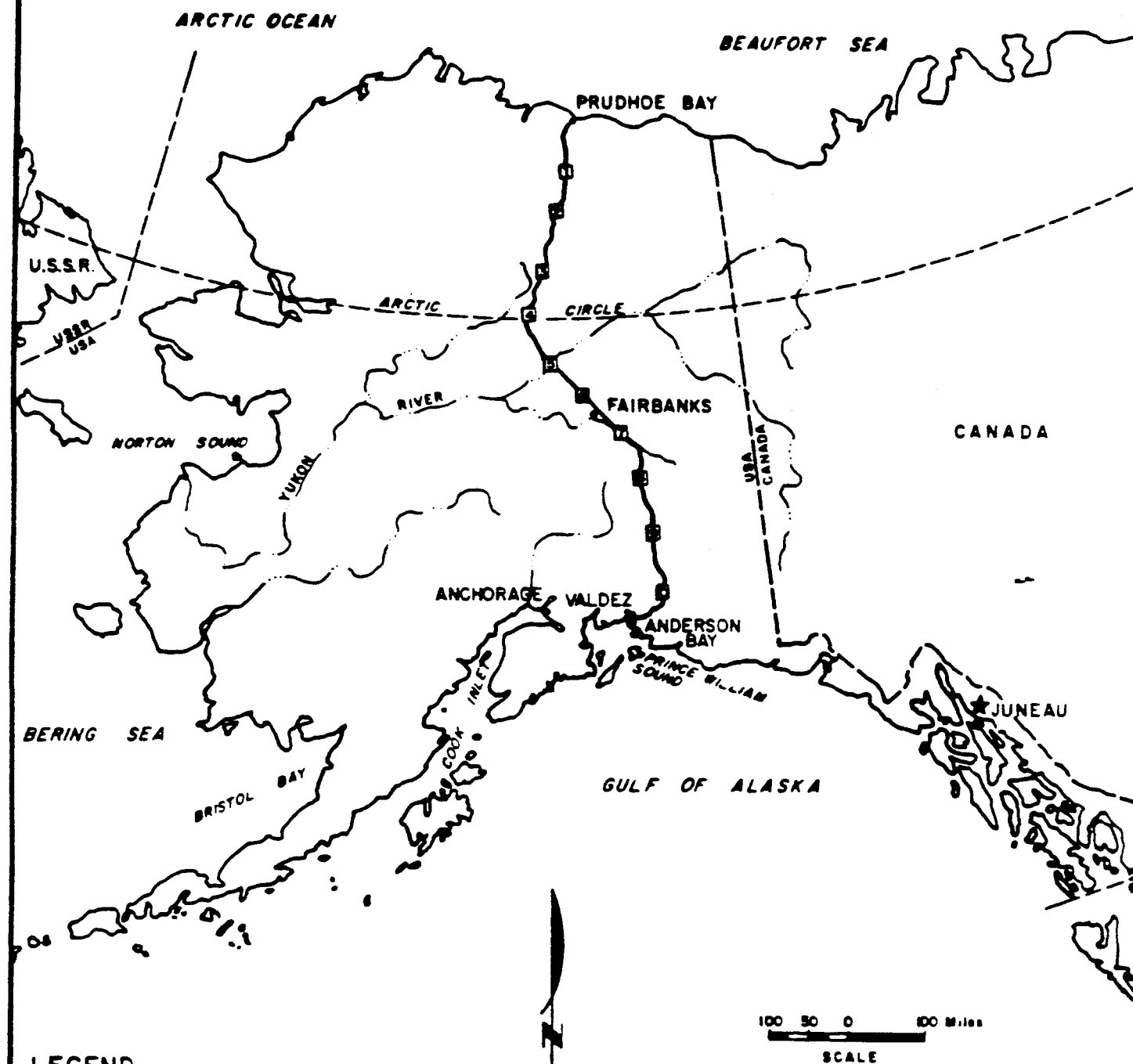
Figure 1.1

3.0 LOCATION

3.1 PIPELINE

The TAGS pipeline will consist of approximately 796.5 miles of 36-inch O.D. pipe from Prudhoe Bay to the LNG plant located on Anderson Bay, as shown on Figure 3.1. The pipeline will be located entirely within the State of Alaska, within an established utility/transportation corridor, approximately parallel to the TAPS pipeline for most of its distance.

Commencing in the southeast quarter of Section 11, Township 11 N., Range 14 E. Beechey Point (Alaska) Quadrangle B-3, the pipeline will proceed south from Prudhoe Bay, across the north slope, and enter the Brooks Range near Galbraith Lake. The pipeline will cross the Continental Divide through Atigun Pass and follow the valleys of the Upper Chandalar, Middle Fork Koyukuk, and Dietrich rivers. The pipeline will continue south to the Yukon River, angle southeast, to the east of Fairbanks, and continue up the Tanana River valley to the Delta River. There it will turn southward again and cross the Alaska Range through Isabel Pass. Continuing generally southward, the pipeline will cross the Gulkana River and follow the Copper River drainage into the Chugach Mountains, following the Richardson Highway through Thompson Pass and Keystone Canyon. From the mouth of Keystone Canyon, the pipeline will follow TAPS to the oil terminal. At this point, the TAGS pipeline will cross or bypass the TAPS oil terminal facility, and continue approximately 3.0 miles west along the south shore of Port Valdez. The pipeline will terminate at the LNG plant in the northwest quarter of Section 20, Township 9 S., Range 7 W., Valdez (Alaska) Quadrangle A-7.



LEGEND

-  PIPELINE ROUTE
-  COMPRESSOR STATION LOCATION

NOTE

PIPELINE BEGINS AT PRUDHOE BAY.
PIPELINE TERMINUS, LNG PLANT AND
MARINE TERMINAL AT ANDERSON BAY.



**YUKON PACIFIC CORPORATION
TRANS-ALASKA GAS SYSTEM**

FACILITIES LOCATION MAP

Figure 3.1

3.2 COMPRESSOR STATIONS

Ten (10) compressor stations will be located at intervals along the pipeline. General locations of the stations are shown on Figure 3.1; specific locations are shown on maps in the Appendix.

3.3 LNG PLANT/MARINE TERMINAL

The proposed LNG plant/marine terminal complex will be located at the southern terminus of the pipeline on Anderson Bay of Port Valdez. Anderson Bay is located on the south shore of Port Valdez, approximately 3.0 miles east of the narrows of Valdez Arm. Valdez Arm is a fjord, oriented northeast along the northern boundary of Prince William Sound in the Gulf of Alaska.

The LNG plant/marine terminal complex will be located in portions of Sections 19, 20, and 24; Township 9 S, Range 7 W. of the Valdez (Alaska) Quadrangle A-7. The complex will be located approximately 5.5 miles southwest of the downtown city of Valdez and 3.0 miles west of TAPS oil terminal facilities. Figure 3.1 shows the location of the LNG plant/marine terminal facilities with respect to the overall project; Figure 5.39 shows the location with respect to Port Valdez and Anderson Bay; and Figure 5.40 is the site plan of plant and terminal facilities.

The LNG plant facilities will cover approximately 300 acres, with most facilities located below 200-foot elevation. The marine terminal will be located adjacent to the LNG plant in Port Valdez, with the dock extending approximately 500 feet out from shore to a water depth of approximately 60 feet below MLLW (mean lower low water).

5.0 FACILITIES DESCRIPTION

5.1 OVERVIEW

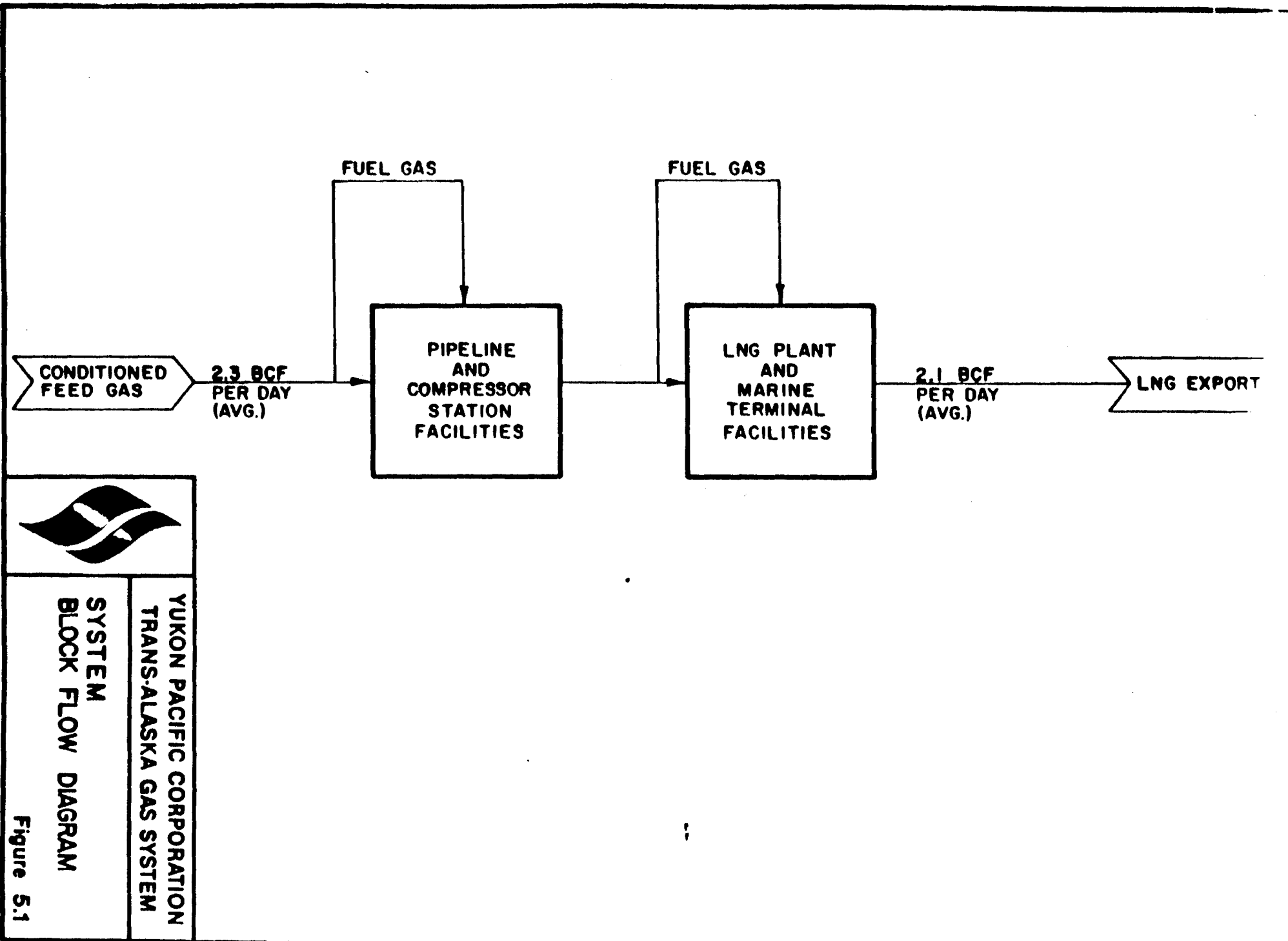
The proposed Trans-Alaska Gas System (TAGS) consists of two major components:

- o Pipeline and compressor station system
- o LNG plant and marine terminal

Together, the pipeline, compressor stations, liquefaction plant and marine terminal facilities are proposed for transportation of North Slope natural gas to a year-round port, where LNG can be loaded onto tankers for export to Pacific Rim markets.

Figure 5.1, a system block flow diagram, shows major TAGS components. An average 2.3 billion cubic feet (BCF) per day of conditioned feed gas is proposed for pipeline transportation to liquefaction plant facilities. After fuel gas utilization by compressor stations and liquefaction facilities, an average 2.1 BCF per day will be converted to LNG. Approximately 14 million tons/yr of LNG will be loaded into tankers.

The pipeline will extend approximately 796.5 miles from Prudhoe Bay to Valdez, Alaska. In order to accommodate the proposed system throughput, 36-inch O.D., welded steel line pipe has been selected for maximum operating pressures of 2,220 psig. The pipeline will be constructed in a buried mode with chilled operation where soil conditions are favorable for long-term operation. Isolated special design areas will require the aboveground construction mode where belowground construction is not feasible.



5-2



YUKON PACIFIC CORPORATION
TRANS-ALASKA GAS SYSTEM

SYSTEM
BLOCK FLOW DIAGRAM

Figure 5.1

Transportation of gas through the pipeline will be provided by gas-fueled, turbine driven compression equipment located at intervals along the pipeline route. Conceptual design has selected a ten compressor station configuration to provide optimum system operating characteristics. Many of the stations will be operated with refrigeration systems for chilling pipeline gas throughput to temperatures below 32°F.

At the terminus of the pipeline, LNG plant facilities will receive gas throughput at a pressure of approximately 1,300 psig. After removal of any moisture and impurities by drier and filter equipment, the gas will be liquefied through a series of refrigeration steps at successively lower temperatures. LNG will be stored in large, insulated, special-metallurgy tanks. Based upon conceptual design and analyses, four 800,000 barrel storage tanks are estimated to satisfy system reliability requirements. Separate impoundment of each storage tank with large dike structures will contain any accidental spillage of LNG. Loading LNG into tankers will be accomplished by a system of special-metallurgy transfer lines, cryogenic pumps, and articulated loading arms. The transfer system will extend from storage tanks to tanker berths along the dock trestle structure.

Auxiliary facilities for maintenance, operation and control of the proposed Trans-Alaska Gas System include block valves, measurement facilities, communication facilities, maintenance facilities, and personnel living quarters.

An estimate of the area disturbed by construction and placement of permanent facilities is presented in Table 5.1.

TABLE 5.1
ESTIMATE OF DISTURBED AREA

<u>Development Component</u>	<u>Phase</u>	
	<u>Construction</u>	<u>Operation</u>
	<u>(Acres)</u>	
Pipeline	14,473	5,114
Ten Compressor Stations	278	200
Access Roads	430	430
Temporary Camps Storage Yards	730	255
Air Strips	144	0
River Crossing Extra Work Space	55	20
Spoil	700	80
Construction Materials and Access Road to Sites	5,800	1,740
LNG Facility	<u>300</u>	<u>280</u>
Total Area Disturbed	22,910	8,119

5.2 PIPELINE

The TAGS pipeline system will be designed to transport 2.3 BCF per day of conditioned natural gas from Prudhoe Bay. Beginning at a Prudhoe Bay gas measurement facility, the pipeline will extend approximately 796.5 miles south to the proposed Anderson Bay LNG plant and marine terminal facility. The pipeline route will utilize the existing transportation/utility corridor, generally paralleling highway and Trans-Alaska Pipeline System (TAPS) alignments.

In order to provide the 2.3 BCF per day system capacity, conceptual design is for a chilled, buried, 36-inch O.D., welded steel pipeline. Maximum operating pressures will be 2,220 pounds per square inch gauge (psig). Operating temperatures below 32°F will be maintained through northern and interior permafrost areas. Conventional warm gas operation will be utilized in southern areas where essentially permafrost-free

foothills of the Brooks Range. Route length is minimized by taking advantage of a course almost due south from Prudhoe Bay to the Sagwon Bluffs area. While proximity to, and crossings of, existing facilities are avoided, the Dalton Highway still affords reasonable construction access from segment ends and well-placed intermediate access points.

The area is characterized predominantly by fine grained lowland loess and thaw lake basin deposits. Approaching the Arctic foothills, upland silts are underlain by shallow bedrock. Beneath surface vegetation, soils are continuously frozen with a shallow active layer.

The Putuligayuk River and 1 other stream are crossed by this segment.

Road crossings include the spine road and one well pad access road at Prudhoe Bay. After passing to the west of TAPS pump station one, the route has no proximity to, or crossings of, TAPS or the TAPS fuel gas line. The Kuparuk oil line and three gathering lines are crossed at Prudhoe Bay. There is no crossing of, or proximity to, the ANGTS right-of-way in this segment.

TAGS Compressor Station #1 is located near the end of this segment at Milepost 66.5.

Sagwon Bluffs Area (Milepost 67.0) to Ice-Cut Hill Area
(Milepost 88.0)

The TAGS route is west of the Dalton Highway from the Sagwon Bluffs area to a point just north of Ice-Cut Hill. The route takes advantage of generally flat terrain along the Sagavanirktok River valley floor. The southern part of this segment

Milepost 598 to 608 (Approximate)

- o Routing in predominantly frozen soils, with minimum groundwater, to minimize frost heave potentials
- o Routing to avoid floodplain construction and potential for aufeis conditions near Richardson Highway
- o Routing to minimize number of stream crossings
- o Routing to avoid TAPS proximity and crossings east of Richardson Highway
- o Routing to minimize pipeline length

Milepost 643 to 648 (Approximate)

- o Routing to avoid Gulkana Wild and Scenic Rivers Conservation Unit

Milepost 700 to 706 (Approximate)

- o Routing to avoid upslope construction of aboveground TAPS in known area of TAPS thaw settlement and slope instability problems
- o Routing to avoid TAPS proximity and crossings
- o Routing to make stream crossings as far upstream as possible
- o Routing to minimize construction areas affecting the Tonsina River
- o Routing to minimize pipeline length

5.2.2 FEED GAS COMPOSITION

Conceptual design of the TAGS pipeline system has considered the following feed gas composition:

<u>Constituent</u>	<u>Molecular %</u>
N ₂ (Nitrogen)	0.75
CO ₂ (Carbon Dioxide)	0.00

C ₁	(Methane)	91.60
C ₂	(Ethane)	2.67
C ₃	(Propane)	3.40
iC ₄	(Iso-Butane)	0.35
nC ₄	(Normal Butane)	1.12
iC ₅	(Iso-Pentane)	0.06
nC ₅	(Normal Pentane)	0.04
C ₆ +	(Hexanes and heavier)	<u>0.01</u>
		100.00%

It has been assumed that pipeline feed gas will be discharged to the TAGS system from conditioning facilities at Prudhoe Bay. The proposed TAGS pipeline and compressor station system utilizes pipeline gas to fuel turbine units at each station. The composition of the gas will remain unchanged along the pipeline route.

5.2.3 SYSTEM OPERATING CHARACTERISTICS

The proposed TAGS pipeline conceptual design is for 2.3 billion cubic feet per day (average) of gas throughput. A 36-inch outside diameter pipeline has been sized to accommodate the design throughput. Maximum operating pressures will be 2,220 psig. Operating temperatures will be maintained below 32°F in northern permafrost areas where pipe structural designs are based on frost heave conditions. Where conventional pipe structural designs are utilized in southern portions of the route, operating temperatures will be maintained above 32°F.

Operating pressures will vary from the maximum 2,220 psig to a low of 1,100 psig. Mean operating temperatures will vary from just below freezing (32°F) to approximately 0°F in permafrost areas. In nonpermafrost areas or areas where

conventional pipe structural designs are utilized, operating temperatures will vary from just above freezing (32°F) to approximately 80°F.

System operating characteristics will be optimized in design phases of project development as related to pipe structural requirements, geotechnical requirements, thermal requirements and site-specific evaluation of stream crossings and facility crossings.

5.2.4 LINE PIPE

Design and construction of the proposed TAGS pipeline facility will involve utilization of the best available arctic technology. Specially developed arctic grade steels, welding techniques and coating systems will be used. Recent successful projects in Alaska, in northern Canada, and in the Soviet Union have led to the development of arctic pipeline technology that is now available to the TAGS project.

5.2.4.1 Pipe Steel Selection

High-strength, arctic grade steel pipe will be utilized for the proposed TAGS pipeline. The pipe will be designed with sufficient wall thickness to withstand operating pressures and any external loads that will be imposed after installation. Pipe manufacture will be in accordance with standard specifications of the American Petroleum Institute for high-strength line pipe. Metallurgical design of the pipe will be for the range of temperature conditions that may be encountered over the life of the facility.

Conceptual design of the TAGS pipeline has considered use of the highest strength, commercially available pipe manufactured.

APPENDIX G

YUKON PACIFIC CORPORATION

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JUL 28 1986

July 28, 1986

H. W. MOLES

Mr. Harold W. Moles
Vice President, Operations
Northwest Alaskan Pipeline Company
1001 Noble Street, Suite 300
Fairbanks, AK 99701

Dear Mr. Moles:

Enclosed is a draft "project overview" for the Yukon Pacific.. Corporation Trans-Alaska Gas Project (TAGS). Northwest Alaskan Pipeline Company will be a participant in the environmental review process for TAGS.

Your review and comments will be appreciated.

Sincerely,



John Horn
Vice Chairman

JH: BH
Enc.

To - C. LaGrone
C. Wadlington, Jr.
E. Kuhn
L. Legg
W. Moses
V. Wolfe

From - H. Moles

DRAFT

RECEIVED

JUL 28 1986

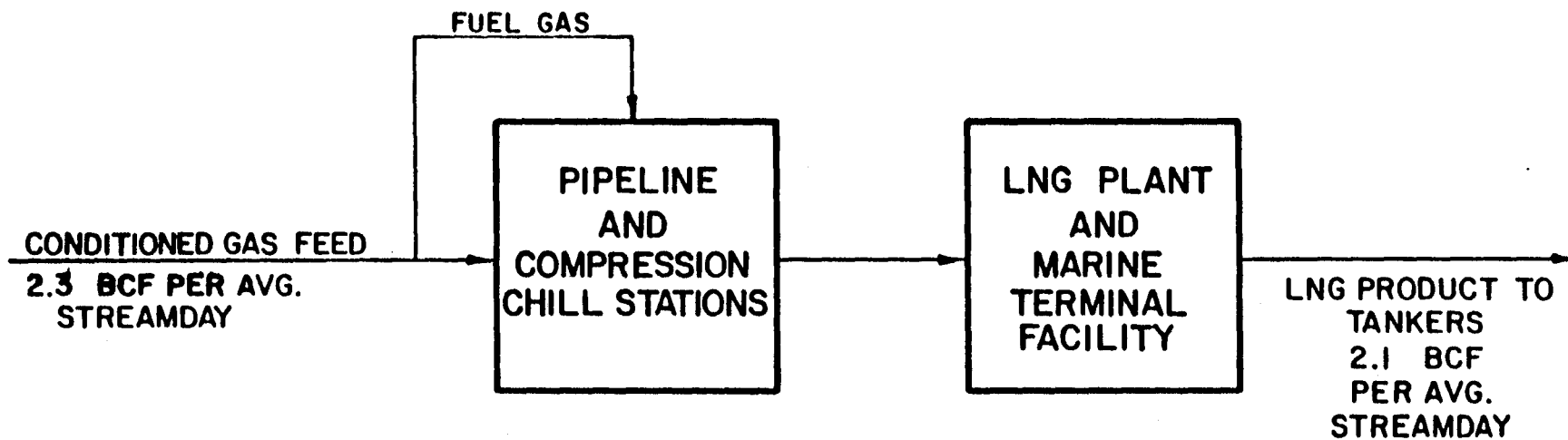
H. W. MOLES

PROJECT OVERVIEW

TRANS-ALASKA GAS SYSTEM

DATE: JULY 1986

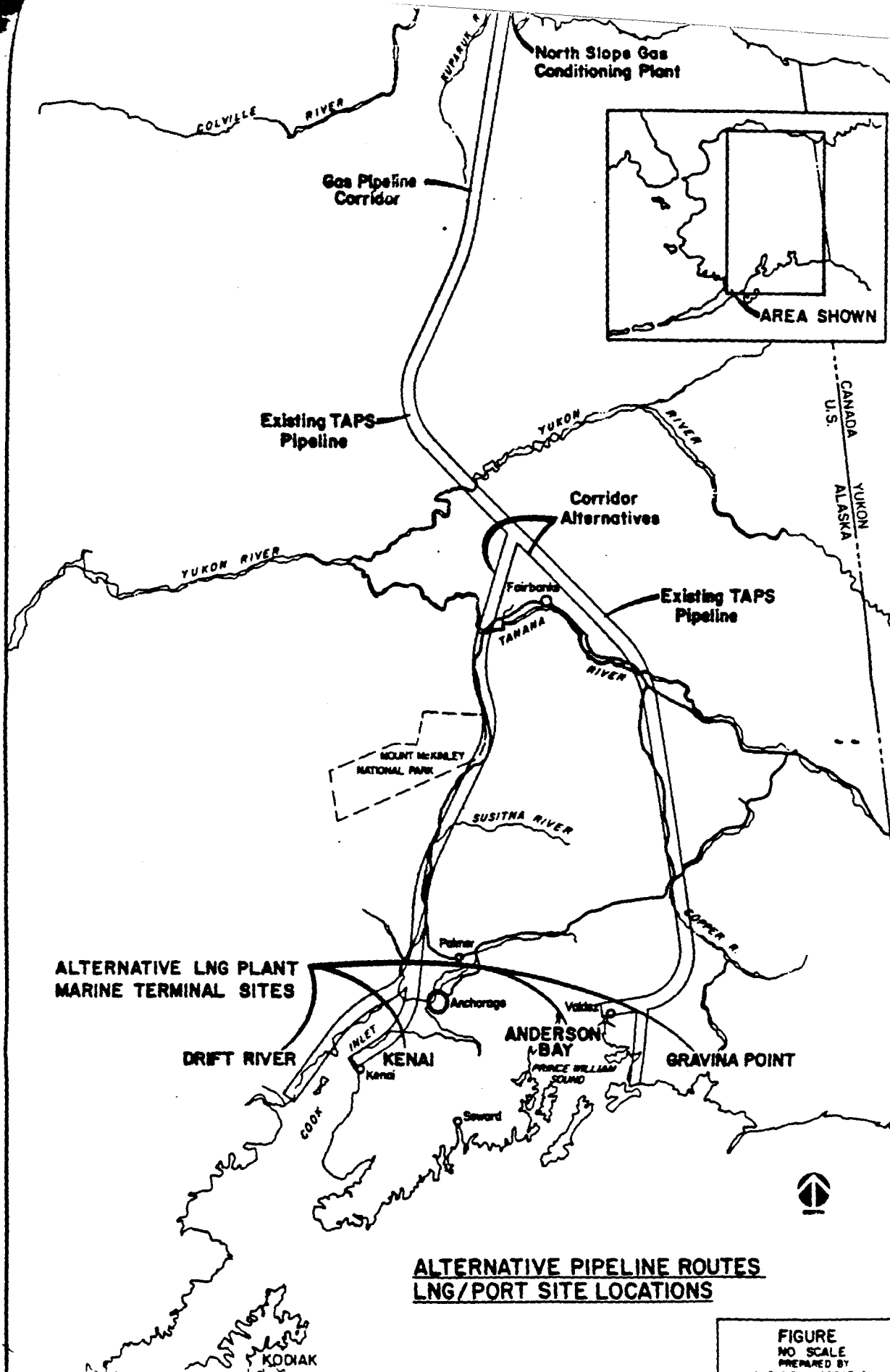
YUKON PACIFIC CORPORATION



BLOCK FLOW DIAGRAM
TRANS ALASKA GAS SYSTEM

FIGURE

PREPARED BY
YUKON PACIFIC CORPORATION



Pipeline quality LNG feed gas is essentially free of carbon dioxide (CO₂) and natural gas liquids, and has a BTU value between 1050 to 1150 BTU per cubic foot of gas. For planning purposes, the following gas composition has been assumed:

<u>Compound</u>	<u>MOL. %</u>
Carbon Dioxide	0.01
Nitrogen	0.80
Methane	94.56
Ethane	1.95
Propane	2.48
Isobutane	0.10
Normal Butane	0.10

The TAGS project does not currently propose to develop a gas conditioning facility on the North Slope. A gas conditioning facility has been previously sited and the associated environmental permits have been evaluated and issued through the FERC and EIS process.

Responsibility for construction and operation of the gas conditioning facility will be the subject of future discussions among major oil and gas producers within the Prudhoe Bay unit, Northwest Pipeline Company, and Yukon Pacific Corporation. Further, after agreements are reached among major parties, permission to use state lands will need to be acquired from the State of Alaska.

B. PIPELINE

Conceptual routing of the TAGS pipeline will follow the utility corridor (generally parallel to TAPS and ANGTS) from Prudhoe Bay to Delta Junction. From Delta Junction south, the TAGS pipeline will follow

APPENDIX H

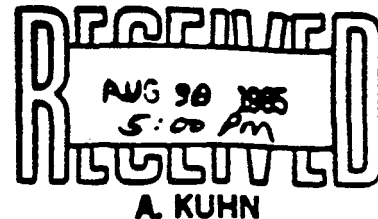


Office of the Federal Inspector
Alaska Natural Gas Transportation System

Post Office Building, P.O. Box 290
1200 Pennsylvania Avenue, NW.
Washington, DC 20044

D0024427

AUG 30 1985



Jeffrey B. Lowenfels, Esquire
Birch, Horton, Bittner, Pestinger
and Anderson
Suite 1200
1155 Connecticut Avenue, NW
Washington, D.C. 20036

RE: Appeal of Freedom of Information Act Request Determination

Dear Mr. Lowenfels:

On July 22, 1985, the Yukon Pacific Corporation (YPC) filed an appeal to the Office of the Federal Inspector's (OFI) Freedom of Information (FOIA) Officer's determination of its May 22, 1985 Freedom of Information Act request for the following documents:

- 1) all completed sections of the Pipeline Design Criteria Manual;
- 2) Design approval for the Alaska Gas Conditioning Facility;
- 3) Telecommunications Design Criteria Manual;
- 4) Operations Control Center Supervisory Control System Design Criteria Manual;
- 5) Compressor and Metering Stations Design Criteria Manual; and
- 6) all Environmental (Stipulation 1.6.1) Plans approved to date.

For reasons discussed below, the Federal Inspector finds that YPC's appeal does not warrant any modification of the OFI's FOIA Officer's decision.

I. PROCEDURAL HISTORY

On May 22, 1985, YPC filed a FOIA request for the above-described documents. On May 24, 1985, pursuant to its information regulations, 10 CFR 1504.208, the OFI notified the Northwest Alaskan Pipeline Company (NWA) to allow it to comment on the propriety of releasing the requested information. On June 12, 1985, NWA filed comments with the OFI stating that it did not object to disclosure of the following information:

1. Pipeline DCM Section 1.0, "Table of Contents," Revision 2 of October 31, 1983, consisting of a cover page, pages 1-1 and 1-2;
2. Pipeline DCM Section 2.0, "Introduction," Revision 2 of April 15, 1983, consisting of a cover page, pages 2-1, 2-2, and 2-3;
3. Pipeline DCM Section 5.0, "Material Sites," Revision 2 of January 24, 1983, consisting of a cover page and page 5-1 (but specifically excluding referenced material);
4. Pipeline DCM Section 18.0, "Mainline Pipe," Revision 2 of January 24, 1983, consisting of a cover page and page 18-1 (but specifically excluding referenced material);
5. Pipeline DCM "Glossary," Revision 2 of October 31, 1983, consisting of a cover page, and pages 1-20, each of them dated 31 October 1983;
6. Stipulation 1.6.1 Plan #5, "Corrosion Control," January 1984, consisting of a cover page and pages 5-1.0-1, 5-1.0-2, and 5-2.0-1 (but specifically excluding the documents referenced on page 5-2.0-1);
7. Stipulation 1.6.1 Plan #6, "Cultural Resource Preservation," September 1982, consisting of a cover page, table of contents, the pages included in Sections 1.0, 2.0, 3.0, and the pages included in Attachments A, B, C.
8. Stipulation 1.6.1 Plan #8, "Erosion and Sedimentation Control," November 1982, consisting of a cover page and pages 8-1.0-1, 8-1.0-2, 8-1.0-3, 8-2.0-1, and 8-2.0-2 (but specifically excluding the documents referenced on the last two pages); and
9. Stipulation 1.6.1 Plan #24, "Seismic," January 1984, consisting of a cover page and pages 24-1.0-1, 24-1.0-2, 24-1.0-3, 24-2.0-1, and 24-2.0-2 (but specifically excluding the documents referenced on the last two pages).

With respect to the release of Section 21A of the Pipeline Design Criteria Manual (DCM) and the appendices to the BASF process for the Alaska Gas Conditioning facility, NWA noted that these documents had previously received a "sensitive" designation as provided for in OFI's information regulations, which the OFI had agreed in advance to resist disclosure. For all of the other material requested, NWA stated that FOIA, the Copyright Act, the Trade Secrets Act and constitutional considerations bar disclosure.

On June 20, 1985, the OFI FOIA Officer issued its determination which found that Section 21A of the DCM and the appendices to the BASF process were sensitive, constituted trade secrets, and should not be disclosed. All of the individual sections of the DCM except that material identified as non-objectionable by NWA were found to be exempt from disclosure pursuant to 5 U.S.C. 552(b)(4):

This material provides the design framework for the pipeline, and its disclosure would be likely to cause substantial harm to [NWA's] competitive position. While not determinative, it should be noted that your client is sponsoring a "competing" pipeline proposal. While it is difficult to assess the magnitude of the monetary harm NWA would incur if the requested material were released, it is not necessary to "conduct a sophisticated economic analysis of the likely effects of disclosure." (Citation omitted)

For substantially the same reasons, the FOIA Officer determined that the Telecommunications Design Criteria Manual, the Operations Control Center Supervisory System Design Criteria Manual, the Compressor and Metering Stations Design Criteria Manual, and significant portions of the Stipulation 1.6.1 Plans should not be disclosed. However, the FOIA Officer found that the cover page, introduction, scope, summary, and criteria sections of the 1.6.1 Plans should be released because it "appears that nothing contained therein would subject the submitter to substantial competitive harm if released."

By letter dated June 25, 1985, NWA requested clarification of OFI's June 20, 1985 initial determination of YPC's FOIA request. On pages 1 and 2 of NWA's letter, it objected to the "release [of] certain portions of NWA's Stipulation 1.6.1 plans over and above the plans for which NWA has stated it had no objection to release." In addition, it provided 5 pages of additional comments explaining the basis of its objections to the release of the documents in question. NWA also requested clarification of the third paragraph on page 4 which states:

OFI has considered NWA's Copyright Law, Trade Secrets Act, and constitutional arguments and finds them un-compelling. The disclosure determination made here is based upon OFI's assessment of the competitive harm NWA would suffer if the requested material is disclosed.

On July 1, 1985, the OFI responded. With respect to the comments relating to the release of information to which NWA objected, the FOIA Officer decided that that portion of the letter did not constitute a request for clarification, but rather a request for reconsideration which shall be addressed concurrently with YPC's appeal. As for the portion of the letter deemed to be a legitimate request for clarification, the FOIA Officer stated:

The language in the June 20th letter pertained to material deemed releasable under the substantial competitive injury test. To the extent that the decision not to disclose was made, it was based upon OFI's assessment of the competitive harm NWA would suffer if the information were released. With respect to material deemed non-releasable, [the] OFI therefore, did not reach the additional arguments offered in support of non-disclosure by NWA based upon the Copyright Law, Trade Secrets Act, and constitutional considerations. The initial determination, however, directed the release of some information over the objection of NWA. With respect to those documents deemed releasable, OFI did reach the additional arguments and found them unpersuasive.

II YUKON PACIFIC COMPANY'S APPEAL

On July 22, 1985, Yukon Pacific Corporation (YPC) filed its appeal of the OFI FOIA officer's determination that the bulk of the information sought pursuant to its May 22, 1985 FOIA request not be disclosed. YPC argues that both the OFI and Northwest Alaskan Pipeline Company (NWA) are wrong in concluding that YPC is a competitor of NWA. It maintains that the projects contemplate serving markets in disparate geographic regions. Moreover, it contends that by virtue of the President's "Decision and Report to Congress on the Alaska Natural Gas Transportation System" (Decision), NWA has an exclusive Federal "franchise" to transport and market North Slope gas to the contiguous 48 states. Consequently, it argues, neither it nor any other company can be viewed as competition to NWA.

The only competition that YPC acknowledges is "resource" competition, i.e., there is only enough gas on the North Slope to support one gas project. However, it maintains that this is insufficient to come within the ambit of FOIA exemption b(4) (trade secret or commercial information release of which would cause competitive harm). In any event, YPC contends that North Slope gas reserves are probably higher than the oft-stated 26 trillion cubic feet, and, in addition, there are significant proven reserves in the Canadian Arctic which require transportation. Stated differently, since there are significant natural gas reserves, the "resource" competition argument is not viable.

YPC states that FOIA exemptions should be construed narrowly. In order to sustain a non-disclosure determination "[s]pecific factual or evidentiary material and not mere conclusory [sic] opinion is required." It contends that "NWA's arguments fall short from demonstrating 'actual competition and the likelihood of substantial competitive injury.'"

YPC states that the public's right to review plans approved by the Federal government for the construction of a pipeline on public lands outweighs any potential harm to NWA. It points out that NWA was directed to submit the requested documents by the government in order to obtain an exclusive license (ROW grant). Since OFI was given the responsibility to approve the requested documents, YPC argues that the public must be given the right to scrutinize them "to determine whether the OFI has accomplished its job properly"

Finally, it states:

In addition, the requirement that the Bureau of Land Management complete an environmental impact statement for the Yukon Pacific project also tips the scales in favor of disclosure of the approved plans.

On August 12, 1985, NWA filed a response to YPC's appeal to correct "numerous misstatements of fact and inaccurate characterizations." NWA vigorously disagrees with YPC's statement that it is not a competitor. It lists five ways in which the respective companies are competing:

1. Project versus Project;
2. Competition between the parties as transporters of natural gas;
3. Competition as sellers of gas;
4. Competition as commercial pipelines, generally; and
5. Competitors in a process.

III DISCUSSION

After careful consideration of all of the pleadings and other pertinent documents, I find nothing that warrants any change or modification of the FOIA Officer's determination, which I hereby affirm in its entirety. However, I wish to emphasize that despite YPC's protestations to the contrary, it is a competitor of NWA, and release of information, over and above that already provided, would subject NWA to substantial competitive injury.

YPC has itself on prior occasion acknowledged that it is a competitor of ANGTS. It has initiated action to dismantle NWA's Federal "franchise" to transport and market North Slope natural gas in an effort to promote its own project. While YPC acknowledges that there may be resource competition, it argues that there are probably adequate North Slope and Canadian Arctic reserves to support more than one project. NWA states that:

It is generally recognized that any major gas pipeline can be financed and constructed only on the basis of proven reserves. The fact remains that sufficient proven reserves exist on the Alaskan North Slope for only one large diameter gas pipeline.

I agree with that observation. Moreover, while YPC claims that the respective companies markets are in disparate geographic regions, it appears that the West Coast of the United States is a market common to both projects.

YPC ignores the fact that it and NWA are competing pipeline proposals; the former, a prospective enterprise, has done virtually no planning or design, and the latter, has gone to considerable expense in planning and design activities. NWA has something of great value to YPC, the "technical data and know-how required to construct a large diameter arctic gas pipeline and gas conditioning plant at Prudhoe Bay."

NWA succinctly points out one of the more disturbing aspects of the instant request:

The requester's conclusion at page 9 of its Appeal asserts a final and revealing reason for release of the requested documents, to wit: there is something allegedly wrong with the process which requires NWA to spend millions of dollars prior to laying one section of pipeline; that in preparing its own project, Yukon Pacific seeks to avoid falling into the same trap; that Yukon Pacific needs to review NWA's documents in order to avoid spending similar millions of dollars. Yukon Pacific thus proposes to profit by the original effort and expense invested by NWA, to "leap frog" itself past NWA by acquiring the road map and know-how to duplicate NWA's progress to this point. Such a windfall, besides having a basic sense of unfairness about it, would place NWA at a distinct competitive disadvantage.

The release of the majority of the requested documents in these circumstances would violate the spirit and the letter of the Freedom of Information Act.

YPC suggests that one factor which should favor disclosure is the Bureau of Land Management's (BLM) responsibility to prepare an environmental impact statement (EIS) for its proposed route. However, public disclosure is not necessary to achieve that purpose. OFI's information regulations provide for sharing arrangements between Federal and state agencies of sensitive and business information, as long as the other entity agrees to abide by OFI's disclosure determinations. Consequently, BLM could request the pertinent information from OFI to prepare the EIS without it being publically disclosed.

Moreover, the Department of the Interior (DOI) and the OFI signed a Memorandum of Agreement on May 3, 1983, which established the DOI Agency Authorized Officer (AAO) as the focal point between the respective agencies. The AAO represents all bureaus and offices of the DOI in matters dealing with the OFI or ANGTS. Most if not all of the information needed for BLM to prepare the EIS for its project would be available to the AAO as a matter of course. Therefore, the information could be used by DOI or the pertinent part thereof, to fulfill its official obligations.

Finally, I have considered the comments submitted by NWA arguing against the disclosure of information found to be releasable in the initial determination. After careful review, I find nothing contained therein warrants any modification of the initial determination.

The relevant documents and portions thereof will be disclosed or withheld consistent with this response.

Sincerely yours,


John T. Rhett
Federal Inspector

APPENDIX I

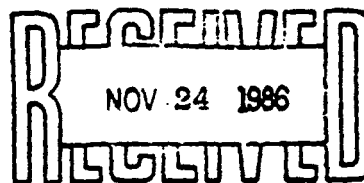


**US Army Corps
of Engineers**

Alaska District

Regulatory Branch
Post Office Box 898
Anchorage, Alaska 99506-0898

Public Notice



A. KUHN



U.S. DEPARTMENT
OF THE INTERIOR
Bureau of Land Management
Alaska State Office

PUBLIC NOTICE DATE: November 19, 1986

EXPIRATION DATE: December 23, 1986

CORPS REFERENCE NUMBER: 2-840222

WATERWAY NUMBER: Valdez Harbor 105

BLM REFERENCE NUMBER: AA-53559
F-083941

SPECIAL PUBLIC NOTICE

Trans-Alaska Gas System Environmental Impact Statement

Interested parties are hereby notified of the U.S. Army Corps of Engineers (Corps) and Bureau of Land Management (BLM) intent to prepare an Environmental Impact Statement (EIS) for Yukon Pacific Corporation's (YPC) proposed Trans-Alaska Gas System (TAGS) Project. YPC has applied for a Department of the Army (DA) permit and a Federal grant of right-of-way to construct a large diameter (36") buried gas pipeline, liquid natural gas (LNG) plant and tanker loading port facilities, and other related facilities. The Corps and the BLM have determined that the issuance of a DA permit for the proposed work and the granting of a Federal right-of-way are major Federal actions which may significantly affect the human environment and that an EIS will be prepared prior to the decision on whether to issue or deny the permit or grant the Federal right-of-way.

APPLICANT: Yukon Pacific Corporation, Post office Box 101700, Anchorage, Alaska 99510.

LOCATION: The proposed project would extend from Prudhoe Bay to Port Valdez with an LNG plant and port facilities being located at Anderson Bay approximately five miles southwest of Valdez, Alaska. See attached route maps.

WORK: The proposed work consists of constructing a buried 36" diameter 797 mile long gas pipeline, ten gas compressor stations, an LNG plant, and a marine tanker loading port facility.

The project would follow existing utility corridors from Prudhoe Bay to Valdez, roughly paralleling the existing Trans-Alaska Pipeline System (TAPS) oil pipeline and (from Prudhoe Bay to Delta Junction) the authorized but unconstructed Alaska Natural Gas Transportation System (ANGTS) gas pipeline. See section 2 of the attached project description document for details.

2. PROJECT DESCRIPTION

NATURAL GAS

Gas Supply:

Current state estimates show a North Slope (Alaska) natural gas reserve of 28.7 trillion cubic feet (TCF). Of that, 27.3 TCF is in Prudhoe Bay. U.S. Geological Survey estimates of undiscovered, recoverable, conventional resources of natural gas on the Alaskan North Slope and adjacent offshore areas average 189.5 TCF. At full development, TAGS would use 2.8 billion cubic feet per day (BCFD) of raw natural gas.

Approximately 2.5 BCFD of North Slope natural gas is currently produced and reinjected during oil extraction. Prior to reinjection, water and some heavier hydrocarbons are removed. Additional gas conditioning would be required to meet pipeline quality specifications. Conditioning at Prudhoe Bay will result in 2.3 BCFD of pipeline-quality gas. A small amount will be used for operation of the TAGS compressor stations and LNG terminal, leaving approximately 2.1 BCFD of pipeline gas for conversion to LNG. See Figure 2 for system block flow diagram.

For planning purposes, YPC assumes the pipeline-quality natural gas received at Prudhoe Bay will be approximately 92 percent methane, 3.5 percent propane, and 2.5 percent ethane, with the remaining 2.0 percent comprised of butane, isobutane, nitrogen, and carbon dioxide. The heating value will be approximately 1110 Btu per cubic foot.

Gas Conditioning Facility:

Since previously authorized gas conditioning facilities at Prudhoe Bay could deliver the quality and quantity of natural gas needed for the TAGS project, YPC will not seek authorization to construct such a facility at this time. Development of gas conditioning facilities in Prudhoe Bay will be discussed among gas producers, the Northwest Alaskan Pipeline Company, and YPC.

PROJECT COMPONENTS

Pipeline:

TAGS conceptual design is based upon a 36-inch, outside diameter, buried pipeline. The pipeline will only be elevated at two major fault crossings and four major river crossings (Yukon, Tanana, Gulkana, and Tazlina rivers). The Yukon River crossing will require one pier to be located in the river. See Figures 3 through 6 for typical fault and river crossings.

Operating pressure of the pipeline system will range from 1,100 to 2,220 pounds per square inch gauge (psig).

APPENDIX J



**THE SECRETARY OF THE INTERIOR
WASHINGTON**

March 20, 1984

**Honorable Walter J. Mickel
Chairman of the Board
Yukon Pacific Corporation
P.O. Box 101700
Anchorage, Alaska 99510**

Dear Governor Mickel:

I enjoyed my conversation with you and your colleagues regarding the Trans-Alaska Gas System as proposed by Yukon Pacific. There appears to be broadly based interest in development of a system to move natural gas from the Prudhoe region into either or both domestic and foreign markets. I have discussed your proposal with colleagues in the State Department, the National Security Council and Secretary Model in the Department of Energy. They feel the project deserves serious consideration within the Administration. However, we need much more detail including how the Yukon Pacific Gas Project may interrelate with the Alaska Natural Gas Transportation System (ANGTS) which, as you know, still maintains a right-of-way along a substantial portion of the proposed route.

There is reason to believe that the project could provide substantial benefits to our close allies, Korea and Japan. Prime Minister Nakasone and President Reagan recently encouraged private sectors in their countries to engage in feasibility studies to determine whether moving Alaska natural gas to key markets is economically viable.

I look forward to further discussions with you on the Yukon Pacific Gas Project. Deputy Under Secretary William Horn, Assistant Secretary Garrey Carruthers, and other members of the Department of the Interior are available to discuss the project as it relates to our authorities and responsibilities. As you know, there is an existing legislative commitment to ANGTS for delivering North Slope gas reserves to the domestic market. While that commitment does not foreclose other options for transporting Prudhoe Bay gas reserves, legislation may be necessary to authorize another transportation project. The Department will support initiatives which bring North Slope gas to market.

I look forward to hearing from and seeing you again.

Sincerely,

/s/ William Clark

William Clark