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COMMITTEE PRINT

DECISION AND REPORT TO CONGRESS
ON THE ALASKA NATURAL GAS
TRANSPORTATION SYSTEM

SELECTED MATERIALS

PRINTED AT THE REQUEST OF

HENRY M. JACKSON, *Chairman*
COMMITTEE ON ENERGY AND
NATURAL RESOURCES
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gas Pipeline

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MEMORANDUM OF THE CHAIRMAN

To Members of the Senate Committee on Energy and Natural Resources:

The Alaska Natural Gas Transportation Act (Public Law 94-586), passed by Congress on October 1, 1976, and signed by the President on October 22, 1976, established a special decisionmaking process for the selection of a transportation system to move natural gas from the North Slope of Alaska to United States markets. The act was designed to expedite the selection of such a transportation system and to provide for the participation of the President and Congress in the final decision. Ordinarily, the Federal Power Commission has the final authority to approve proposed natural gas transmission systems.

As mandated by the act, the FPC reported its recommendations to the President on May 2, 1977, and other Federal departments and agencies submitted their comments and responses to the FPC report on July 1, 1977. The President is directed by the act to issue a decision as to whether or not a transportation system for the delivery of Alaska natural gas should be approved and, if so, to designate such a system.

Pursuant to the act, the President's decision designating an approved transportation system for the delivery of Alaska natural gas shall take effect upon the enactment of a joint resolution of Congress. Beginning on the date after the receipt of such decision, the Congress has 60 calendar days of continuous session to enact a joint resolution. If not approved within 60 days, the act allows the President an additional 30 days to propose a new decision.

In order to provide members of the committee, the Congress, and the public with access to the various reports and comments submitted by the FPC and other Federal departments and agencies, I have asked that the President's decision transmitted to the Congress on September 22, 1977, and selected summaries of relevant documents be assembled in a committee print and made available.

HENRY M. JACKSON, *Chairman.*

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DECISION OF THE PRESIDENT

DECISION ON AN ALASKA

NATURAL GAS TRANSPORTATION

SYSTEM

**PREFACE - STATUTORY REQUIREMENTS FOR A DECISION ON AN ALASKA
NATURAL GAS TRANSPORTATION SYSTEM**

Section 7(a)(4) of the Alaska Natural Gas
Transportation Act of 1976 (ANGTA) states:

If the President determines to designate for approval a transportation system for delivery of Alaska natural gas to the contiguous States, he shall in such decision-

(A) describe the nature and route of the system designated for approval;

(B) designate a person to construct and operate such a system, which person shall be the applicant, if any, which filed for a certificate of public convenience and necessity to construct and operate such system;

(C) identify those facilities, the construction of which, and those operations, the conduct of which, shall be encompassed within the term "construction and initial operation" for purposes of defining the scope of the directions contained in Section 9 of this Act, taking into consideration any recommendation of the Commission with respect thereto; and

(D) identify those provisions of law, relating to any determination of a Federal officer or agency as to whether a certificate, permit, right-of-way, lease, or other authorization shall be issued or be granted, which provisions he finds (i) involve determinations which are subsumed in his decision and (ii) require waiver pursuant to Section 8(g) in order to permit the expeditious construction and initial operation of the transportation system.

As part of these determinations, an Agreement on Principles concluded with the Government of Canada prescribes various terms and conditions applicable to the construction and operation of the pipeline. The Agreement on Principles is attached hereto as Section 7 of this Decision and made an integral part of the Decision by this reference.

With the incorporation of the aforesaid Agreement, and the finding that it is in the national interest to expeditiously undertake to construct an Alaska Natural Gas Transportation System, the system designation and related statutory determinations are as follows:

SECTION 1 - DESIGNATION OF PERSON TO CONSTRUCT AND OPERATE
THE SYSTEM

The Alcan Pipeline Company, now a wholly owned subsidiary of Northwest Pipeline Corporation^{1/}, or its successor, is hereby designated to construct and operate the portion of the system within the State of Alaska.

The Northern Border Pipeline Company, a partnership consisting of subsidiaries or affiliates of Columbia Gas Transmission Corporation, Michigan-Wisconsin Pipeline Company, Natural Gas Pipeline Company of America, Northern Natural Gas Company, Panhandle Eastern Pipe Line Company, and Texas Eastern Transmission Corporation, or its successor, is hereby designated to construct and operate the portion of the system from the United States-Canada border near Monchy, Saskatchewan, to a point near Dwight, Illinois.

The Alcan Pipeline Company, or its successor, and the Northern Border Pipeline, or its successor, shall be publicly held corporations or general or limited partnerships, open to ownership participation by all persons

^{1/} Northwest Pipeline owns and operates a 4,300-mile pipeline system for transporting gas in the states of Colorado, Idaho, Nevada, Oregon, Utah, Washington, and Wyoming. Northwest Pipeline is a wholly-owned subsidiary of Northwest Energy Company, a holding company whose principal asset is all the outstanding common stock of Northwest Pipeline.

without discrimination, except producers of Alaskan natural gas.

The Pacific Gas Transmission Company is hereby designated to construct and operate the portion of the system from the United States/Canada border near Kingsgate, British Columbia, to the border between the States of California and Oregon.

The Pacific Gas and Electric Company is hereby designated to construct and operate the portion of the system from the border between the States of California and Oregon through the State of California.

SECTION 2 - DESCRIPTION OF THE NATURE AND ROUTE OF THE
APPROVED SYSTEM

The Alcan system is an overland pipeline system to transport natural gas from the Prudhoe Bay area of Northern Alaska through Alaska and Canada into the Midwest and Western sections of the contiguous United States. See Exhibit 1.

The 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. The capacity of the system could be increased in the future to accommodate additional volume throughput by construction of additional facilities.

Alcan Pipeline Route in Alaska

The proposed Alcan pipeline will commence at the discharge side of the gas plant facilities in the Prudhoe Bay field. The pipeline will parallel the Alyeska oil pipeline southward from the North Slope of Alaska, cross the Brooks Range through the Atigun Pass, and continue on to Delta Junction.

At Delta Junction, the Alcan Pipeline will diverge from the Alyeska oil pipeline and follow the Alaska Highway and the Haines oil products pipeline right-of-way, passing near the towns of Tanacross, Tok, and Northway Junction



in Alaska. The right-of-way of the Haines oil products pipeline is at present approximately fifty feet wide and is closely parallel to the Alaska Highway. The Alcan pipeline will then connect with the proposed new facilities of Foothills Pipe Lines (South Yukon) Ltd. at the Alaska/Yukon Territory border.

From Prudhoe Bay to Delta Junction, Alcan expects to construct its line approximately eighty feet from the Alyeska oil pipeline. As proposed by Alcan, construction will be carried out by extending the existing Alyeska work pads. However, Alyeska advised Alcan that its "preliminary general guidelines" indicate that the Alyeska and Alcan lines must be separated by 100 to 200 feet where blasting to build the pipeline trench would occur (approximately 350 miles of pipeline length). Additional studies will determine the minimum distance between the Alyeska oil pipeline and the Alcan line that is necessary to permit safe construction and operation.

Alcan Pipeline Route Through Canada

The Canadian portion of the Alcan Project will commence at the Alaska/Yukon border in the vicinity of the towns of Border City, Alaska and Boundary, Yukon.

From the Alaska/Yukon border, the Foothills Pipe Lines (South Yukon) Ltd. pipeline will proceed south until it

reaches the White River (milepost 44), where it will take a more eastward course across the Yukon Territory. The pipeline will cross the Territory generally parallel to the Alaska Highway. Along most of the pipeline route through the Yukon, the separation between the pipeline route and highway route will be approximately one mile. There will be several points, however, where the pipeline route will divert substantially from the route of the Alaska Highway. These departures from the Alaska Highway route will permit the pipeline to continue on a more direct course than if it were to follow the Alaska Highway.

At approximately milepost 246, the pipeline will be routed north of Whitehorse and cross the Yukon River near the intersection of the Alaska and Klondike Highways. Near this intersection, approximately 9 miles northwest of Whitehorse, the pipeline will be constructed to permit a later connection with the proposed Dempster Line from the Mackenzie Delta, if and when the Dempster Line is constructed.

After it crosses the Yukon River north of Whitehorse, the pipeline will turn southeast and again travel parallel to the Alaska Highway, entering British Columbia at approximately milepost 397 and reentering the Yukon Territory at approximately milepost 435. The pipeline will continue

to follow the Alaska Highway eastward through the Yukon Territory and again cross the border into British Columbia, approximately twelve miles southwest of Watson Lake, Yukon. At this point, the Foothills Pipe Lines (South Yukon) Ltd. pipeline will terminate, and the Foothills Pipe Line (North B.C.) Ltd. interconnecting pipeline will commence.

After it passes the British Columbia border, the pipeline will proceed generally southeast across the northeastern part of the Province to the British Columbia/Alberta border, crossing the existing Westcoast Transmission Company Ltd. main line some 35 miles south of Fort Nelson. At Boundary Lake on the British Columbia-Alberta border, the pipeline would connect with the Foothills Pipe Lines (Alta.) Ltd. pipeline. In Alberta, the Foothills Pipe Lines (Alta.) Ltd. pipeline will proceed generally southeast from Boundary Lake to Gold Creek Junction. After Gold Creek Junction, the pipeline will follow the existing Alberta Gas Trunkline Co., Ltd. (AGTL) pipeline right-of-way to James River Station.

From James River Station, the western leg of the pipeline will proceed separately to the south, approximately following the existing AGTL right-of-way to the Alberta/British Columbia border near Coleman, Alberta. It will then connect with the Foothills Pipelines (South B.C.)

Ltd. pipeline, continue to the southwest across British Columbia, and finally connect with the Pacific Gas Transmission (PGT) pipeline at the United States/Canada border near Kingsgate, British Columbia. The pipeline route through southern British Columbia will generally parallel the existing pipeline route of Alberta Natural Gas Company Ltd.

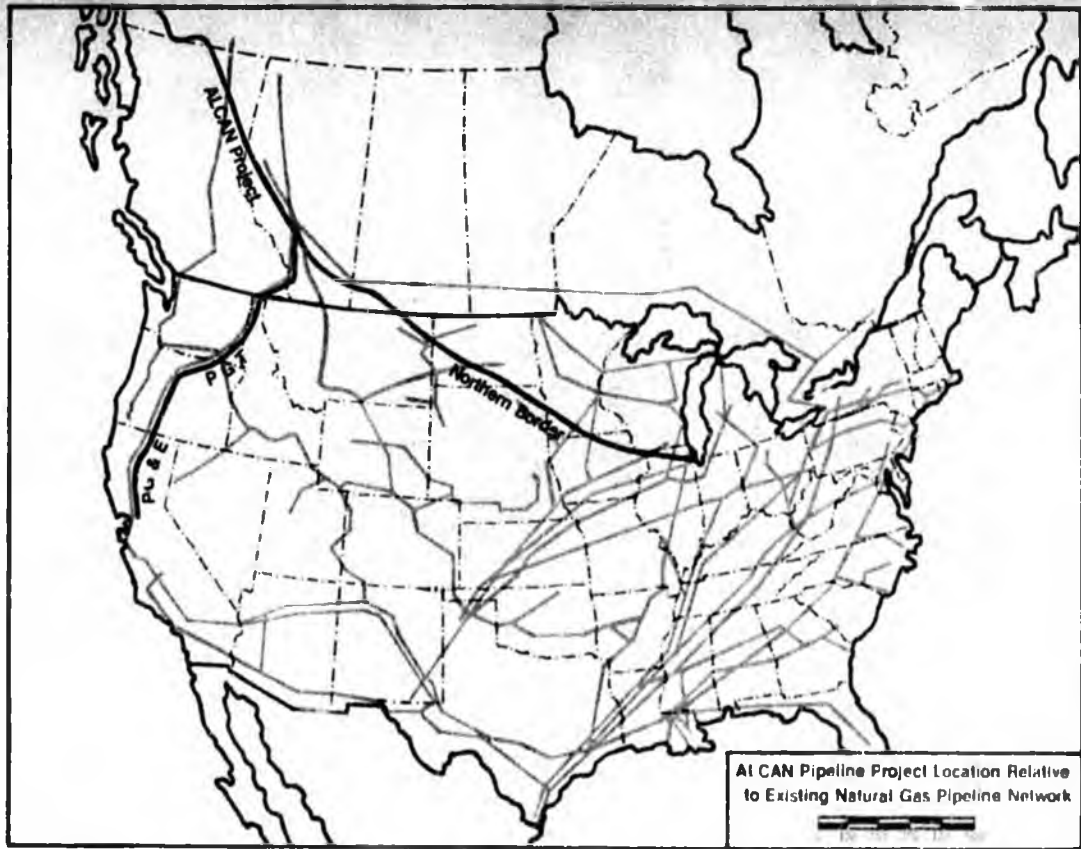
For the eastern leg from the James River Station, the pipeline will proceed generally to the southeast until it reaches the Alberta/Saskatchewan border near Empress, Alberta. The eastern leg will then connect with the Foothills Pipe Lines (Sask.) Ltd. pipeline. The pipeline will then continue to the southeast across Saskatchewan and join with the Northern Border Pipeline system at the United States/Canada border near Monchy, Saskatchewan.

Alcan Pipeline Route in the Contiguous United States

On the western leg, the Alaska gas will be transferred at the United States-Canada border near Kingsgate, British Columbia, to the PGT system. The PGT system will transport the gas through northern Idaho, southeast Washington, and central Oregon. At the Oregon/California border, the gas will be transferred to enter the Pacific Gas and Electric Company (PG&E) system and will then be transported throughout California.

On the eastern leg the Alaska gas will be transferred at the Saskatchewan/Montana border from the Canadian-owned portion of the Alcan system to the Northern Border Pipeline system. The Northern Border Pipeline system will then transport the gas across the northeast corner of Montana, the southwest section of North Dakota, the northeast section of South Dakota, the southwest corner of Minnesota, and the northeast section of Iowa, and finally bring the gas just south of Chicago to Dwight, Illinois.

Exhibit 2 on the following page illustrates the respective routes of the eastern and western legs of the Alcan system and their relationship to the existing gas pipeline network in the United States.



SECTION 3 - IDENTIFICATION OF FACILITIES INCLUDED WITHIN
"CONSTRUCTION AND INITIAL OPERATION"

General Project Description

This section identifies the facilities for the Alcan project which will be entitled to the expedited authorization process prescribed in Section 9 of ANGTA. The facilities which are to be covered are those in the U.S. which are adequate for a throughput of up to 2.4 bcfd and are included in the revised Alcan filing submitted to the Federal Power Commission (FPC) in March 8, 1977. If any modifications to those facilities are required by the Agreement on Principles between the U.S. and Canada, those modified facilities will also be entitled to the expedited authorization process in Section 9.

Uncertainties remain as to the future level of gas exports from Canada's historical gas supply sources. The actual division of Alaska gas among the various regions of the contiguous United States awaits conclusion of gas sales contracts. Routing and design work should be sufficiently complete to allow final certification in late 1978 or early 1979. The final design and location of the facilities, however, will be within the general description set forth.

The gas transportation system will utilize a 48-inch diameter pipeline from Prudhoe Bay to James River, Alberta.

From James River, gas destined for the midwestern and eastern states will be transported through a 42-inch diameter pipeline to Monchy, Saskatchewan, and gas destined for the western states will be transported through a 36-inch pipeline to Kingsgate, British Columbia. PGT and PG&E will complete looping^{2/} as necessary of their existing pipeline systems from the Idaho-British Columbia border to Antioch, California (near San Francisco) with a 36-inch diameter pipeline.

All of the pipeline in Alaska and the first forty-one miles of pipeline in the Yukon lie in the continuous and discontinuous permafrost region.^{3/} This section will be operated in a chilled state (i.e., below 32°F.) to prevent degradation of the permafrost regime. Gas chilling

^{2/} "Looping" is construction of a pipeline parallel to and interconnected with an existing pipeline. Looping may extend to part or all of an existing line.

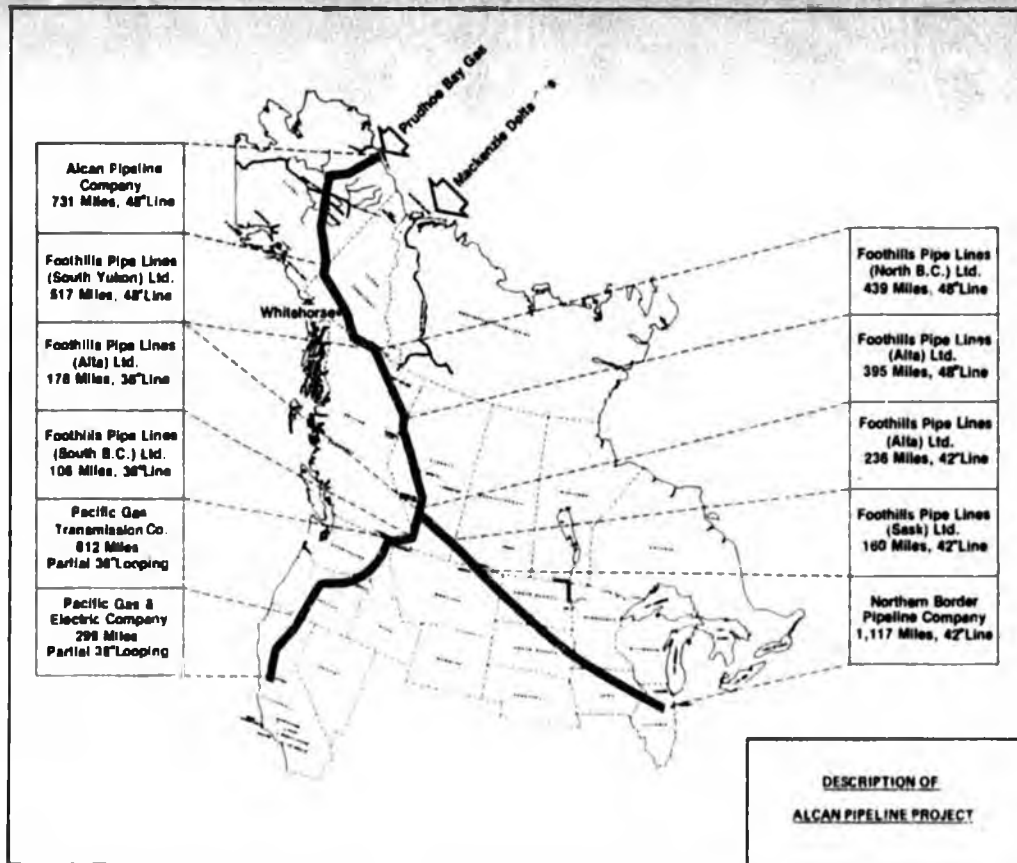
^{3/} By definition, permafrost consists of soil, rock, or other earth material, the temperature of which remains at or below 32°F. (0°C) continuously for two or more years. Its distribution is not uniform. Factors controlling the distribution of permafrost include the glacial and climatic history of the area, thermal properties of the earth material, ambient temperature, insulation properties of overburden, and amount of exposure to sun (e.g., shading caused by orientation of topographic features). The permafrost would be continuous along approximately the first 240 miles of the pipeline (to near the South Fork of the Koyukuk River). Along the remaining pipeline route to the Yukon border, the permafrost would be discontinuous.

will be accomplished by propane refrigeration systems at all compressor stations in Alaska.

The length of the various pipeline segments will be as follows:

<u>Company</u>	<u>Location</u>	<u>Length (Miles)</u>
Alcan Pipeline Company	Alaska	731
Foothills Pipe Lines (South Yukon) Ltd.	Yukon	517
Foothills Pipe Lines (Sask.) Ltd.	Saskatchewan	160
Foothills Pipe Lines (North B.C.) Ltd.	Yukon/B.C. Border to B.C./Alberta Border	439
Foothills Pipe Lines (South B.C.) Ltd.	Coleman to Kingsgate	106
Foothills Pipe Lines (Alta.) Ltd.	B.C./Alberta to James River	395
	James River to Coleman	176
	James River to Empress	<u>235</u>
	Total Alaska and Canada	<u>2,759</u>
Pacific Gas Transmission Co.	Kingsgate to Malin	612
Pacific Gas & Electric Co.	Malin to Antioch	299
Northern Border Pipeline Co.	Monchy to Dwight	<u>1,117</u>
	Total Contiguous States	<u>2,028</u>
	Total System Length	<u>4,787</u>

Exhibit 3 on the next page identifies and locates the various pipeline segments.



Peak-day capacity utilizing nine compressor stations (see item 4 below) will be 2.6 bcfd, with an average daily volume of 2.4 bcfd. By installation of intermediate compressor stations, the system could be increased to 3.4 bcfd peak capacity, with an average day capacity of 3.2 bcfd. The system capacity could be further increased by addition to the compressor horsepower at each station.

Alcan Compressor Stations and Refrigeration
Facilities in Alaska

Centrifugal compressors, powered by natural gas-fueled turbine engines, will be used on the Alcan system. In order to minimize thawing of the permafrost soil, the discharge gas at each compressor station in Alaska will be chilled by a propane refrigeration plant. The following describes the required compression and refrigeration facilities. All of these facilities are required for construction and initial operation.

Station	Milepost	Number of Gas Compressors	Total Installed Horsepower (ISO)	
			Gas Compression	Gas Refrigeration
AL-1	75.0	1	26,500	7,660
AL-2	133.0	1	26,500	7,660
AL-3	242.3	1	26,500	13,830
AL-4	331.8	1	26,500	13,830
AL-5	418.8	1	26,500	13,830
AL-6	504.7	1	26,500	13,830
AL-7	589.9	1	26,500	13,830
AL-8	673.4	1	26,500	13,830
TOTAL		8	212,000	98,300

Other Alcan Pipeline Facilities in Alaska

Metering facilities for the measurement of gas flow and gas quality will be required in Alaska at the Prudhoe Bay receipt point, at the Fairbanks sales point, and at the transfer point on the Alaska-Yukon border.

A central operating center, located in Fairbanks, will monitor and control all compressor station operations.^{4/}

Alcan will utilize staging areas established for the Alyeska oil pipeline at Prudhoe Bay, Fairbanks, and Valdez. Material storage sites will be located at Anchorage, Seward, and Whittier, and at selected locations along the pipeline route.

Existing transportation and communication facilities will be utilized to the fullest extent practicable. Short lateral roads will be constructed to pipeline facilities as required.

Permanent bases for operating and maintaining the system will be selected and located after defining areas in which common problems may occur due to similarities of terrain and

^{4/} The compressor stations will be automated for remote control of all normal functions, including discharge gas temperature.

climate. The bases will be located at or near compressor stations to avoid duplication of permanent above-ground facilities. Materials and various spare parts will be located at the bases to facilitate maintenance and repair operations.

All of these facilities will be required for construction and initial operation.

Lower 48 Facilities

For purposes of this part of the Decision, the facilities described generally below are deemed necessary for construction and initial operation, and will be entitled to expedited issuance of authorizations pursuant to Section 9 of ANCTA, provided that the final certification of such facilities shall be determined by reference to the size necessary to provide the transportation capacity certified to the FPC^{5/} by the Secretary of Energy, as set forth in the terms and conditions section.

^{5/} The final certification function currently resides with the Federal Power Commission under the Natural Gas Act. On October 1, 1977, the Department of Energy will be activated pursuant to the Department of Energy Organization Act, Public Law 95-91, and the functions of the FPC under the Natural Gas Act will be transferred in part to the Federal Energy Regulatory Commission (FERC). Therefore, where reference is made herein to future actions of the FPC, they will be carried out by either the Secretary or the FERC, as the case may be, as of October 1, 1977.

In order to deliver gas contemporaneously to points both east and west of the Rocky Mountains in the lower continental United States, the Alcan system will bifurcate at James River, Alberta and form a Western Leg and an Eastern Leg. First, the Western Leg is described below, and then the Eastern Leg.

Western Leg

Alaskan gas will be transferred at the Canada/United States border near Kingsgate, British Columbia, to Pacific Gas Transmission Company (PGT). PGT will transport the gas through Idaho, Washington, and Oregon. At the Oregon/California border, the gas will enter the intrastate facilities of Pacific Gas and Electric Company (PG&E). The gas will be transported throughout much of California through existing and expanded intrastate gas pipelines.

The additional Western Leg facilities which are part of the Alcan project are those covered by the "1580 Design." The major component of this expansion will add approximately 873 miles of looping and result in complete looping of the 917-mile PGT/PG&E system from the Canada/United States border to Antioch, California (near San Francisco). The two parallel lines will be operated as a single system. Various modifications to the existing compression facilities will be required. However, the increase in system

capacity of 659 mmcf/d could be achieved without installation of additional compression horsepower or increase of compression fuel usage. A minor addition of facilities south of Antioch may be made at a later date, depending on conditions prevailing at that time. All Western Leg facilities which are part of the Alcan project are subject to Section 9 of ANGTA.

The Eastern Leg

The Alcan system will transport Alaskan gas for delivery to Midwestern and Eastern markets in the lower continental United States through an Eastern Leg. The Eastern Leg will commence at the bifurcation point of the main express line at James River, Alberta and terminate at Dwight, Illinois (near Chicago). Total length of the Eastern Leg will be 1,352 miles, including 235 miles in Canada and 1,117 miles in the United States. All pipeline for the Eastern Leg will be 42 inches in diameter.

Alaskan gas will be transferred at the Saskatchewan/Montana border from the Canadian-owned portion of the Alcan system to the Northern Border Pipeline system (Northern Border). The Northern Border system will travel diagonally across Montana, North Dakota, South Dakota, Minnesota, and Iowa, and terminate near Chicago, Illinois. Along this

route, direct deliveries of gas will be made by Northern Border into the systems which cross the pipeline: Natural Gas Pipeline Company of America, Northern Natural Gas Company, and Michigan-Wisconsin Pipeline Company. Other purchasers will receive Alaska gas by displacement.^{6/}

The specific facilities that will be required to interconnect the various pipelines to receive gas from the Northern Border system, either by direct delivery or by displacement, will be determined when gas sales contracts have been executed. Final design of the required facilities will depend upon the division of Alaskan gas among the various pipeline companies and various regions of the contiguous States. Final design will be complete at the time of final system certification in late 1978 or early 1979. All facilities which are part of the Northern Border system are necessary for construction and initial operation, and all facilities which are part of the Northern Border system as finally certified by the FPC are subject to Section 9 of ANGTA.

^{6/} "Displacement" of gas is a method by which gas may be supplied to a purchaser from close by in exchange for gas sold to the purchaser elsewhere. Displacement, which is a commonly used method in the gas industry, eliminates the cost of physically transferring gas between markets.

SECTION 4 - DELINEATION OF PROVISIONS OF LAW THAT ARE
SUBSUMED IN THIS DECISION AND REQUIRE WAIVER

Under Section 7(a)(4)(D) of ANGTA, the President shall

identify those provisions of law, relating to any determination of a Federal officer or agency as to whether a certificate, permit, right-of-way, lease, or other authorization shall be issued or be granted, which provisions the President finds (i) involve determinations which are subsumed in his decision and (ii) require waiver pursuant to section 8(g) in order to permit the expeditious construction and initial operation of the transportation system.

At this time, however, there are only two statutory provisions that involve determinations subsumed in this decision and require waiver pursuant to section 8(g) of ANGTA.^{7/}

Under Section 3 of the Natural Gas Act (15 U.S.C. 717b), the Federal Power Commission must issue an order to authorize any export of natural gas; such an order shall

^{7/} Section 8(g)(1) of ANGTA states that the President will have the opportunity at a later date to identify and seek waiver of additional provisions of law. This subsection states:

At any time after a decision designating a transportation system is submitted to the Congress pursuant to this section, if the President finds that any provision of law applicable to actions to be taken under subsection (a) or (c) of section 9 require waiver in order to permit expeditious construction and initial operation of the approved transportation system, the President may submit such proposed waiver to both Houses of Congress.

issue unless the Commission finds that the export is not consistent with the public interest.

In addition, under Section 103 of the Energy Policy and Conservation Act, the President is required to promulgate a general rule prohibiting exports of natural gas from the U.S., except that he may permit those exports which he determines to be consistent with the national interest and with the purposes of the Act (Section 103(b)(1)). To make such a determination, Section 103(d)(1) directs the President to take into account the need to leave uninterrupted or unimpaired "exchanges in similar quantity for convenience or increased efficiency of transportation with persons or the government of a foreign state."

As a result of the recent Agreement on Principles between the United States and Canada, Alcan will be required to make available limited quantities of Alaskan gas to communities in the Yukon Territory and the western provinces, subject to provision of replacement gas downstream in Canada. This transaction will be an export requiring separate authorizations under the above mentioned two statutes.

The requirements arising under Section 3 of the Natural Gas Act and under Section 103 of the Energy Policy and Conservation Act could be met without waiver of these provisions, but additional, and unnecessary, FPC and Presidential action would be required. Accordingly, both of these statutory subsections shall be waived for the exchange of gas mentioned herein.

SECTION 5 - TERMS AND CONDITIONS AND ENFORCEMENT

To ensure the proper management and timely completion of the construction of the designated transportation system, the following general terms and conditions shall be appropriately incorporated into any certificate, right-of-way, lease, permit or authorization directed to be made by any Federal officer or agency.

As described more fully below, these terms and conditions will be followed by a set of stipulations establishing general standards of environmental and construction performance, and the procedures for the submission and approval of construction plans and environmental safeguards, and then by site specific terms and conditions issued prior to actual construction of any pipeline segment. The terms and conditions described here are not meant to limit or foreclose the adoption of such stipulations and terms and conditions but are intended to begin the process by which a set of effective and workable safeguards are evolved. There is contemplated cooperative action by the Federal and Alaska State Governments in the development and enforcement of stipulations and site specific terms and conditions. Similar cooperative action is contemplated with the governments of all affected states.

Under the proposal made at the end of this section for the organizational involvement of the Federal Government with the successful applicant, the Federal Inspector for construction of the transportation system shall have supervision authority over the enforcement of these terms and conditions subject to the ultimate authority of the Executive Policy Board described below.

Terms and Conditions

The terms and conditions proposed for inclusion into this Congressional authorization are set forth, by category, as follows:

I. Construction Costs and Schedule
Management and Organization

1. Prior to the issuance of the certificate, the successful applicant shall provide a detailed overall management plan, to be approved by the Federal Inspector, for the preconstruction and the construction phases of the transportation system project. The successful applicant shall define its relationship with the execution contractors, and shall give consideration to various management approaches -- such as Fast Track, Stage Design, and other management

approaches -- that will facilitate the cost-effective, environmentally sound, and timely construction of the project.

2. The successful applicant may not use cost-plus type contracts with execution contractors, except where the Federal Inspector determines that special conditions warrant this type of contract. Otherwise, the applicant shall use fixed-price contracts, including the firm fixed-price, the fixed-price with escalation, and fixed-price incentive type of contract.

3. The successful applicant shall specify for approval of the Federal Inspector the insurance, bonding, and any other prequalification requirements for all consultants and execution contractors.

Construction Cost and Schedule Control Techniques

4. Prior to the initiation of construction, the successful applicant shall provide a detailed analysis and description of its proposed cost and schedule control techniques. The applicant shall give particular consideration to cost and manpower control and manpower estimating techniques.

5. Prior to the initiation of construction, the successful applicant shall develop and submit to the Federal Inspector a final design, design-cost estimate, and construction schedule. This design cost estimate and schedule must represent a construction design of at least 70 percent (or greater) of the total system, and the remainder may not represent any one contiguous or specific type of construction or geologic situation (e.g., river crossings, discontinuous permafrost, or elevated pipeline). The Federal Inspector may relax the above specified minimum percentage requirement, with the consent of the Executive Policy Board, if he finds there are extenuating circumstances that warrant such an action.

General Operating Strategies

6. The successful applicant shall develop and submit to the Federal Inspector cost-effective and feasible methods for supplying general and specialized equipment, as well as repair facilities and spare-part inventories, to the execution contractors. The applicant

shall give consideration to various techniques of equipment provision, including use of equipment pools, equipment leasing or buy-backs.

7. Prior to the initiation of construction, the successful applicant shall supply detailed information to the Federal Inspector on its labor relations procedures, and indicate the proposed means to address and resolve disputes arising under collective bargaining agreements.

8. In entering into contracts with execution contractors, the successful applicant shall seek to incorporate techniques for resolving disputes arising under such contracts without recourse to litigation.

Quality Assurance and Control Procedures

9. The successful applicant shall provide to the Federal Inspector a detailed description of quality assurance and control procedures that will be implemented prior to the start of construction. Such a description must at least include provisions for quality assurance and control procedures for environmental protection, corrosion, pipeline and compressor-station

welds, pipeline placement, equipment and other appropriate matters.

Procedures for Enforcement of Terms and Conditions

10. The successful applicant may not initiate activity on any aspect of the pipeline until authorization to proceed with construction, including site-specific terms and conditions for that aspect of the pipeline, has been issued and procedures for enforcement of terms and conditions have been established by the appropriate Federal officers.

Minority Business Enterprise Participation.

11. The successful applicant shall develop and submit to the Federal Inspector for approval a plan for taking affirmative action to ensure that no person shall on the grounds of race, creed, color, national origin or sex be excluded from receiving or participating in contracts for management, engineering design or construction activity. The successful applicant shall require each of his contractors and subcontractors having contracts valued at \$150,000 or more to develop similar plans providing the assurances specified in the preceding sentence.

II. Safety and Design

1. The successful applicant shall construct, operate, maintain and terminate the pipeline in accordance with Federal gas pipeline safety regulations. The applicant shall ensure that construction and operating specifications are in accordance with good engineering practice, both to maintain the safety and the integrity of the pipeline and to protect the health and safety of project personnel and the general public.

2. The successful applicant may not begin construction of any pipeline segment until the Federal Inspector has approved the design of that segment, including technical construction specifications, having had sufficient time to review the design.

3. The successful applicant shall establish a procedure for briefing the Federal Inspector, or his designated representative, on a regular basis concerning the status of the project during the design, construction, testing and start-up phases.

4. The successful applicant shall establish a procedure to ensure access to all project facilities by the Federal Inspector, or his designated representative, in the performance of official duties.

5. The successful applicant shall submit a plan or procedure for conducting its own inspections of project facilities during construction, to be approved by the Federal Inspector.

6. The successful applicant shall provide a seismic monitoring system, to be approved by the Federal Inspector, and shall ensure that there are adequate procedures for the safe shut-down of the project under severe seismic conditions.

III. Environment

1. The successful applicant shall construct, operate, maintain and terminate the pipeline with maximum concern for the protection of environmental values. A set of stipulations containing the general standards of environmental and construction performance, and the procedure for the

submission and approval of construction plans and environmental safeguards will be developed by the concerned government agencies and must be accepted by the applicant as a condition of his right to proceed over public lands. Additional "site-specific" terms and conditions will be incorporated in authorizations to proceed with construction issued by the appropriate Federal agency, into particular certificates, rights-of-way, permits and other authorizations to protect and enhance environmental values during the design, construction and operation of the pipeline. These additional "site specific" terms and conditions will be issued as appropriate to minimize disturbance from construction and operation of the pipeline to rivers and other water bodies and adjacent land and vegetation; to protect wildlife and endangered species and maintain forest, agricultural and other resource productivity; to control the risks of pipeline ruptures, leaks and hazards; to maintain air and water quality values; to make provision for control and disposal of sewage, garbage, wastes

and toxic substances; and take other measures necessary for protection of the environment during the design, construction and operation of the pipeline.

2. The successful applicant shall prepare a plan of operations which integrates environmental protection with the proposed schedule of construction and operations, the proposed supervisory and technical staffing, the proposed quality control programs, and the proposed quality assurance programs. In preparation and implementation of this plan, the successful applicant shall provide for timely integration of environmental mitigation and restoration practices with the activity which creates the need for the restoration or mitigation.

3. The successful applicant shall develop and submit to the Federal Inspector an effective plan for implementation of specific environmental safeguards through an educational program for field personnel prior to and during construction, operation, maintenance and termination of the pipeline.

4. The successful applicant shall establish an effective pipeline-performance monitoring system of inspection and instrumentation to insure performance in keeping with environmental concerns.

IV. Finance

1. The successful applicant shall provide for private financing of the project, and shall make the final arrangement for all debt and equity financing prior to the initiation of construction.

2. If the direct capital cost estimates excluding interest during construction for the overall project in 1975 constant dollars filed with the FPC immediately prior to certification, adjusted to reflect design changes to increase capacity that result from the Agreement on Principle between the United States and Canada, materially and unreasonably exceed the comparable capital cost estimates filed by Alcan with the Federal Power Commission on March 8, 1977, Section 6, page 2, the FPC may not issue a certificate for the project. If these final capital cost estimates are not excessive under the above standard, the FPC may use these final estimates for the U.S.

segments as the basis for fixing a variable rate of return on equity that will reward the applicant for project completion under budgeted cost and penalize the applicant for project completion above budgeted cost. The variable return shall be set to provide substantial incentives to construct the project without incurring overruns. These final capital cost estimates need not be the design-cost estimates based on the system design which must subsequently be submitted to the Federal Inspector. The applicant shall, however, submit to the FPC for approval on a timely basis all components of construction work in progress.

3. Neither the successful applicant nor any purchaser of Alaska gas for transportation through the system of the successful applicant shall be allowed to make use of any tariff by which or any other agreement by which the purchaser or ultimate consumer of Prudhoe Bay natural gas is compelled to pay a fee, surcharge, or other payment in relation to the Alaska

natural gas transportation system at any time prior to completion and commissioning of operation of the system.

4. The Alcan Pipeline Company, or its successor, and the Northern Border Pipeline, or its successor, shall be publicly held corporations or general or limited partnerships, open to ownership participation by all persons without discrimination, except producers of Alaskan natural gas.

V. Antitrust

1. The successful applicant shall exclude and prohibit producers of significant amounts of Alaska gas, or their subsidiaries and affiliates, from participating in the ownership of the Alaska natural gas transportation system, except that such producers may provide guarantees for project debt. The aforesaid producers of Alaska gas may not be equity members of the sponsoring consortium, have any voting power in the project, have any role in the management or operations of the project, have any continuing financial obligation in relation to debt guarantees associated

with initial project financing after the project is completed and the tariff is put into effect, or impose conditions on the guarantees of project debt permitted above which may give rise to competitive abuse, including power to veto pro-competitive policies.

2. All agreements for the sale of Alaska gas made between the aforesaid producers and purchasers who are shippers through the Alaska natural gas transportation system shall be fully disclosed to the Federal Power Commission, and all collateral agreements made between the same parties with respect to the sale of Alaska gas shall also be fully disclosed. All contracts for sale of Alaska gas, for all collateral agreements to these contracts, shall be submitted for approval by the Federal Power Commission.

VI. Certification of Facilities

1. Prior to the issuance of a certificate of public convenience and necessity to Northern Border Pipeline or to Pacific Gas Transmission Company, the Secretary of Energy shall certify to the Federal Power Commission whether there

has been any material change in the facts regarding future potential gas supplies for the East or West since the date of this Decision that would warrant certification of such facilities at a different rated capacity than authorized herein. If the Secretary certifies that there has been a material change in the facts, he shall instead certify to the Commission the capacity at which he has determined a certificate of public convenience and necessity should be issued and the reasons therefor, which capacity shall be determined in a manner that is as consistent as possible with the reasons for the initial authorization, as set forth in the Report submitted to the Congress pursuant to Section 7(b) of the Alaska Natural Gas Transportation Act, Public Law 94-586. The certificate issued by the PPC shall be consistent with the Secretary's determination.

Enforcement

To enforce the terms and conditions proposed above, and to carry out the duties of the office assigned and set forth by section 7(a)(5)(A)-(E) of ANGTA, an appropriate and qualified individual shall be appointed by the President

to serve as the Federal Inspector, with the advice and consent of the Senate. Upon approval of the Presidential designation of an Alaska natural gas transportation system, the Federal Inspector shall:

(A) establish a joint surveillance and monitoring agreement, approved by the President, with the State of Alaska similar to that in effect during construction of the trans-Alaska oil pipeline to monitor the construction of the approved transportation system within the State of Alaska;

(B) monitor compliance with applicable laws and the terms and conditions of any applicable certificate, rights-of-way, permit, lease, or other authorization issued or granted;

(C) monitor actions taken to assure timely completion of construction, schedules and the achievement of quality of construction, cost control, safety, and environmental protection objectives and the results obtained therefrom;

(D) have the power to compel, by subpoena if necessary, submission of such information as he deems necessary to carry out his responsibilities; and

(E) keep the President and the Congress currently informed on any significant departures from compliance and issue quarterly reports to the President and the Congress concerning existing or potential failures to meet construction schedules or other factors which may delay the construction and initial operation of the system and the extent to which quality of construction, cost control, safety and environmental protection objectives have been achieved.

In addition to these duties and responsibilities, the President will submit to Congress, upon approval of the Presidential decision, a limited executive reorganization plan to transfer to the Federal Inspector field-level

supervisory authority over enforcement of terms and conditions from those Federal agencies having statutory responsibilities over various aspects of an Alaska natural gas transportation system. The respective Federal agencies would retain their existing statutory authority pursuant to section 9(a) of ANGTA, to issue on an expedited basis the necessary certificates, permits, rights-of-way and other authorizations, and to prescribe any appropriate terms and conditions that are permissible under present law. The Agency Authorized Officers would directly represent the statutory authority of the respective Federal agencies in the field on all matters pertaining to construction of the pipeline. However, the Federal Inspector would have the necessary field-level supervisory authority to overrule the enforcement action of an Agency Authorized Officer, whenever the Federal Inspector determined that such a decision was warranted.

The President's supervision of the Federal Inspector will be carried out by an Executive Policy Board. The Board would be made up of the Secretaries of the Interior, Energy, Transportation, the Administrator of the Environmental Protection Agency, and the Chief of the Army Corps of Engineers, or their Deputies (or senior officers who have

been delegated authority over gas pipeline matters), as well as the Federal Inspector, who is the non-voting Chairman of the Board. The Board will provide policy guidance to the Federal Inspector, and act as an appellate body to resolve differences among the agencies and the Federal Inspector, including differences that may arise when the Federal Inspector overrules an enforcement action of an Agency Authorized Officer. The Board shall expeditiously resolve any such appeal with a limited period of time that shall be prescribed. The President will authorize by Executive Order the creation of the Executive Policy Board pursuant to his power under Section 301 of Title 3, and will delegate the necessary authority to the Board to carry out its functions. The Board shall be paramount for policy-making purposes on all matters pertaining to construction of an Alaskan natural gas transportation system; the Federal Inspector shall be the agent or conduit of the Board in such matters, and shall also have the necessary supervisory power over field level decisions.

SECTION 6 - PRICING OF ALASKA GAS

Final financing for an Alaska natural gas transportation project cannot be arranged until the producer-owners of the Prudhoe Bay gas execute sales contracts. Without such contracts, no gas can be transported, and financing consequently would be unobtainable. Producers cannot be expected to negotiate sales contracts until a price has been established with a reasonable degree of certainty. If this project is to proceed expeditiously, the field price of the gas should be established as soon as possible.

Because no contracts for gas sales in interstate commerce have been concluded and submitted to the FPC for approval, the FPC has not, to date, attempted to determine the costs of providing the gas in order to establish what might be a just and reasonable (cost-based) wellhead price. The FPC, in fact, has excluded the Alaska gas from its national rate proceedings; Alaska costs and related reserve data have been excluded from all statistics underlying FPC rate determinations.

Alaska gas is produced in association with oil; therefore, it is impossible to determine precisely the costs of finding, developing and producing only the gas. Cost allocation and, therefore, cost-based pricing is

somewhat arbitrary. Because of the difficult and arbitrary nature of the allocation problem, the FPC in recent years has priced gas on the basis of the cost of only non-associated gas in each producing area, and then allowed the same price to be paid for associated gas produced in that area as well. Were the FPC to initiate a price proceeding under the Natural Gas Act, it is expected that its procedures and subsequent litigation over cost allocation and other matters would likely exceed a period of 18 months.

The Administration's proposed National Energy Act is before the Congress. That Act provides a basis for moving from cost-based pricing to commodity-value pricing. That transition is essential to restoring the balance between natural gas supply and demand. Under the gas pricing provisions in the National Energy Plan, Alaska gas would be classified as "old gas under a new contract" subject to a \$1.45 per mcf ceiling price.

If, on the other hand, proposals to deregulate natural gas prevail, serious uncertainties and delays concerning the development of any Alaskan natural gas transportation

project could result. If producers are inclined to insist on prices of \$2.00 per mcf or higher, questions concerning the saleability of the gas and the financeability of the project will arise. Such price levels could result in an additional \$20 billion in consumer charges, as well as the added costs of any delays in project construction.

This decision, therefore, calls for enactment of a gas pricing approach similar to that contained in the National Energy Plan. That approach also provides a mechanism for allocating the cost of more expensive supplies to lower-priority users, rather than the residential and commercial users who have less capacity to convert to other fuels. The gas pricing policies which are part of the National Energy Plan are fair and equitable, and should apply to both the production and sale of Alaska gas.

SECTION 7 - AGREEMENT BETWEEN THE UNITED STATES OF AMERICA
AND CANADA ON PRINCIPLES APPLICABLE TO A NORTHERN NATURAL
GAS PIPELINE

The Government of the United States of America and
the Government of Canada,

Desiring to advance the national economic and energy
interests and to maximize related industrial benefits of
each country, through the construction and operation of
a pipeline system to provide for the transportation of
natural gas from Alaska and from Northern Canada,

Hereby agree to the following principles for the
construction and operation of such a system:

1. Pipeline Route

The construction and operation of a pipeline for the
transmission of Alaska natural gas will be along the route
set forth in Annex I, such pipeline being hereinafter referred
to as "the Pipeline". All necessary action will be taken
to authorize the construction and operation of the Pipeline
in accordance with the principles set out in this Agreement.

2. Expeditious Construction; Timetable

a) Both Governments will take measures to ensure the
prompt issuance of all necessary permits, licenses, certi-
ficates, rights-of-way, leases and other authorizations

required for the expeditious construction and commencement of operation of the Pipeline, with a view to commencing construction according to the following timetable:

- Alaska - January 1, 1980
- Yukon - main line pipe laying January 1, 1981
- Other construction in Canada to provide for timely completion of the Pipeline to enable initial operation by January 1, 1983.

b) All charges for such permits, licenses, certificates, rights-of-way, leases and other authorizations will be just and reasonable and apply to the Pipeline in the same non-discriminatory manner as to any other similar pipeline.

c) Both Governments will take measures necessary to facilitate the expeditious and efficient construction of the Pipeline, consistent with the respective regulatory requirements of each country.

3. Capacity of Pipeline and Availability of Gas

a) The initial capacity of the Pipeline will be sufficient to meet, when required, the contractual requirements of United States shippers and of Canadian shippers. It is contemplated that this capacity will be 2.4 billion cubic feet per day (bcfd) for Alaska gas and 1.2 bcfd for northern Canadian gas. At such time as a lateral pipeline

transmitting Northern Canadian gas, hereinafter referred to as "the Dempster Line", is to be connected to the Pipeline or at any time additional pipeline capacity is needed to meet the contractual requirements of United States or Canadian shippers, the required authorizations will be provided, subject to regulatory requirements, to expand the capacity of the Pipeline in an efficient manner to meet those contractual requirements.

b) The shippers on the Pipeline will, upon demonstration that an amount of Canadian gas equal on a British Thermal Unit (BTU) replacement value basis will be made available for contemporaneous export to the United States, make available from Alaska gas transmitted through the Pipeline, gas to meet the needs of remote users in the Yukon and in the provinces through which the Pipeline passes. Such replacement gas will be treated as hydrocarbons in transit for purposes of the Agreement between the Government of Canada and the Government of the United States of America concerning Transit Pipelines, hereinafter referred to as "the Transit Pipeline Treaty". The shippers on the Pipeline will not incur any cost for provision of such Alaska gas except those capital costs arising from the following provisions:

i) the owner of the Pipeline in the Yukon will make arrangements to provide gas to the communities of Beaver Creek, Burwash Landing, Destruction Bay, Haines Junction, Whitehorse, Teslin, Upper Liard and Watson Lake at a total cost to the owner of the Pipeline not to exceed Canadian \$2.5 million;

ii) the owner of the Pipeline in the Yukon will make arrangements to provide gas to such other remote communities in the Yukon as may request such gas within a period of two years following commencement of operation of the Pipeline at a cost to the owner not to exceed the product of Canadian \$2500 and the number of customers in the communities, to a maximum total cost of Canadian \$2.5 million.

4. Financing

a) It is understood that the construction of the Pipeline will be privately financed. Both Governments recognize that the companies owning the Pipeline in each country will have to demonstrate to the satisfaction of the United States or the Canadian Government, as applicable, that protections against risks of non-completion and interruption are on a basis acceptable to that Government before proof of financing is established and construction allowed to begin.

b) The two Governments recognize the importance of constructing the Pipeline in a timely way and under effective cost controls. Therefore, the return on the equity investment in the Pipeline will be based on a variable rate of return for each company owning a segment of the Pipeline, designed to provide incentives to avoid cost overruns and to minimize costs consistent with sound pipeline management. The base for the incentive program used for establishing the appropriate rate of return will be the capital costs used in measuring cost overruns as set forth in Annex III.

c) It is understood that debt instruments issued in connection with the financing of the Pipeline in Canada will not contain any provision, apart from normal trust indenture restrictions generally, applicable in the pipeline industry, which would prohibit, limit or inhibit the financing of the construction of the Dempster Line; nor will the variable rate of return provisions referred to in subparagraph (b) be continued to the detriment of financing the Dempster Line.

5. Taxation and Provincial Undertakings

a) Both Governments reiterate their commitments as set forth in the Transit Pipeline Treaty with respect to

non-discriminatory taxation, and take note of the statements issued by Governments of the Provinces of British Columbia, Alberta and Saskatchewan, attached hereto as Annex V, in which those Governments undertake to ensure adherence to the provisions of the Transit Pipeline Treaty with respect to non-interference with throughput and to non-discriminatory treatment with respect to taxes, fees or other monetary charges on either the Pipeline or throughput.

b) With respect to the Yukon Property Tax imposed on or for the use of the Pipeline the following principles apply:

i) The maximum level of the property tax, and other direct taxes having an incidence exclusively, or virtually exclusively, on the Pipeline, including taxes on gas used as compressor fuel, imposed by the Government of the Yukon Territory or any public authority therein on or for the use of the Pipeline, herein referred to as "the Yukon Property Tax", will not exceed \$30 million Canadian per year adjusted annually from 1983 by the Canadian Gross National Product price deflator as determined by Statistics Canada, hereinafter referred to as the GNP price deflator.

ii) For the period beginning January 1, 1980, and ending on December 31 of the year in which leave to open the Pipeline is granted by the appropriate regulatory authority, the Yukon Property Tax will not exceed the following:

1980--\$5 million Canadian

1981--\$10 million Canadian

1982--\$20 million Canadian

Any subsequent year to which this provision applies--\$25 million Canadian.

iii) The Yukon Property Tax formula described in subparagraph (b)(i) will apply from January 1 after the year in which leave to open the Pipeline is granted by the appropriate regulatory authority until the date that is the earlier of the following, hereinafter called the tax termination date:

A) December 31, 2008, or

B) December 31 of the year in which leave to open the Dempster Line is granted by the appropriate regulatory authority.

iv) Subject to subparagraph (b) (iii), if for the year ending on December 31, 1987, the percentage increase of the aggregate per capita revenue derived from all

property tax levied by any public authority, in the Yukon Territory (excluding the Yukon Property Tax) and grants to municipalities and Local Improvement Districts from the Government of the Yukon Territory as compared to aggregate per capita revenue derived from such sources for 1983 is greater than the percentage increase for 1987 of the Yukon Property Tax as compared to the Yukon Property Tax for 1983, the maximum level of the Yukon Property Tax for 1987 may be increased to equal the amount it would have reached had it increased over the period at the same rate as the aggregate per capita revenue.

v) If for any year in the period commencing January 1, 1988, and ending on the tax termination date, the annual percentage increase of the aggregate per capita revenue derived from all property tax levied by any public authority in the Yukon Territory (excluding the Yukon Property Tax) and grants to municipalities and Local Improvement Districts from the Government of the Yukon Territory as compared to the aggregate per capita revenue derived from such sources for the immediately preceding year exceeds the percentage increase for that year of the Yukon Property

Tax as compared to the Yukon Property Tax for the immediately preceding year, the maximum level of the Yukon Property Tax for that year may be adjusted by the percentage increase of the aggregate per capita revenue in place of the percentage increase that otherwise might apply.

vi) The provisions of subparagraph (b)(i) will apply to the value of the Pipeline for the capacities contemplated in this Agreement. The Yukon Property Tax will increase for the additional facilities beyond the aforesaid contemplated capacity in direct proportion to the increase in the gross asset value of the Pipeline.

vii) In the event that between the date of this Agreement and January 1, 1983, the rate of the Alaska property tax on pipelines, taking into account the mill rate and the method of valuation, increases by a percentage greater than the cumulative percentage increase in the Canadian GNP deflator over the same period, there may be an adjustment on January 1, 1983, to the amount of \$30 million Canadian described in subparagraph (b) (i) of the Yukon Property Tax to reflect this difference. In defining the Alaska

property tax for purposes of this Agreement, the definition of the Yukon Property Tax will apply mutatis mutandis.

viii) In the event that, for any year during the period described in subparagraph (iii), the annual rate of the Alaska property tax on or for the use of the Pipeline in Alaska increases by a percentage over that imposed for the immediate preceding year that is greater than the increase in percentage of the Yukon Property Tax for the year, as adjusted, from that applied to the immediately preceding year, the Yukon Property Tax may be increased to reflect the percentage increase of the Alaska property tax.

ix) It is understood that indirect socioeconomic costs in the Yukon Territory will not be reflected in the cost-of-service to the United States shippers other than through the Yukon Property Tax. It is further understood that no public authority will require creation of a special fund or funds in connection with construction of the Pipeline in the Yukon, financed in a manner which is reflected in the cost of service to U.S. shippers, other than through the Yukon Property Tax. However, should public authorities

in the State of Alaska require creation of a special fund or funds, financed by contributions not fully reimbursable, in connection with construction of the Pipeline in Alaska, the Governments of Canada or the Yukon Territory will have the right to take similar action.

c) The Government of Canada will use its best endeavors to ensure that the level of any property tax imposed by the Government of the Northwest Territories on or for the use of that part of the Dempster Line that is within the Northwest Territories is reasonably comparable to the level of the property tax imposed by the Government of the Yukon Territory on or for the use of that part of the Dempster Line that is in the Yukon.

6. Tariffs and Cost Allocation

It is agreed that the following principles will apply for purposes of cost allocation used in determining the cost of service applicable to each shipper on the Pipeline in Canada:

a) The Pipeline in Canada and the Dempster Line will be divided into zones as set forth in Annex II. Except for fuel and except for Zone 11 (the Dawson-Whitehorse portion of the Dempster Line), the cost of service to each

shipper in each zone will be determined on the basis of volumes as set forth in transportation contracts. The volumes used to assign these costs will reflect the original BTU content of Alaskan gas for U.S. shippers and Northern Canadian gas for Canadian shippers, and will make allowance for the change in heat content as the result of commingling. Each shipper will provide volumes for line losses and line pack in proportion to the contracted volumes transported in the zone. Each shipper will provide fuel requirements in relation to the volume of his gas being carried and to the content of the gas as it affects fuel consumption.

b) It is understood that, to avoid increased construction and operating costs for the transportation of Alaskan gas, the Pipeline will follow a southern route through the Yukon along the Alaska Highway rather than a northern route through Dawson City and along the Klondike Highway. In order to provide alternative benefits for the transportation of Canadian gas to replace those benefits that would have been provided by the northern route through Dawson City, U.S. shippers will participate in the cost of service in Zone 11. It is agreed that if cost overruns on construction of the Pipeline in Canada do not exceed filed costs set forth in Part D of Annex III by more than 35

percent, U.S. shippers will pay the full cost of service in Zone 11. U.S. shipper participation will decline if overruns on the Pipeline in Canada exceed 35 percent; however, at the minimum the U.S. shippers' share will be the greater of either two-thirds of the cost of service or the proportion of contracted Alaska gas in relation to all contracted gas carried in the Pipeline. The proportion of the cost of service borne by U.S. shippers in Zone 11 will be reduced should overruns on the cost of construction in that Zone exceed 35 percent after allowance for the benefits to U.S. shippers derived from Pipeline construction cost savings in other Zones. Notwithstanding the foregoing, at the minimum, the U.S. shippers' share will be the greater of either two-thirds of the cost of service or the proportion of contracted Alaska gas in relation to all contracted gas carried in the Pipeline. Details of this allocation of cost-of-service are set out in Annex III.

c) Notwithstanding the principles in subparagraphs (a) and (b), in the event that the total volume of gas offered for shipment exceeds the efficient capacity of the Pipeline, the method of cost allocation for the cost of service for shipments of Alaskan gas (minimum entitlement 2.4 bcf/d) or Northern Canadian gas (minimum entitlement 1.2 bcf/d) in

excess of the efficient capacity of the Pipeline will be subject to review and subsequent agreement by both Governments; provided however that shippers of either country may transport additional volumes without such review and agreement, but subject to appropriate regulatory approval, if such transportation does not lead to a higher cost of service or share of Pipeline fuel requirements attributable to shippers of the other country.

d) It is agreed that Zone 11 costs of service allocated to U.S. shippers will not include costs additional to those attributable to a pipe size of 42 inches. It is understood that in Zones 10 and 11 the Dempster Line will be of the same gauge and diameter and similar in other respects, subject to differences in terrain. Zone 11 costs will include only facilities installed at the date of issuance of the leave to open order, or that are added within three years thereafter.

7. Supply of Goods and Services

a) Having regard to the objectives of this Agreement, each Government will endeavor to ensure that the supply of goods and services to the Pipeline project will be on generally competitive terms. Elements to be taken into account in weighing competitiveness will include price, reliability, servicing capacity and delivery schedules.

b) It is understood that through the coordination procedures in Paragraph 8 below, either Government may institute consultations with the other in particular cases where it may appear that the objectives of subparagraph (a) are not being met. Remedies to be considered would include the renegotiation of contracts or the reopening of bids.

8. Coordination and Consultation

Each Government will designate a senior official for the purpose of carrying on periodic consultations on the implementation of these principles relating to the construction and operation of the Pipeline. The designated senior officials may, in turn, designate additional representatives to carry out such consultations, which representatives, individually or as a group, may make recommendations with respect to particular disputes or other matters, and may take such other action as may be mutually agreed, for the purpose of facilitating the construction and operation of the Pipeline.

9. Regulatory Authorities: Consultation

The respective regulatory authorities of the two Governments will consult from time to time on relevant

matters arising under this Agreement, particularly on the matters referred to in paragraphs 4, 5 and 6, relating to tariffs for the transportation of gas through the Pipeline.

10. Technical Study Group on Pipe

a) The Governments will establish a technical study group for the purpose of testing and evaluating 54-inch 1120 pounds per square inch (psi), 48-inch 1260 psi, and 48-inch 1680 psi pipe or any other combination of pressure and diameter which would achieve safety, reliability and economic efficiency for operation of the Pipeline. It is understood that the decision relating to pipeline specifications remains the responsibility of the appropriate regulatory authorities.

b) It is agreed that the efficient pipe for the volumes contemplated (including reasonable provision for expansion), subject to appropriate regulatory authorization will be installed from the point of interconnection of the Pipeline with the Drompster Line near Whitehorse to the point near Caroline, Alberta, where the Pipeline bifurcates into a western and an eastern leg.

11. Direct Charges by Public Authorities

a) Consultation will take place at the request of either Government to consider direct charges by public

authorities imposed on the Pipeline where there is an element of doubt as to whether such charges should be included in the cost of service.

b) It is understood that the direct charges imposed by public authorities requiring approval by the appropriate regulatory authority for inclusion in the cost of service will be subject to all of the tests required by the appropriate legislation and will include only

i) those charges that are considered by the regulatory authority to be just and reasonable on the basis of accepted regulatory practice, and

ii) those charges of a nature that would normally be paid by a natural gas pipeline in Canada. Examples of such charges are listed in Annex IV.

12. Other Costs

It is understood that there will be no charges on the Pipeline having an effect on the cost of service other than those:

- i) imposed by a public authority as contemplated in this Agreement or in accordance with the Transit Pipeline Treaty, or

- ii) caused by Acts of God, other unforeseen circumstances, or
- iii) normally paid by natural gas pipelines in Canada in accordance with accepted regulatory practice.

13. Compliance with Terms and Conditions

The principles applicable directly to the construction, operation and expansion of the Pipeline will be implemented through the imposition by the two Governments of appropriate terms and conditions in the granting of required authorizations. In the event of subsequent non-fulfillment of such a term or condition by an owner of the Pipeline, or by any other private person, the two Governments will not have responsibility therefor, but will take such appropriate action as is required to cause the owner to remedy or mitigate the consequences of such non-fulfillment.

14. Legislation

The two Governments recognize that legislation will be required to implement the provisions of this Agreement. In this regard, they will expeditiously seek all required legislative authority so as to facilitate the timely and efficient construction of the Pipeline and to remove any delays or impediments thereto.

15. Entry Into Force

This Agreement will become effective upon signature and shall remain in force for a period of 35 years and thereafter until terminated upon 12 months' notice given in writing by one Government to the other, provided that those provisions of the Agreement requiring legislative action will become effective upon exchange of notification that such legislative action has been completed.

IN WITNESS WHEREOF the undersigned representatives,
duly authorized by their respective Governments, have
signed this Agreement.

DONE in duplicate at Ottawa in the English and French
languages, both versions being equally authentic, this
_____ day of _____, 1977.

For the Government
of the United States:

For the Government
of Canada:

The Pipeline RouteIn Alaska:

The Pipeline constructed in Alaska by Alcan will commence at the discharge side of the Prudhoe Bay Field gas plant facilities. It will parallel the Alyeska oil pipeline southward on the North Slope of Alaska, cross the Brooks Range through the Atigun Pass, and continue on to Delta Junction.

At Delta Junction, the Pipeline will diverge from the Alyeska oil pipeline and follow the Alaska Highway and Haines oil products pipeline passing near the towns of Tanacross, Tok, and Northway Junction in Alaska. The Alcan facilities will connect with the proposed new facilities of Foothills Pipe Lines (South Yukon) Ltd. at the Alaska-Yukon border.

In Canada:

In Canada the Pipeline will commence at the Boundary of the State of Alaska, and the Yukon Territory in the vicinity of the towns of Border City, Alaska and Boundary, Yukon. The following describes the general routing of the Pipeline in Canada:

From the Alaska-Yukon border, the Foothills Pipe Lines (South Yukon) Ltd. portion of the Pipeline will proceed in a southerly direction generally along the Alaska Highway to

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a point near Whitehorse, Yukon, and thence to a point on the Yukon-British Columbia border near Watson Lake, Yukon, where it will join with the Foothills Pipe Lines (North B.C.) Ltd. portion of the Pipeline.

The Foothills Pipe Lines (North B.C.) Ltd. portion of the Pipeline will extend from Watson Lake in a southeasterly direction across the north eastern part of the Province of British Columbia to a point on the boundary between the Provinces of British Columbia and Alberta near Boundary Lake where it will interconnect with the Foothills Pipe Lines (Alta.) Ltd. portion of the Pipeline.

The Foothills Pipe Lines (Alta.) Ltd. portion of the Pipeline will extend from a point on the British Columbia-Alberta boundary near Boundary Lake in a southeasterly direction to Gold Creek and thence parallel to the existing right-of-way of the Alberta Gas Trunk Line Company Limited to James River near Caroline.

From James River a "western leg" will proceed in a southerly direction, generally following the existing right-of-way of the Alberta Gas Trunk Line Company Limited to a point on the Alberta-British Columbia boundary near Coleman in the Crow's Nest Pass area. At or near Coleman the Foothills Pipe Lines (Alta.) Ltd. portion of the Pipeline will interconnect with the Foothills Pipe Lines (South B.C.) Ltd. portion of the Pipeline.

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The Foothills Pipe Lines (South B.C.) Ltd. portion of the Pipeline will extend from a point on the Alberta-British Columbia boundary near Coleman in a southwesterly direction across British Columbia generally parallel to the existing pipeline facilities of Alberta Natural Gas Company Ltd. to a point on the International Boundary Line between Canada and the United States of America at or near Kingsgate in the Province of British Columbia where it will interconnect with the facilities of Pacific Gas Transmission Company.

Also, from James River, an "eastern leg" will proceed in a southeasterly direction to a point on the Alberta-Saskatchewan boundary near Empress Alberta where it will interconnect with the Foothills Pipe Lines (Sask.) Ltd. portion of the Pipeline. The Foothills Pipe Lines (Sask.) Ltd. portion of the Pipeline will extend in a southeasterly direction across Saskatchewan to a point on the International Boundary Line between Canada and the United States of America at or near Monchy, Saskatchewan where it will interconnect with the facilities of Northern Border Pipeline Company.

ANNEX IIZones for the Pipeline and the Dempster Line in Canada

- Zone 1 Foothills Pipe Lines (South Yukon) Ltd.
Alaska Boundary to point of interconnection with
the Dempster Line at or near Whitehorse.
- Zone 2 Foothills Pipe Lines (South Yukon) Ltd.
Whitehorse to Watson Lake.
- Zone 3 Foothills Pipe Lines (North B.C.) Ltd.
Watson Lake to point of interconnection with
Westcoast's main pipeline near Fort Nelson.
- Zone 4 Foothills Pipe Lines (North B.C.) Ltd.
Point of interconnection with Westcoast's main
pipeline near Fort Nelson to the Alberta-B.C.
border.
- Zone 5 Foothills Pipe Lines (Alta.) Ltd.
Alber. a-B.C. border to point of bifurcation near
Caroline, Alberta.
- Zone 6 Foothills Pipe Lines (Alta.) Ltd.
Caroline, Alta. to Alberta-Saskatchewan border
near Empress.

ANNEX II

- Zone 7 Foothills Pipe Lines (Alta.) Ltd.
Caroline to Alberta-B.C. border near Coleman.
- Zone 8 Foothills Pipe Lines (South B.C.) Ltd.
Alberta-B.C. border near Coleman to B.C.-U.S.
border near Kingsgate.
- Zone 9 Foothills Pipe Lines (Sask.) Ltd.
Alberta-Saskatchewan border near Empress to
Saskatchewan-U.S. border near Monchy.
- Zone 10 Foothills Pipe Lines (North Yukon) Ltd.
Mackenzie Delta Gas fields in the Mackenzie
Delta, N.W.T., to a point near the junction of
the Klondike and Dempster highways just west
of Dawson, Yukon Territory.
- Zone 11 Foothills Pipe Lines (South Yukon) Ltd.
A point near the junction of the Klondike and
Dempster highways near Dawson to the connecting
point with the Pipeline at or near Whitehorse.

ANNEX IIICost Allocation in Zone 11

The cost of service in Zone 11 shall be allocated to United States shippers on the following basis:

- i) There will be calculated, in accordance with (iii) below, a percentage for Zones 1 - 9 in total by dividing the actual capital costs by the filed capital costs and multiplying by 100. If actual capital costs are equal to or less than 135% of filed capital costs, then United States shippers will pay 100% of the cost of service in Zone 11. If actual capital costs in Zones 1 - 9 are between 135% and 145% of filed capital costs, then the percentage paid by United States shippers will be adjusted between 100% and 66 2/3% on a straight-line basis, except that in no case will the portion of cost of service paid by United States shippers be less than the proportion of the contracted volumes of Alaskan gas at the Alaska-Yukon border to the same volume of Alaskan gas plus the contracted volume of Northern Canadian gas. If the actual capital

ANNEX III

costs are equal to or exceed 145% of filed capital costs, the portion of the cost of service paid by United States shippers will be not less than $66 \frac{2}{3}\%$ or the proportion as calculated above, whichever is the greater.

ii) There will be calculated a percentage for the cost-overrun on the Dawson to Whitehorse lateral (Zone 11). After determining the dollar value of the overrun, there will be deducted from it:

- (a) the dollar amount by which actual capital costs in zones 1,7,8 and 9 (carrying U.S. gas only) are less than 135% of filed capital costs referred to in (iii) below;
- (b) in each of Zones 2, 3, 4, 5 and 6 the dollar amount by which actual capital costs are less than 135% of filed capital costs referred to in (iii) below multiplied by the proportion that the U.S. contracted volume bears to the total contracted volume in that zone.

ANNEX III

If the actual capital costs in Zone 11, after making this adjustment, are equal to or less than 135% of filed capital costs, then no adjustment is required to the percentage of the cost of service paid by United States shippers as calculated in (i) above. If, however, after making this adjustment, the actual capital cost in Zone 11 is greater than 135% of the filed capital cost, then the proportion of the cost of service paid by United States shippers will be a fraction (not exceeding 1) of the percentage of the cost of service calculated in (i) above, where the numerator of the fraction is 135% of the filed capital cost and the denominator of the fraction is actual capital cost less the adjustments from (a) and (b) above. Notwithstanding the adjustments outlined above, in no case will the percentage of the actual cost of service borne by United States

ANNEX III

shippers be less than the greater of 66 2/3% or the proportion of the contracted volumes of Alaskan gas at the Alaska-Yukon border to the same volume of Alaskan gas plus the contracted volume of Northern Canadian gas.

- iii) The "filed capital cost" to be applied to determine cost overruns for the purpose of cost allocation in (i) and (ii) above will be:

<u>The Pipeline in Canada (Zones 1 - 9)</u> ^{1/}	<u>"Filed Capital Cost" Estimates for the Pipeline in Canada (millions of Canadian dollars)</u>
48" - 1260 lb. pressure pipeline -	3,873
or 48" - 1680 lb. pressure pipeline -	4,418
or 54" - 1120 lb. pressure pipeline -	4,234

^{1/} These filed capital costs include and are based upon (a) a 1260 psi, 48-inch line from the Alaska-Yukon border to the point of possible interconnection near Whitehorse; (b) a 1260 psi, 48-inch; or 1680 psi, 48-inch; or 1120 psi 54-inch line from the point of possible interconnection near Whitehorse to Caroline Junction; (c) a 42-inch line from Caroline Junction to the Canada-U.S. border near Morchy, Saskatchewan; and (d) a 36-inch line from Caroline Junction to the Canada-U.S. border near Kingsgate, British Columbia. These costs are escalated for a date of commencement of operations of January 1, 1983.

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"Filed Capital Cost"
 Estimates for the
 Pipeline in Canada
 (millions of Canadian
 dollars)

Zone 11 of the Dempster Line^{2/}

30" - Section of Dempster line from Whitehorse to Dawson	-	549
or 36" - Section of Dempster line from Whitehorse to Dawson	-	585
or 42" - Section of Dempster line from Whitehorse to Dawson	-	705

Details for Zones 1 - 9 are shown in the following table:

^{2/} The costs are escalated for a date of commencement of operations of January 1, 1985.

ANNEX IIIFiled Capital Costs for the Pipeline in Canada

<u>Zone</u>	<u>42" 1120 psi \$ million (Canadian)</u>	<u>48" 1090 psi \$ million (Canadian)</u>	<u>54" 1120 psi \$ million (Canadian)</u>
1	707	707	707
2	721	664	805
3	738	650	303
4	380	488	456
5	677	859	813
6	236	236	236
7	126	126	126
8	83	83	83
* 9	<u>205</u>	<u>205</u>	<u>205</u>
Total Zones 1-9	3,873	4,418	4,234

*The last compression station in Zone 9 includes facilities to provide compression up to 1440 psi.

ANNEX III

It is recognized that the above are estimates of capital costs. They do not include working capital, property taxes or the provision for road maintenance in the Yukon Territory (not to exceed \$30 million Canadian).

If at the time construction is authorized, both Governments have agreed to a starting date for the operation of the Pipeline different from January 1, 1983, then the capital cost estimates shall be adjusted for the difference in time using the GNP price deflator from January 1, 1983. Similarly at the time construction is authorized for the Dempster Line, if the starting date for the operation agreed to by the Canadian Government is different from January 1, 1985, then the capital cost estimate shall be adjusted for the difference in timing using the GNP price deflator from January 1, 1985. The diameter of the pipeline in Zone 11, for purposes of cost allocation, may be 30", 36" or 42", so long as the same diameter pipe is used from the Delta to Dawson (Zone 10).

The actual capital cost, for purposes of this Annex will be the booked costs as of the date "leave to open" is granted plus amounts still outstanding to be accrued on a basis to be approved by the National Energy Board. Actual

ANNEX III

capital costs will exclude working capital, property taxes, and direct charges for road maintenance of up to \$30 million Canadian in the Yukon Territory as specifically provided herein.

For purposes of this Annex above, actual capital costs will exclude the effect of increases in cost or delays caused by actions attributable to the U.S. shippers, related U.S. pipeline companies, Alaskan producers, the Prudhoe Bay deliverability or gas conditioning plant construction and the United States or State Governments. If the appropriate regulatory bodies of the two countries are unable to agree upon the amount of such costs to be excluded, the determination shall be made in accordance with the procedures set forth in Article IX of the Transit Pipeline Treaty.

The filed capital costs of facilities in Zones 7 and 8 will be included in calculations pursuant to this Annex only to the extent that such facilities are constructed to meet the requirements of U.S. shippers.

ANNEX IVDirect Charges by Public Authorities

- *1. Crossing damages (roads, railroad crossings, etc.; this item is usually covered in the crossing permit).
- *2. Road damages caused by exceeding design load limits.
- *3. Required bridge reinforcements caused by exceeding design load limits.
4. Airfield and airstrip repairs.
5. Drainage maintenance.
6. Erosion control.
7. Borrow pit reclamation.
8. Powerline damage.
9. Legal liability for fire damage.
10. Utility system repair (water, sewer, etc.)
11. Camp waste disposal.
12. Camp site reclamation.
13. Other items specified in environmental stipulations.
14. Costs of surveillance and related studies as required by regulatory bodies or applicable laws.

* In the case of these items and all other road related charges by public authorities, total charges in the Yukon Territory shall not exceed Canadian \$30 million.

British Columbia Statement

The Government of the Province of British Columbia agrees in principle to the provisions contained in the Canada-United States Pipeline Treaty of January 28, 1977, and furthermore British Columbia is prepared to cooperate with the Federal Government to ensure that the provisions of the Canada-United States Treaty, with respect to non-interference of throughput and non-discriminatory treatment with respect to taxes, fees or other monetary charges on either the pipeline or throughput, are adhered to. Specific details of this undertaking will be the subject of a Federal-Provincial Agreement to be negotiated at as early a date as possible. Such Agreements should guarantee that British Columbia's position expressed in its telegram of August 31 is protected.

ANNEX VAlberta Statement

The Government of the Province of Alberta agrees in principle to the provisions contained in the Canada-United States Pipeline Treaty of January 26, 1977, and furthermore, Alberta is prepared to cooperate with the Federal Government to ensure that the provisions of the Canada-United States Treaty, with respect to non-interference of throughput and non-discriminatory treatment with respect to taxes, fees, or other monetary charges on either the Pipeline or throughput, are adhered to. Specific details of this undertaking will be the subject of a Federal-Provincial Agreement to be negotiated when the Canada-United States protocol or understanding has been finalized.

Saskatchewan Statement

The Government of Saskatchewan is willing to cooperate with the Government of Canada to facilitate construction of the Alcan Pipeline through southwestern Saskatchewan and, to that end, the Government of Saskatchewan expresses its concurrence with the principles elaborated in the Transit Pipeline Agreement signed between Canada and the United States on January 28, 1977. In so doing, it intends not to take any discriminatory action towards such pipelines in respect of throughput, reporting requirements, and environmental protection, pipeline safety, taxes, fees or monetary charges that it would not take against any similar pipeline passing through its jurisdiction. Further details relating to Canada-Saskatchewan relations regarding the Alcan Pipeline will be the subject of Federal-Provincial agreements to be negotiated after a Canada-United States understanding has been finalized.

FPC LETTER TO THE PRESIDENT

FEDERAL POWER COMMISSION,
Washington, D.C., May 2, 1977.

*The President,
The White House,
Washington, D.C.*

DEAR MR. PRESIDENT: Enclosed is the recommendation of the Federal Power Commission pursuant to Section 5 of the Alaska Natural Gas Transportation Act of 1976. We have come to the following basic conclusions:

1. It is in the best interests of the citizens of the United States that a system be built in the near future to transport natural gas from the North Slope of Alaska to the contiguous United States.

2. Three competing groups have applied for a certificate of public convenience and necessity to construct and operate such a system. They are the Alaskan Arctic Gas Pipeline Company, El Paso Alaska Company, and Alcan Pipeline Company. The first and third applicants propose overland systems, while the second is a pipeline and tanker route.

3. We recommend that an overland system through Canada be selected, if such a route is made available by the Government of Canada on acceptable terms and conditions. If appropriate, discussion could be undertaken after the completion of proceedings before their National Energy Board. Until the Canadian Government has made a decision whether a land route is available, it would be premature for this Commission to recommend a route, unconditionally.

4. In making a decision between the two overland routes, it will become obvious to the reader of this recommendation that additional information is needed as well as an understanding of the intentions of the Government of Canada. Based on today's circumstances, reasonable men can disagree on the right course of action. Under present circumstances and expectations, Chairman Dunham recommends Alcan, Commissioner Watt Alcan, Commissioner Holloman Arctic, Commissioner Smith Arctic.

Commissioners Holloman and Smith recommend that an overland system through Canada be selected. Section 5(d) of the Alaska Natural Gas Transportation Act precludes the Commission from basing its recommendation upon the fact that Canadian authorities have not at this time rendered a decision authorizing a pipeline system to transport Alaskan natural gas through Canada. They, therefore, recommend approval of the Arctic proposal, conditioned upon timely affirmative decisions by the Government of Canada to make the route available and, after development, to allow simultaneous transportation of Canadian natural gas reserves from the Mackenzie Delta. In the absence of a Canadian determination that development and transportation of Mackenzie reserves should be permitted, the Alcan project should be approved, subject to the Government of Canada's making the route available on acceptable terms and conditions. In the absence of

timely and acceptable agreements with the Canadian Government to make a route available for an overland system, a United States pipeline and tanker system can be built and can deliver gas to the contiguous United States at an economical price, and the El Paso project should be selected.

5. In the absence of agreement with the Canadian Government, a United States pipeline can be built in Alaska and a tanker system can deliver the gas to the contiguous United States at an economical price.

6. Any of the proposed systems can be financed without extraordinary risk-bearing by consumers or taxpayers, if investors are allowed the opportunity to earn an adequate return commensurate with the unusual size and degree of risk in this project. Alternatively, consumers and taxpayers could assume the risks of noncompletion of the system or interruption of service in return for a lower delivered cost of gas.

In reaching these conclusions, we have exhaustively considered the massive record compiled here and material outside the record, as directed by the Alaska Natural Gas Transportation Act. Our full recommendation covers hundreds of points. In the last analysis, we find the following items to be the most important and we recommend that you and the Congress direct your attention primarily to the confirmation or modification of these conclusions.

A. At least 20 trillion cubic feet of producible natural gas exist at Prudhoe Bay in Alaska, enough to provide about five percent of our natural gas consumption for the next 25 years. These volumes are adequate to support an economical transportation system.

B. This gas must be produced and delivered to markets both for its own value as energy and because its extraction is necessary to avoid a long-term reduction in oil production from Prudhoe Bay.

C. This gas can be delivered to the contiguous United States and successfully marketed by any one of the three competing applicant groups: Arctic, Alcan and El Paso.

D. Each system will have some adverse environmental impacts. We believe all of these impacts to be acceptable, given proper precautionary measures. Arctic would involve crossing the Arctic National Wildlife Range, and other lands now little used by man. The other projects would generally follow existing utility corridors—a distinct environmental advantage.

E. An overland route can deliver each unit of gas more cheaply than a land and water route using liquefied natural gas technology. If Canadian gas is also developed, the sharing of facilities will lower Arctic's cost of service to Americans slightly below that of Alcan.

F. Calculations of Net National Economic Benefit produce the same relative results for the three systems. El Paso has an advantage in this analysis, because all of its tax payment go to the United States, and virtually all of its wage and material payments go to Americans.

G. Using our best estimate of the likely ultimate construction cost (not the applicants' figures), El Paso's system would require the least capital, with Alcan and Arctic costing somewhat more.

H. Arctic has the greatest risk of major cost overruns beyond our estimate, primarily because of its difficult winter construction schedule. El Paso is least vulnerable to such overruns.

I. Each of the systems can be constructed basically in the manner proposed, with the qualifications and conditions contained in our report.

J. Each of the systems should operate reliably once service begins. El Paso has a slightly higher likelihood of service interruption due to its complex nature and greater seismic risk.

K. El Paso would be the easiest system to finance because of its slightly lower initial cost and because of Federal guarantees of bonds for its tankers under Title XI of the Merchant Marine Act.

L. All of the above cost conclusions assume the simultaneous development and transportation of Canadian reserves in the Mackenzie Delta. Arctic's proposed route has the advantage of passing directly through this area. Should the Canadian Government decide not to proceed with the development of those reserves at this time, the overall balance of cost advantages shifts to Alcan.

M. Should additional gas be found in the vicinity of the transportation system, expansion capability could become important. Arctic can expand to deliver up to 3.5 billion cubic feet per day (Bcf/d) from Prudhoe Bay, at a small cost. Any such expansion would lower the unit cost of gas delivered. Alcan is designed to start at 2.4 Bcf/d, but can expand to 3.2 Bcf/d at a small additional cost. El Paso can also expand its pipeline deliveries to 3.2 Bcf/d at low cost, but its costs for ships, terminal facilities, and operating expenses will rise more rapidly proportionate to increased deliveries.

N. The North Slope gas should be distributed as widely as possible throughout the United States. Wide distribution will encourage broad-based financing for the chosen project, an important consideration in an undertaking of this size. Furthermore, because there is always some threat of service interruption, no area of the country should be allowed to become too heavily dependent on the Alaskan gas.

O. A choice must be made as to who shall bear the ultimate risks of project failure, service interruption, or massive cost overruns. If investors are to bear them, they will expect a commensurate return. If they do not receive such a return, the project cannot be privately financed. If consumers or taxpayers bear the risks, their charges, in the event of success, should be lowered in return for the service they have rendered. Our recommendation outlines the dimensions of each plan and contains specific suggestions for implementing either approach.

The decision now before you, we recognize, will significantly influence this Nation's energy future. Therefore, beyond providing our best thinking in these recommendations, the commissioners and staff of the Federal Power Commission stand ready to assist you in every way.

Sincerely yours,

RICHARD L. DUNHAM,
Chairman.

JAMES G. WATT,
Vice Chairman.

DON S. SMITH,
Commissioner.

JOHN H. HOLLOMAN III,
Commissioner.

FPC NEWS RELEASE NO. 23113

FEDERAL POWER COMMISSION,
Washington, D.C., May 2, 1977.

FPC RECOMMENDS OVERLAND ROUTE FOR TRANSPORTATION OF
ALASKAN NATURAL GAS

The Federal Power Commission today recommended an overland pipeline route to bring Alaskan natural gas to contiguous U.S. markets, but split on which of the two proposed overland routes to specifically recommend.

Chairman Richard L. Dunham and Commissioner James G. Watt recommend the Alcan proposal, and Commissioners Don S. Smith and John H. Holloman III recommended the Arctic Gas proposal. All three proposals are described in the accompanying fact sheet (News Release No. 23112).

The Commission found that all three proposals are technically and economically feasible and that a system should be built to bring the natural gas to the lower 48 market. It said the benefits of Alaskan gas would help meet the energy needs of our society and fully justify the costs and risks involved.

However, it found an overland route preferable because of its greater reliability, easier expansibility, greater efficiency in terms of gas consumed in route, and lesser environmental impact.

The Canadian portions of the proposed overland routes are still subject to approval of the Canadian Government. The Commission said that in deciding between the two overland routes, additional information is needed as well as an understanding of the intentions of the Government of Canada. "Based on today's circumstances, reasonable men can disagree on the right course of action," the Commission said.

Commissioners Holloman and Smith pointed out that the Alaska Natural Gas Transportation Act precludes the Commission from basing its recommendation on the fact that Canadian authorities have not at this time rendered a decision authorizing a pipeline system through Canada. They therefore recommend approval of the Arctic Gas proposal, conditioned on favorable decisions by the Canadian government to make the route available and permit Canadian natural gas reserves from the Mackenzie Delta to be transported by the same system. Absent a favorable decision concerning the Mackenzie Delta reserves, they would recommend approval of the Alcan project. If Canada disallows an overland pipeline route, they would approve the El Paso project.

Today's approximately 500-page recommendation follows over three years of hearings and consideration by the FPC, and compilation of a 45,000-page record. FPC Administrative Law Judge Nahum Litt last February 1 recommended approval of the Arctic Gas pro-

posal. The Commission heard oral argument in the proceeding the first week of April.

The Alaskan Natural Gas Transportation Act of 1976 required the FPC to make a recommendation to the President by May 1, which fell on a Sunday. The President is to make a recommendation to Congress by September 1, but may postpone his decision until up to December 1, at his discretion.

The Commission said in making today's recommendation it is acting in an advisory capacity to the President, setting forth the strengths and weaknesses of the various options.

The three competing applications are by Alaskan Arctic Gas Pipeline Company, known as the Arctic Gas Study Group, a consortium of U.S. and Canadian companies; by El Paso Alaska Company; and by Alcan Pipeline Company.

The Prudhoe Bay Field contains the largest unit of reserves yet discovered on the North American continent—virtually every estimate exceeds 20 trillion cubic feet of proven producible reserves, enough to provide about 5 percent of our gas consumption for the next 25 years. The gas can be produced for sale in four or five years.

The Commission found the system approved should be designed to carry initially 2 to 2.5 billion cubic feet daily, with expansibility in the 1 to 1.5 range. Under the three proposals, the earliest the gas could reach the lower 48 states is 1981 (under Alcan's proposal).

The cost of the three projects were estimated by the applicants in the \$6.5 to \$6.7 billion range, in 1975 dollars. By the time the project is built the impact of inflation undoubtedly would drive the cost in nominal dollars to \$10 billion or more. There are risks of cost overruns and delays in completion, it said, but in each instance the risk is well within an acceptable range. There is virtually no chance that any system would become so costly as to be uneconomic, it stated.

The Commission recommended rolled-in pricing be used, meaning the price of the Alaskan gas would be averaged in with all other gas in the purchaser's system. This would assist in obtaining the critical financing, the FPC noted. Federal financial assistance was not recommended by the Commission. However, it said if this is to be avoided, innovative approaches will be needed to meet the greatest financing challenge ever considered by the FPC. A choice must be made, the FPC said, as to who shall bear the ultimate risk of project failure, severe interruption, or massive cost overruns—private investors or consumers. Should the former be chosen, the rate of return would have to be an adequate incentive to invest—in the 11 to 18 percent range. Should consumers and taxpayers bear the risk, their charges should be lower.

It is imperative that the price of Prudhoe Bay gas be established as soon as possible, the FPC declared, and proposed to establish in the near future a proceeding to determine that price. It will also examine pricing mechanisms other than setting a fixed price, it added, such as formula pricing. However, it said that since its authority to approve such a pricing procedure could be challenged, it urged the President to submit legislation to authorize it to determine field or wellhead rates for Prudhoe Bay gas on the basis of market factors and alternative fuel prices.

Adverse environmental impacts of all three projects can be substantially avoided or mitigated, the FPC found. All three applicants demonstrated their technical ability and determination to reduce to acceptable levels the environmental impacts.

Of the three proposed systems the Commission concluded that Alcan promises the least environmental impact, if proper mitigative actions are taken. However, it rejected Alcan's contention that alignment in an existing utility corridor is a compelling reason to choose one transportation system over another. While some construction and operation impacts would be smaller, the FPC said, the overall decrease is not substantial. Each system must be judged on its own total impact, the Commission stated.

Substantial evidence in the record supports the feasibility of winter construction, the FPC said, which Arctic Gas would use wholly and the other two would use in part. Machines can be prepared and men equipped to enable construction to proceed in all except the most severe conditions, it said. Winter construction poses greater economic risks than summer construction, the FPC stated, but it is clear that in Arctic regions winter construction is environmentally sounder.

The Commission said it intends to implement the requirements for a western leg to deliver gas directly to the U.S. west coast, but at this time does not believe it necessary to make a final decision as to what new facilities would be needed. That decision can be deferred until about two years before delivery is to begin, it said. However, the Commission found the Oxnard, Calif., site should be the first choice for a west coast ship terminal and regasification facilities should El Paso be granted a certificate.

FPC NEWS RELEASE NO. 23112

[No. 23112 (accompanies FPC Release No. 23113)]

FEDERAL POWER COMMISSION,
Washington, D.C., May 2, 1977.

ALASKAN NATURAL GAS FACT SHEET

This Federal Power Commission proceeding involves three competing projects proposing significantly different approaches to delivering natural gas from the Prudhoe Bay Area of Alaska's North Slope to markets in the lower 48 states. The 200-square mile Prudhoe Bay Field is estimated to contain 22.5 trillion cubic feet in proven reserves of natural gas.

Under the Alaska Natural Gas Transportation Act of 1976 (Public Law No. 94-586), passed by Congress October 1, 1976, and signed into law by the President October 22, the FPC has made its recommendations to the President today on the selection of a transportation route for the gas.

The different proposals considered by the Commission are:

Alaskan Arctic Gas Pipeline Company (CP74-239, et al.).—This project involves the construction of about 3,600 miles of new pipeline and about 900 miles of looped (connected and parallel to existing lines) pipeline. The pipeline, ranging in diameter from 30 to 48 inches, would pick up United States reserves in Prudhoe Bay, Alaska, and Canadian reserves in the Mackenzie Delta, Northwest Territories, and proceed to Caroline Junction, Alberta, where the system would divide, with one leg extending into the Pacific Northwest down to California, and the other crossing the U.S. border into Montana and southeast into Illinois. Gas would move to eastern markets by displacement. This project includes transmission facilities proposed by several other Canadian and American companies—Canadian Arctic Gas Pipeline Limited, Alberta Natural Gas Company Limited, Pacific Gas Transmission Company, Pacific Gas and Electric Company, and Northern Border Pipeline Company.

The project facilities are designed to deliver at least 2.2 billion cubic feet of gas daily to U.S. markets and will cost an estimated \$6.73 billion (U.S. share of total cost expressed in 1975 dollars).

El Paso Alaska Company (CP75-96).—This company would build an 809-mile 42-inch pipeline from Prudhoe Bay along the Alyeska oil pipeline corridor to a liquefaction facility at Point Gravina on the south coast of Alaska. The liquefied natural gas would be transported across water by a fleet of 8 cryogenic tankers 1,900 nautical miles to Point Conception, California, where it would be regasified. Gas would flow to midwest and east markets by displacement. The project is estimated to cost \$6.57 billion (expressed in 1975 dollars) and would be capable of delivering an estimated 2.1 billion cubic feet of gas per day.

Alcan Pipeline Company (Alcan II proposal) and Northwest Pipeline Corporation, along with several Canadian companies (Foothills Pipe Lines Ltd., Westcoast Transmission Company Limited, Alberta Gas Trunk Line Limited), propose construction of about 3,900 miles of new pipeline and 900 miles of looped pipeline. A 48-inch pipeline would pick up Prudhoe Bay reserves and follow the Alyeska oil route as far as Delta Junction, Alaska, and from there would run parallel to the Alcan Highway partway to the James River Junction in Alberta. From James River, gas destined for eastern U.S. markets would be transported through a 42-inch pipeline to Monchy, Saskatchewan, and gas destined for the western United States would be transported through a 36-inch pipeline to Kingsgate, British Columbia. Alcan plans to use the same lower U.S. facilities as those proposed by Arctic Gas. The project would cost an estimated \$6.76 billion (in 1975 dollars) and would deliver at least 2.2 billion cubic feet per day.

In its original application, *Alcan Pipeline Company*, Northwest Pipeline Corporation, and the Canadian companies involved proposed construction of about 3,000 miles of new pipeline and 1,600 miles of looped pipeline. The pipeline, ranging in diameter from 30 to 48 inches, would pick up Prudhoe Bay reserves and follow the Alyeska oil pipeline route as far as Delta Junction, Alaska, and from there would parallel the Alcan Highway to a connection with Canadian pipelines in British Columbia and Alberta, where the system would split the gas between western U.S. and midwest U.S. shippers. Gas would also flow to the east by displacement. This system would deliver approximately 2.0 billion cubic feet per day and would deliver gas both into the Pacific Northwest and across a route similar to the Arctic Gas project extending from northeastern Montana into Illinois. The proposed project will cost an estimated \$6.28 billion (as filed).

In connection with both the original and revised Alcan proposals, an associated, although independent project, Maple Leaf, is proposed to deliver Canadian reserves from the Mackenzie Delta to Southern Canadian markets.

CHRONOLOGY

- March 21, 1974—Alaskan Arctic Gas Pipeline Company application filed.
- September 24, 1974—El Paso Alaska Company application filed.
- January 23, 1975—FPC order consolidating both applications (in Docket No. CP75-96, et al.).
- April 7, 1975—Hearings began before FPC Administrative Law Judge Nahum Litt.
- November 21, 1975—FPC staff Draft Environmental Impact Statement issued.
- April 7, 1976—Final Environmental Impact Statement issued.
- July 9, 1976—Alcan Pipeline Company and Northwest Corporation application filed.
- September 1976—Supplemental Final Environmental Impact Statement issued.
- November 12, 1976—Hearings concluded. (There were a total of 253 days of hearings resulting in 44,458 pages of transcript together with numerous exhibits.)

December 7, 1976--Final Position Brief of the Commission Staff issued.

December 14, 1976--FPC issued Order No. 558 prescribing procedures pursuant to the Alaska Natural Gas Transportation Act of 1976.

February 1, 1977--Initial decision issued by Judge Litt, recommending approval of Alaskan Arctic Gas Pipeline Company project.

March 1, 1977--Briefs on exceptions to the Judge's decision filed by FPC staff and parties in the proceeding.

March 8, 1977--Alcan Pipeline Company filed amended application.

March 22, 1977--Supplemental information filed by parties to the proceeding.

April 4-8, 1977--Oral argument held before Federal Power Commission.

April 8, 1977--FPC staff report on Alcan revised proposal and other supplemental information filed.

May 2, 1977--The Federal Power Commission made its recommendation to the President.

September 1, 1977--The President to make his recommendation to Congress. He may postpone his decision until up to December 1, at his discretion.

Sixty days after the President's recommendation, Congress may enact a joint resolution. The Alaska Natural Gas Transportation Act of 1976 (in section 8) provides dates for further executive and legislative review, if necessary.

Maps of the proposed Alaskan natural gas transportation systems accompany this fact sheet.



EL PASO ALASKA PROJECT





REPORT OF THE ATTORNEY GENERAL TO THE PRESIDENT

JULY 1977.

This Report is submitted to the President pursuant to Section 6 of the Alaska Natural Gas Transportation Act of 1976. Section 6 of the Act directs that any Federal officer or agency may submit written comments to the President with respect to the recommendation and report of the Federal Power Commission and alternative methods for transportation of Alaska natural gas for delivery to the contiguous states.¹ This Report is principally concerned with item (6)—the impact upon competition of the respective proposed transportation systems.

The Department of Justice has done an extensive analysis of this subject in the Report of the Attorney General submitted to the Congress pursuant to Section 19 of the Act. Rather than repeat what already has been said therein, we are appending a copy of our Report to Congress. We believe that the contents of that Report fully set forth the antitrust implications of the various proposed projects.

The remainder of this Report will summarize briefly the areas of agreement or disagreement with the Federal Power Commission's competitive analysis in its Recommendation to the President. Also, in accordance with Section 6(c) we discuss the question of waiver of law.

I. IMPACT ON COMPETITION: SUMMARY OF RECOMMENDATIONS OF THE FEDERAL POWER COMMISSION AND THE DEPARTMENT OF JUSTICE

The Federal Power Commission concludes generally that the certification of any one of the proposed systems will not have a significant impact upon competition among pipelines. The Department has reached the same overall conclusion.

The Commission has encouraged the participation of producers of substantial amounts of gas in the pipeline joint venture in order to contribute their significant financial resources to aid in the financing of the pipeline. The Department disagrees. We have recommended in the Report to Congress that an ownership interest, or participation in any form in the transportation system, by producers of significant amounts of natural gas, or their subsidiaries or affiliates, should be prohibited. The license to be issued to the selected system should contain a condition which prevents participation in any manner by such gas producers.

The Federal Power Commission has stated that it is strongly in favor of widespread distribution of Alaskan natural gas in order to limit reliance on Alaskan gas, to create incentives for participation in displacement arrangements and to provide easier private financing. The Department has stated that if, because of continued wellhead price

¹ Attorney General Bell did not participate in the preparation of this Report due to conflict of interest considerations. Responsibility for this Report was delegated by Mr. Bell to Deputy Attorney General Flaherty.

regulation, market forces are not permitted to operate to allocate gas in the most efficient manner, then the possibility of a regulatory allocation mechanism should be examined if widespread distribution of Alaskan natural gas is believed to be in the national interest.

The Commission is of the view that Section 13(a) imposes common carrier obligations upon the selected transportation system. The Commission indicates that this is a procompetitive result but may impact adversely upon the ability of the system to secure private financing. The Department disagrees. Section 13(a) of the Act provides for equal access to the gas transportation system based upon ownership or lack thereof. But it is unclear whether this provision was intended to create common carrier status for the transportation system. It is our view that common carrier status for all facilities constructed or utilized as an integral part of the system carrying gas to the lower 48 states is desirable and Section 13(a) should be clarified to unambiguously create such status. Additionally, we do not view Section 13(a) to be an impediment to private financing. Moreover, to ensure the equal access provided for by Section 13(a), Congress should consider legislation to grant the Commission, or its successor agency, the authority to order prorationing of pipeline capacity among shippers when gas is available in excess of pipeline capacity.

The Federal Power Commission approves of displacement arrangements as the most efficient mechanism for distribution of the Alaskan gas. The Commission, however, is fearful that such arrangements could create the potential for collusive market conduct. Thus the Commission would permit only those practices which are indispensable to the successful operation of the displacement procedure. The Department agrees that the efforts to work out displacement schemes may produce collusive behavior. We have recommended that if a system requiring displacement of gas is authorized, Government agencies should monitor any meetings of the transmission companies concerning reallocation. The plans for the meetings and the displacement programs resulting from the meetings should be subject to scrutiny and approval by Government agencies.

The Commission indicates that as a result of the implementation of an all-events, cost-of-service tariff, the producers may be able to exercise market power over the shippers if the producers know whatever price they charge will be passed on to the consumer. The Department, on the other hand, is concerned that the proposed pipeline capacities be evaluated carefully since the potential for adoption of an all-events cost-of-service tariff has diminished the incentives of the proponents to properly determine and propose the most efficient pipeline size.

The Commission indicates that the contracting process for the purchase of Alaskan gas has not been competitive. Among the elements the Commission points to as indicative of the noncompetitive nature of this process is the existence of side arrangements. The Commission has concluded that in the absence of full-fledged price competition, the producers have used side arrangements as a means of favoring companies which can provide other benefits. The use of a widespread distribution scheme may reduce the likelihood of such restrictive side arrangements. The Department's view is somewhat different. To minimize the distortion of Commission regulation from side arrangements for

various forms of compensation collateral to sales contracts for Alaskan gas, such arrangements should be disclosed and subjected to Commission scrutiny. As long as there is wellhead price regulation, the Commission, or its successor agency, should examine carefully each Alaskan gas purchase contract and disapprove or condition each such contract that it finds not in the public interest. In addition to the recommendations in the Report to Congress, we note further that the Commission should assess the impact of such arrangements in various producing fields because of the widespread existence of "favored-nation" clauses. Price increases which at first may appear innocuous, may have a greater impact throughout the field due to price increases in other contracts with such clauses.

In summary, while the Department agrees with the Commission's overall conclusion that certification of any of the proposed transportation systems will not have any significant impact upon competition, we have indicated our differences with other conclusions. We urge the President to consider each of these matters carefully and to append to any license the conditions we have suggested in our Congressional Report and which have been reiterated in this Report.

II. WAIVERS OF LAW

Section 6(c) of the Act directs each Federal officer or agency to report to the President actions to be taken by such officer or agency necessary or related to the construction and initial operation of the approved transportation system and to include recommendations with respect to any provision of law to be waived upon recommendation by the President to the Congress. It is the Department's view that no action must be taken by the Attorney General under section 9(a) of the Act—action which is necessary or related to the construction and initial operation of the approved transportation system. Furthermore, it is the Department's view that none of the antitrust laws should be waived by the President.

Section 14 of the Act states:

Nothing in the Act, and no action taken hereunder, shall imply or effect an amendment to, or exemption from any provision of the antitrust law.

It is plain from this provision that Congress did not mean for the antitrust laws to be waived in any manner and intended that they remain in full force and effect.

Many of the competitive effects indicated in the accompanying Report are prospective in nature. Thus, their full impact may not be known until the transportation system is built and operating. In light of this situation, it is the Department's view that none of the antitrust laws should be waived. The transportation system and its owners ought to be subjected to the full panoply of the antitrust laws and their possible enforcement should any violations of these laws appear in the future.

III. CONCLUSION

I conclude that antitrust considerations do not militate against selection of any of the three proposed projects as the transportation system for moving Alaskan natural gas to the lower 48 states; nor do

competitive considerations point to selection of one of the three projects in preference of the other two. The problems we have identified in this Report and our Report to Congress may impact on any selected project and, therefore, do not make one project seem more desirable than the others.

We have proposed several conditions which ought to be appended to a license issued to any of the proposed transportation systems. These recommendations are in the Report to Congress appended to this Report and are summarized in the Conclusion of the appended Report.

Respectfully submitted.

PETER F. FLAHERTY,
Deputy Attorney General.

REPORT OF THE ATTORNEY GENERAL TO CONGRESS

(JULY 1977)

EXECUTIVE SUMMARY

This report is submitted to Congress in compliance with Section 19 of the Alaska Natural Gas Transportation Act of 1976. That provision requires the Attorney General to conduct a thorough study of the anti-trust issues and problems relating to the production and transportation of Alaskan natural gas.

Based on our analysis of all information currently available, we find that antitrust considerations do not militate against selection of any of the three proposed projects as the transportation system for moving Alaskan natural gas to the Lower 48 states; nor do competitive considerations point to selection of one of the three projects in preference to the other two. Although we have identified several potential antitrust problem areas associated with the projects, these problems may impact on any project that is selected and thus do not make one project seem more desirable than the others.

This report has identified several potential competitive problem areas, which can be addressed through: (1) the imposition of conditions upon the license issued to whichever project is chosen; (2) enactment of legislation; and (3) collateral action by the Federal Power Commission, or its successor agency. Since some of the identified problems are not directly associated with the transportation of natural gas but are associated with the sale of natural gas, these problems would have to be addressed in the context of the required examination of the gas purchase contracts.

The report first provides a general introduction to the three proposed projects, the methods of transportation and routes proposed and the participants in each proposed project. There are two overland pipeline projects proposed by Alcan and Arctic Gas, and a combination pipeline and liquefied natural gas tanker system proposed by El Paso.

(1) The Alcan route follows the Alaska oil pipeline route to Fairbanks and then follows the Alcan Highway through Canada. Alcan has proposed two different sized pipelines. Originally Alcan proposed a 42-inch pipeline but more recently has proposed a 48-inch pipeline similar to that of Arctic Gas.

(2) The Arctic Gas route proceeds east from the North Slope to the Mackenzie Delta of Canada, where it is expected additional gas reserves will be developed. The route then proceeds south through Canada to the United States border.

(3) The El Paso project calls for a pipeline to follow the Alaska oil pipeline to Point Gravina on Prince William Sound. There the gas would be converted to liquid natural gas and shipped by tanker to the coast of California.

(a) *Arctic Gas.*—

Alaska Arctic Gas Pipeline Company
 Canadian Arctic Gas Pipeline Company, Ltd.
 Alberta Natural Gas Company, Ltd.
 Northern Border Pipeline Company
 Pacific Gas Transmission Company
 Pacific Gas and Electric Company

The first two above are shell companies, formed to construct and operate the pipeline in Alaska and Canada. Owners of the two companies are:

American Members:

Columbia Gas Transmission Corporation
 Michigan Wisconsin Pipe Line Company
 Natural Gas Pipe Line Company of America
 Northern Natural Gas Company
 Pacific Gas & Electric Company
 Pacific Lighting of California
 Panhandle Eastern Pipe Line Company
 Texas Eastern Transmission Corporation

Canadian Members:

Alberta Natural Gas Company, Ltd.
 The Consumers' Gas Company
 Canada Development Corporation
 Gulf of Canada, Ltd.
 Imperial Oil, Ltd. (a 70 percent owned subsidiary of Exxon)
 Northern and Central Gas Company, Ltd.
 Shell Canada, Ltd.
 TransCanada PipeLines, Ltd.
 Union Gas, Ltd.

(b) *Alean.*—

Alean Pipeline Company (a wholly-owned subsidiary of Northwest Pipeline Company)
 Alberta Gas Trunk Line Company, Ltd.
 Alberta Gas Trunk Line (Canada), Ltd.
 Westcoast Transmission Company, Ltd.
 Foothills Pipeline (Yukon), Ltd.

(c) *El Paso.*—The El Paso project is proposed by El Paso Alaska Company, a wholly owned subsidiary of El Paso Natural Gas Company.

The gas transportation and distribution industries are not highly concentrated on a national basis at this time. Although standard industry concentration measures are less meaningful in the natural gas industry because it is pervasively regulated and because pipelines are to a great extent natural monopolies; these ratios and individual company shares do give an indication of the relative industry positions of the prospective Alaskan natural gas participants.

The proponents of the El Paso project control 8.2 percent of gas supplies from all sources (as of 1974), the Alean American proponent controls 4.3 percent and the Arctic Gas American proponents control 36 percent of gas supplies from all sources. Although there is some danger that the sponsors of the Arctic Gas project, if they were the only purchasers of Alaskan gas, could use their control of Alaskan gas in combination with their control of other gas supplies to manipulate

displacement plans to their own advantage or to affect regional competition among pipelines, regulation by the Federal Power Commission minimizes this danger.

Present Federal Power Commission regulation of city gate prices also appears to preclude an opportunity for competitive abuse by the gas producers or transmission companies provided the price ceilings set by Federal Power Commission regulation are effective. However, if the regulation of the wellhead price of gas were relaxed and the Alaskan gas producing areas were workably competitive, producer ownership or control of the transportation system could circumvent Federal Power Commission regulation of the pipeline and monopoly profits could be taken by the integrated company by transferring some or all of the profits stemming from the transportation monopoly to unregulated upstream production operations through denial of access to non-owners and restricting downstream supply. If the regulation of the wellhead price of gas were relaxed and the Alaskan gas producing areas were not workably competitive, but were instead characterized by producer market dominance, gas supplies could be restricted at the production stage without any need to derive market power from the pipeline. However, such market power is not necessarily permanent and could be reduced by discovery and development of new fields by other producers, creating a situation where an integrated producer/pipeline owner would seek to restrict access and throughput to take monopoly profits. Therefore, we recommend that an ownership interest, or participation in any form in the transportation system, by one or more gas producers of significant amounts of gas be prohibited. The license to be issued to the selected system should contain a condition that prevents participation in any manner by such gas producers.

Ownership of a transportation system by the buyers of gas will not result in any potential anticompetitive conduct as long as Federal Power Commission regulation of city gate prices continues in the present mode, which it appears likely to do. If the regulatory scheme changes, potential monopsony problems can be cured by appropriate regulatory action. Therefore, we do not oppose ownership of the transportation systems by the buyers of the gas.

During the period from 1971 to 1975 the major North Slope producers, Exxon, ARCO and BP/Sohio entered into agreements to negotiate for the sale of their natural gas with various transmission companies, all members of the Arctic Gas consortium. These agreements called for advance payments from the transmission companies to help the producers develop the North Slope fields. In December, 1975, the Federal Power Commission struck down all advance payment contracts entered into after December 28, 1973, as not in the national interest. Thus, there is currently no plan for distribution of Alaskan gas.

Collateral to these advance payment agreements, the transmission companies entered into a variety of side arrangements with the producers. The side arrangements provided for renegotiation of existing gas sale contracts in the lower 48 states to raise prices or to permit revenue sharing between producer and pipeline with respect to existing production. These side arrangements are clear evidence of evasions of wellhead price regulation and demonstrate the extreme

difficulty of holding down the price of a scarce resource. Some pipeline companies would be disadvantaged in seeking to gain access to North Slope gas if these arrangements were to continue, since not all pipeline companies have existing relationships that can be altered or other goods or services to barter in addition to paying the wellhead price. The competitive effects of this disadvantage, if any, are uncertain. It may well be that the Federal Power Commission should require disclosure of all collateral considerations in our gas purchase agreement. The Commission could then carefully examine each Alaskan gas purchase contract and disapprove or condition any such agreement that it finds not to be in the public interest.

With current Federal Power Commission regulation of wellhead gas prices, competitive forces cannot operate to distribute gas in the most efficient manner. If a wide distribution of Alaskan natural gas is deemed important, it may be necessary to create a regulatory allocation mechanism.

Competition among pipelines for existing customers and new customers may exist in regional markets. Regional competition can be an important complement to regulation and its importance has been recognized by Congress, the courts and the natural gas industry. The potential for this competition should be preserved to the greatest extent practicable. Several problems associated with the operation of an Alaskan natural gas transportation system arise because of potential effects on this regional competition.

Equal access to the transportation system, as well as other competition rules, would be required if producers are permitted to participate in the Alaskan natural gas transportation system. Moreover, even where producers are not owners, equal access to a transportation system retains some importance as a means to preserve regional competition among pipeline companies by preventing owners of the transportation systems from denying or restricting access to other pipelines that might compete in regional markets.

Section 13(a) of the Alaska Natural Gas Transportation Act provides for equal access to a proposed transportation system. Although the Federal Power Commission interprets this provision to mean that an Alaskan natural gas transportation system must be operated as a common carrier, it is not clear this was the intention of Congress. Read literally, the statute merely provides that access cannot be denied based on ownership or the lack thereof. We believe that those facilities (pipelines, LNG facilities, etc.) constructed or utilized as an integral part of the system carrying gas to the lower 48 states should be operated as common carriers, with equal access thereto available to all purchasers and shippers of Alaskan natural gas. Congress ought to clarify the ambiguous language of existing Section 13(a) to clearly state that the Alaskan natural gas transportation system be operated as a common carrier.

Section 13(a) does not require the transportation system to implement a prorationing scheme in the event the system achieves full capacity, nor does it permit or require any government agency to order such prorationing. Such prorationing during the period of construction of additional capacity is necessary to insure no shipper may be competitively disadvantaged. To insure the equal access provided for under Section 13(a), we recommend that Congress consider granting

the Federal Power Commission authority, where gas is available in excess of pipeline capacity, to order prorationing of pipeline capacity among shippers.

It has been argued that retaining Section 13(a) may prove to be an impediment to financing. We find that Section 13(a) will not be such an impediment, since pipeline companies will be willing to invest in order to insure the construction of such a system. In addition, the possibility of receiving the substantial cash flows from the system which would result from ownership is another incentive to invest in the system.

It is likely that much of the Alaskan gas will be delivered throughout the lower 48 states by displacement rather than by direct delivery. Displacement is a process that would allow Alaska gas to be supplied to conveniently located customers of other pipeline systems that, in turn, could use their "displaced" gas to serve customers of other pipelines. Such a displacement scheme provides considerable savings and ease of delivery but also creates two potential problems. First, a transmission company could thwart the displacement plan by refusing to cooperate and displace gas to its system. To remedy this problem we recommend that legislation be enacted to give the Federal Power Commission, or its successor agency, authority to order participation in displacement programs for Alaskan natural gas.

Displacement also presents potential for anticompetitive activity because implementation of a displacement program requires pipeline companies to meet to agree upon supply reallocation. Obviously, the potential for anticompetitive agreements in the implementation of such a process exists, and almost regardless of the actual risks of such agreements being made, the public perception that such possibilities exist requires some antitrust protection.

This is not an insuperable problem. If the companies do no more than is reasonably necessary to effect the displacements, no antitrust issues should be presented. A method of insuring that no anticompetitive discussions or acts take place is to have interested government agencies monitor such meetings and to have proposed allocation plans subject to government review and approval.

An all-events cost-of-service tariff has been proposed that would guarantee to the owners full reimbursement of all costs associated with the operation of the transportation system. These costs would be passed on to the consumer. These guarantees extend to all unit transportation costs, even if underutilization of the pipeline makes the unit cost excessively high. Guaranteeing these costs would eliminate incentives for the transportation system owners to prudently determine pipeline size and propose the most efficient pipeline based upon expectations of deliverability.

The deliverability of the Prudhoe Bay reserves is unsettled and highly disputed. The forecasts vary substantially; however, 2.0 Bcf/d appears to be the most likely rate of deliverability. The producers have stated their opposition to any form of deliverability guarantee and, since gas and oil production are related, may in the future restrict or eliminate gas production in order to increase the production of higher-priced oil. With the best deliverability estimate being 2.0 Bcf/d and the possibility of less gas production, there is potential for under-

utilization of the transportation system. Underutilization will mean higher unit costs of transportation and under the proposed tariff, this higher transportation cost will be borne by the consumer. Deliverability should be carefully evaluated before a system is selected, and the high cost of constructing a system is undertaken. Further, the sizing of the proposed pipelines should be carefully evaluated, since the proposed tariff guarantees may have diminished incentives on the part of the proponents to determine and propose the most efficient pipeline size.

INTERAGENCY TASK FORCE ON ENVIRONMENTAL ISSUES

(JULY 1, 1977)

EXECUTIVE SUMMARY

ENVIRONMENTAL ISSUES

The Arctic Gas route would cross the Arctic National Wildlife Range (ANWR), which was established for the purpose of preserving its specific unique wildlife, wilderness, and recreational values. Its possible inclusion into protected wilderness status is still pending. The proposed pipeline construction activity would eliminate the impacted portion of the ANWR from wilderness status consideration.

Arctic Gas has not adequately demonstrated that they would be able to construct a pipeline from Prudhoe Bay through the Mackenzie Delta area within the proposed time frames; that their proposed mitigative measures would work as effectively as predicted; or that impacts to animal species and natural ecosystems would be short term or minimal. They have not demonstrated that their unconventional technology would work adequately in minimizing impact, or that if damage should occur, mitigative measures would be capable of restoring impacted habitat or animal populations. If the integrity of the ANWR were to be violated by the Arctic Gas pipeline, there could be a diminished degree of incentive in the future to restrict additional exploration or development in the impacted areas.

There is a continuing international cooperative effort to establish an international wildlife/wilderness reserve which would encompass the ANWR and the adjacent sensitive habitat in Canada.

The El Paso route includes both overland pipeline and ocean tanker transportation systems. A liquefied natural gas (LNG) facility in Alaska and one for regasification in California present serious potential for environmental degradation.

The proposed LNG plant at Gravina Point, Alaska would lie within a zone of very high seismicity in the Chugach National Forest. It is located on the shore of Prince William Sound where abundant commercial fisheries and other marine resources are found. An acceptable solution to the heated water discharge has not yet been proposed. El Paso has not presented baseline oceanographic studies necessary to determine if the proposed sea water cooling system is environmentally acceptable. Impacts from the proposed once-through cooling system include: (1) mortality of all living organisms trapped within the cooling system; (2) thermal shock; (3) changes in migration and feeding behavior of affected marine biota; and (4) the effect of toxic substances released in the effluent. The Environmental Task Force concludes that the proposed once-through cooling system would result in

severe damage to the marine biota, but the Maritime Administration advises that alternatives exist which could permit the LNG facility to become environmentally compatible with Prince William Sound.

The final segment of the pipeline route to Prince William Sound would cross about 33 miles of potential wilderness area in the Chugach National Forest. Although this area is recognized as a defacto wilderness, it is not considered as fragile or unique as the ANWR. The Gravina Point LNG facility would destroy at least one bald eagle nest and disrupt approximately 15 other nest sites and some winter feeding ground for the Sitka black-tailed deer.

Cape Starichkof, located on Cook Inlet, has been proposed as an alternative LNG terminal site. This alternative would avoid the defacto wilderness area within the Chugach National Forest. The route to Cook Inlet would parallel the southeastern boundary of Mount McKinley National Park and cross the Kenai National Moose Range. Seismic conditions are similar to those found at Gravina Point. The Environmental Task Force believes that further investigations of the Starichkof route and site are needed before a final choice is made between the Gravina and Starichkof options.

The proposed regasification sites would be located in southern California, an area of high seismicity. El Paso's proposed site is at Point Conception, which is a rural, grazing area; while the Oxnard alternative site is in an area already zoned for industrial development.

A unique mixture of northern and southern marine species exists off Point Conception. As proposed, the cooled water discharge from the plant would cause ecological changes in the outfall area, particularly critical to this unusual marine environment. The Oxnard alternative site does not have this unique marine community.

In addition, the Oxnard plant's chilled water discharge could be used at the Ormond Beach Generating Station to bring the combined effluent to approximately ambient seawater temperature.

The pipeline needed to connect the Point Conception regasification plant to existing transportation systems would traverse approximately 250 miles, crossing unstable soils within the Los Padres National Forest. By contrast, the connecting route from Oxnard would be approximately 50 miles long, with about 95 percent of the route following existing corridors.

The task force concludes that the Oxnard alternative site is environmentally preferable. However, pending California legislation would require a remote site for safety considerations. Only Point Conception would satisfy this requirement.

Although the Alcan route does not cross such critical environmental areas, as the ANWR and Chugach National Forest, each a de facto wilderness, there are other significant environmental concerns. Alcan's summer construction could cause unnecessary permafrost degradation. The task force believes that summer construction could be accomplished in an environmentally acceptable manner if scheduled during the spring and fall months when temperatures are near or below freezing. Such scheduling is feasible since only two to five percent of Alcan's Alaska route involves critical permafrost areas.

In northern Alaska, the Alcan and El Paso routes utilize the existing trans-Alaska oil pipeline (TAPS) corridor. They would further impact the migration route of the Central Arctic Caribou Herd and

Dall sheep near Atigun Pass, which is a critical salt lick and lambing area.

In Canada, the Alcan route would parallel the Alaska Highway through the Kluane National Park at the base of Sheep Mountain (Dall sheep area) and pass near the proposed Pickhandle Lake International Biological Program Ecological Reserve (sensitive waterfowl and moose area). The route also passes through grizzly bear denning and elk overwintering areas. Construction scheduling could avoid sensitive time periods for most of these species. The data base associated with Alcan's route is generally considered to be inadequate. Additional research and data collection are needed to define site-specific problems and appropriate mitigating measures.

All routes have the potential for impacting threatened, endangered, and protected species, including the polar bear which is a special protected species under International Treaty. Impact to these species and their habitat, after specific critical locations are identified, should be minimal along any of the proposed routes with approved mitigative scheduling and routing measures. Extra consideration should be given to protected species.

Trenching activities along Alcan's and Arctic Gas' proposed North Border route across the prairie pothole area in northern U.S. and Canada may cause drainage of potholes, and thus affect waterfowl habitat. Effectiveness of proposed mitigative measures to prevent drainage and other disturbances is uncertain.

In Public Law 93-153 (amending 1920 Mineral Leasing Act), Congress found utilization of existing corridors to be in the public interest by minimizing adverse environmental impacts due to the proliferation of separate rights-of-way. The utilization of rights-of-way in common should therefore be required to the extent practical. However, the task force believes that the environmental benefits attributable to requiring the use of common corridors must be evaluated individually.

The task force concludes that the Alcan route would make the best use of existing corridors. The El Paso route would utilize the Alyeska corridor but would establish a new right-of-way through the Chugach National Forest in Alaska and along most of the route in California. Except for the portion from Prudhoe Bay through the Mackenzie Delta, including the ANWR, the Arctic Gas route generally follows existing corridors or rights-of-way.

Each route crosses areas which are designated or proposed for designation under the Wild and Scenic Rivers Act, National Trails System Act, Land and Water Conservation Fund Act, and d-2 proposals (lands proposed for Federal designation). The task force suggests site-specific alignments be reviewed and measures taken to avoid such areas or minimize impact. Either pipeline route through Canada would impact National or Provincial designated areas and proposed International Biological Program (IBP) reserves. The Canadian government will make the decision to authorize or reject these crossings.

Water will be required by all proposals for a variety of purposes. The availability of water on the North Slope during the winter season is extremely limited. Arctic Gas and El Paso propose to work from snow roads and work pads. For this purpose alone, the task force believes that a reasonable margin of water is available. When water demands for hydrostatic testing and camp use are added, winter water

supply may be insufficient. The three applicants propose different methods for testing pipeline integrity. Arctic Gas proposes a methanol-water testing plan, Alcan proposes water testing, and El Paso proposes air testing. Among these, the potential spills of the methanol-water test medium present the greater potential for environmental threat. The task force believes that air testing would be the most preferable environmentally and should be required for all applicants where feasible.

Compressor stations, LNG and regasification facilities, and tankers will all emit air pollutants. These emissions generally appear to fall within the allowable Federal air quality standards. They will also be required to comply with State air quality degradation laws.

Numerous archaeological and historic sites may be encountered along any of the routes; therefore, a comprehensive survey/salvage program is necessary for their protection. The Arctic Gas route has the greater potential for impacting cultural resources than either the El Paso or Alcan route.

Any of the three pipelines would accelerate a perhaps inevitable change in Alaskan native lifestyles. The Alaska Native Claims Settlement Act and construction of the Alyeska pipeline have already promoted the trend toward a mixed cash and subsistence economy. The El Paso and Alcan routes would affect a greater number of native villages than the Arctic Gas route, but these are along the Alyeska corridors where native life styles have already been impacted. Although the Arctic Gas route passes near the native village of Kaktovik in an undeveloped portion of northern Alaska, the native lifestyles have already been affected by the nearby DEW line (Defense Early Warning) sites. Native lifestyles would continue to change even in the absence of any of these projects; however, construction activities would accelerate the rate of change in native villages along the route.

We concur with the conclusions reached by the FPC in their "Recommendations to the President" and with the FPC Staff that each of the three pending proposals will have some adverse environmental impacts. If the Alaska gas is distributed on an equitable basis to the 48 States, the task force does not believe that the decreased air pollution in the lower 48 States as a result of Alaska natural gas being available will offset the environmental degradation resulting from the construction of a natural gas transportation system. The task force therefore concludes that a "no action" alternative would be environmentally superior.

However, if the Alaska gas were allocated to maximize air quality benefits the construction of a gas transportation system could be environmentally preferable from the standpoint of public health. It could displace 1 quadrillion Btu's/year of coal and could concentrate air quality benefits in select air quality control regions. It should be noted that the feasibility of this allocation scheme has not been demonstrated. An analysis of the pricing and distribution aspects of this scheme would have to be conducted.

The task force also concurs with the FPC Commissioners and the FPC Staff that, of the three proposed routes, Alcan's appears to promise the least environmental impact if proper mitigative actions are taken. This conclusion is based on the Alcan route's avoidance of: (1) the undeveloped area from Prudhoe Bay through the Mackenzie

Delta, including the Arctic National Wildlife Range and (2) the Chugach National Forest, both of which are de facto wilderness areas; and (3) thermal and chemical pollution from the LNG sites in Alaska and California. In addition, Alcan makes the best use of existing transportation corridors.

The task force finds environmental impacts which would result from the Arctic Gas and El Paso routes to be different in nature, but comparable in magnitude. It is therefore difficult to rank the two systems strictly in terms of environmental impacts. However, it is our conclusion that the El Paso route would impact the environment less, on balance, than the Arctic Gas route. This conclusion is based on: (1) El Paso's avoidance of the Arctic National Wildlife Range and the Mackenzie Delta area (although it still does cross the Chugach National Forest); (2) the assumption that thermal and chemical pollution of the marine environment at the LNG sites in Alaska and California can be properly controlled through design modifications; and (3) the utilization of existing corridors, except for the approximately 40 miles in Alaska and most of the route of California.

The task force believes that the Arctic Gas route has the greatest potential for causing adverse environmental impacts. This conclusion is based on: (1) the crossing of the Arctic National Wildlife Range and the Mackenzie Delta area (although the route does not cross the Chugach National Forest and does not have the LNG siting problems); (2) the lack of permanent access along the North Slope for making summer repairs, should they be necessary; and (3) greater risks due to the distance to be traversed in the fragile Arctic. Finally, the creation of a new transportation system or corridor through this relatively undeveloped portion of Alaska and Canada would create environmental impacts which cannot be totally mitigated. The rest of the route generally follows existing corridors and rights-of-way.

TERMS AND CONDITIONS AND FEDERAL ORGANIZATION

The Federal Power Commission's "Recommendation to the President" found that formulation of specific terms and conditions was premature until a route has been selected and more detailed resource information is available. The FPC Recommendation made some tentative suggestions on the organization to administer terms and conditions and included a number of illustrative terms and conditions.

The FPC Recommendation did not adequately address the process by which all environmental concerns and resources may be considered government-wide (Federal-State-local) during the preparation and subsequent administration of terms and conditions.

The task force proposes continuation of the previously established Federal interagency group to work on terms and conditions. It also proposes environmental guidelines and a schedule which the group (supplemented by State agencies) could use in preparation of terms and conditions and development of the organization(s) to administer them.

REPORT ON CONSTRUCTION DELAY AND COST OVERRUNS

EXECUTIVE SUMMARY

Objective

The object of this report is to review the analysis and findings of the Federal Power Commission (FPC) in their Recommendation to the President: Alaska Natural Gas Transportation Systems with respect to the potential for schedule delay and cost overrun. The Commission's Findings are not fully specified, but a reasonable interpretation is presented on the following page and contrasted with the Lead Agency Findings.

Findings

This Lead Agency Report prepared by the Department of the Interior and the Department of Transportation generally agrees with the Commission's relative ranking among the projects with regard to the possibility of cost overrun and construction delay but differs sharply with respect to the magnitude of the overruns. The Federal Power Commission examined a number of sources of overrun and delay but they seemed to consider these in isolation; they did not fully evaluate the contribution of these sources collectively and interactively to their overall cost and time requirements for completing a long-term, complex construction project.

	Arctic Gas ¹	Akan	El Paso
FPC findings: ¹			
Direct cost ²	\$ 6,783	5,781	5,588
Total cost (includes financing) ³	\$ 8,147	6,761	6,571
Full gas flow realized	(7)	(7)	(9)
Potential cost overrun (percent) ⁴	5	5-10	7-10
Potential delay (months) ⁵	12	9	0
Net national economic benefit ^{6,10}	-7,122	7,652	5,798
Cost of service (dollars per mcf) ¹¹	1.72	1.79	2.09
Lead agency findings: ¹			
Expected direct cost overruns ^{7,11}	\$ 2,506	1,864	1,736
Percent	37	32	31
Expected direct costs ^{8,12}	9,289	7,645	7,324
Expected total cost overruns ⁹	\$ 4,317	3,159	2,775
Percent	53	47	42
Expected total cost ¹⁰ (includes financing) ³	12,464	9,920	9,328
Expected schedule delay (months)	20	17	15
Expected full flow date ¹⁴	(13)	(19)	(17)
Expected net national economic benefits ^{6,10}	3,311	4,825	3,908
Expected cost of service (dollars per mcf) ¹¹	2.15	2.09	2.26

¹ All values in 1983 prices, assumed January 1978 go-ahead.

² Arctic Gas costs include Canadian share.

³ Millions of dollars.

⁴ U.S. share of Arctic direct costs is \$5,621,000,000; U.S. share of Arctic direct cost overruns is approximately \$2,000,000,000.

⁵ U.S. share of Arctic total costs is \$6,729,070,000; U.S. share of Arctic total cost overruns is approximately \$3,432,000,000.

⁶ June 1983.

⁷ January 1983.

⁸ November 1983.

⁹ No NNEB or cost of service calculations are available based on these values.

¹⁰ Present value discounted at 10 percent.

¹¹ Includes \$1 per mcf wellhead price of gas, 20 yr average.

¹² The expected value is the mean or "average" of the estimated probability distribution.

¹³ An upper bound, or "worst" case, may be estimated by adding 3 standard deviations to the expected value: Arctic Gas—\$14,300,000,000, Akan—\$11,200,000,000 and El Paso—\$9,500,000,000. The FPC estimate may be considered a reasonable lower bound.

¹⁴ Both El Paso and Akan have partial, but substantial, gas flows occurring 6 to 10 mo earlier.

¹⁵ March 1985.

¹⁶ July 1984.

¹⁷ February 1985.

The FPC estimates range from 5 to 10 percent cost overruns for the proposals; this Report estimates direct cost overruns for the various proposals ranging from about 30 percent to about 40 percent; moreover, this Report finds that overruns on total costs including financing (allowance for funds used during construction) may range from 40 to 55 percent. The Commissioners have estimated potential delays ranging from 0 to 12 months; this Lead Agency Report anticipates delays ranging from 15 to 17 months.

This Report indicates the Arctic Gas proposal to contain the greatest uncertainty, while the Alcan and El Paso proposals contain less. Taking expected cost overruns and construction delays into account, the report finds that the Alcan proposal has the earliest expected delivery date and the least total cost, El Paso the next earliest delivery date and higher total cost, and Arctic Gas the latest delivery date and highest total expected cost.

Procedure

These estimates were arrived at on the basis of joint estimates of expected cost overruns and schedule delays by independent analysts familiar with each of the three proposed transportation systems and the Trans-Alaska Pipeline System. The FPC estimates are plausible but optimistic engineering estimates, while those presented here recognize that few major construction projects achieve the planned performance, cost and schedule goals. These estimates should be considered "expected value" estimates. It should be noted, that the results presented here do not indicate that a natural gas transportation system is uneconomic.

Other independent analyses, including the FENCO, Inc. risk analysis of Arctic Gas and Alcan for the Canadian Ministry of Energy, Mines, and Resources, the Resource Planning Associates, Inc., risk analysis of all three proposals for the Environmental Protection Agency, and the Department of Interior Report to Congress under Public Law 93-153 have concluded that all the applicants, but particularly Arctic Gas, are quite optimistic in their proposals. The major uncertainties that the FPC failed to assess realistically are highlighted below.

Construction and Productivity

The Commission concluded that Arctic Gas and El Paso have proposed "reasonable" construction programs while questioning the Alcan estimates of productivity. This report finds that Arctic Gas has seriously underestimated the economic costs of construction during the arctic winter, El Paso has also overestimated winter pipeline construction productivity and underestimated potential problems on the complex liquefaction plant. Alcan has overestimated the productivity of its rapid summer construction program, particularly because of the difficulty in supplying the skilled manpower necessary.

Snow Roads and Work Pads

The Commission has concluded that the proposed use of snow roads and snow work pads is a "feasible" arctic construction technique. This report finds that the economic feasibility of these techniques is extremely uncertain. The FPC hearing record indicates substantial controversy over even the technical feasibility. The record further indicates less than complete agreement on the availability of adequate snow and

water, particularly on the North Slope. The economic costs of a construction program relying on snow roads and snow work pads at the scale proposed by Arctic Gas—and to a lesser extent by El Paso—are very uncertain. There is no equivalent experience available; the concept has never been tested on a comparable scale. Alcan's construction plan avoids this risk since it relies on summer and conventional winter construction.

Construction Logistics and Transportation Corridors

The Commission found no substantial logistical problems for any of the applicants, nor did it emphasize any substantial advantage for a particular system because of its corridor. This report finds, to the contrary, that logistical problems beyond those anticipated by the applicants are highly probable.

Alyeska experience indicates that it is virtually impossible to fully predict all requirements in advance and that supporting large scale construction efforts in remote regions of the arctic is extremely difficult. It is clear that alternatives and flexibility are essential for cost and schedule control—two elements limited in the Arctic Gas logistic plan. Arctic Gas must rely on a logistics system that is very seasonally oriented—use of snow roads in the winter and shipping on the Mackenzie River in the summer. Both El Paso and Alcan propose routes having access to virtually all weather transportation systems and other existing infrastructure.

Seismic Design

The Commission found that El Paso has an incomplete seismic design but that adequate time had been provided in the pre-construction schedule to complete the design at "some increases" in cost. The conclusion of this report is that the incomplete design work for the liquefaction plant at Point Gravina leaves substantial uncertainty in both cost and schedule. The record indicates substantial controversy regarding what design factors are acceptable, and there is little experience in designing large scale LNG facilities for a high degree of seismic protection. El Paso is judged to have underestimated the complexity of meeting stringent seismic standards, while neither Arctic or Alcan have a significant seismic problem.

Frost Heave/Thaw Settlement

The Commission concluded that there is "... no doubt that an adequate solution can be found..." although with "... sufficient expenditure of design, time and capital". This report concludes that the applicants may well have substantially underestimated the required design, time and capital.

The exact nature of the technical solution to frost heave/thaw settlement is still an unknown; some experts believe that portions of a gas line may have to be elevated. The economics of an as yet unproven solution are extremely difficult to estimate, particularly if it involves a relatively complex technology (e.g., electrical heating or buried supports).

Project Management and Scheduling

The Federal Power Commission did not address itself specifically to the question of management and scheduling although it did conclude that Arctic Gas and El Paso had presented reasonable programs for

executing feasible projects. This report finds project management and scheduling to be a crucial element in completing any of these large, complex, and remote projects in a timely and economic manner. The Alyeska experience is replete with situations where a problem in one area spilled over into other areas. All of the proposals contain large numbers of interactive elements for which a difficulty with one activity will adversely affect progress on another—resulting in possible delays. All of the projects contain a number of techniques which are relatively unproven in regular commercial application. The projects, through sheer magnitude, will draw on both labor and vendors having limited previous experience in this work.

Institutional Uncertainties

The FPC generally concluded that the applicants had allotted sufficient time during their pre-construction and construction phases to allow for resolution of a number of institutional issues. This report finds that several institutional issues pose major problems for the applicants, with substantial probability for schedule delay and cost overrun. Joint U.S.-Canadian decisions for Arctic Gas and Alcan have the potential for causing delays. Site selection and approval for El Paso's regasification terminal in California may cause some delay. Final right-of-way determination for all applicants is currently on an uncertain schedule. Governmental stipulations, regulations, and permits during construction by any applicant could cause construction delays. Finally, resolution of Canadian Native Claims is likely to cause significant delay for Arctic Gas and, to a lesser extent, Alcan.

Other Large Scale Construction Project Experience

Studies by Professor Mead and others indicate that the ability to accurately forecast the cost of large complex construction projects is very limited. Examples of such evidence are numerous and include Trans-Alaska Oil Pipeline (TAPS), North Sea Oil production, Trans-Peru Pipeline, METRO and Canadian Olympic facilities. These studies indicate that for construction projects involving long construction periods, new technology applications, extensive geotechnical work, and activity in remote areas, costs and schedules substantially beyond those estimated have almost always occurred and are likely to occur in the future.

Probably the most comparable projects is the TAPS project. An early, reliable cost estimate is considered to be the May 1974 estimate of \$4.088 billion. In June 1975, a final, detailed estimate was made at \$6.375 billion and now, only two years later, the final cost is expected to be at least \$7.815 billion—a 23 percent overrun, excluding financing. In comparison, this Report estimates 30 to 40 percent cost overruns, excluding financing, for projects 4 to 7 years away from completion.

Operating Risks

This Lead Agency Report finds uncertainties and their economic impact to be less significant during the operating phase than during the pre-construction and construction phase. The risks of flow interruption and cost overruns during operations is greatest for El Paso because of its complex nature and seismic risk (a major earthquake in the vicinity of the liquefaction site could cause interruption of weeks to more than a year) while both Alcan and Arctic Gas are considered low risk.

REPORT ON SAFETY AND DESIGN

I. SUMMARY

A. Introduction

The safety and design issues in the Alaska natural gas transportation system relate primarily to how a recommended system should be designed, constructed, and operated, and to a lesser degree, where such a system should be located. This report discusses the relative safety and design merits of the three alternatives considered in the Federal Power Commission (FPC) Recommendation to the President, May 1, 1977.

Each of the three systems proposed for transportation of natural gas from Alaska presents new challenges in design, construction, and planned operation. Information in the record detailing the applicants' approaches to meeting these challenges is exhaustive and much of it has been tested for accuracy by examination, rebuttal, and argument before the FPC and by its staff. In this report, the interagency participants who analyzed the FPC Recommendation and other relevant material discuss the principal concerns which remain to be decided relative to the safety and design of an Alaska gas transportation system and make their own recommendations on these matters.

The Department of Transportation (DOT) was lead agency in preparation of this issue report. Personnel from Departments of the Interior, Commerce, Federal Energy Administration, Energy Research and Development Administration, and the Environmental Protection Agency participated in review and analysis of the safety and design issues.

B. Conclusions

The safety and design issue interagency task group concludes, as did the FPC, that each of the systems, assuming proper design and construction, can operate safely and reliably. Although there are special technical problems peculiar to each of the systems which cannot be resolved at this time, it is incumbent on those Federal officers or agencies who are responsible for assuring pipeline safety to do all that is necessary to ensure, before initial operation, that the selected gas transportation system is designed and constructed in a manner consistent with Federal safety standards. Additional attention will need to be devoted especially to potential problems which may arise from the operation of the pipelines at high pressures and transporting chilled gas in discontinuous permafrost as well as the specific technical innovations present in liquefied natural gas (LNG) processing and storage in an active seismic area.

C. Safety

1. The principal element relative to safety for each of the three proposed pipeline systems is the type and design characteristics of the

pipe used in that system. Arctic Gas and Alcan plan to use high strength X-70 grade pipe for which a reference specification is not presently incorporated in the Federal gas pipeline safety standards. El Paso's proposed X-65 grade pipe is included in the standards. Planned operating pressures for Arctic Gas (1680 psig) and El Paso (1670 psig) are high by current industry practice; Alcan plans to operate at a more conventional 1260 psig; and each pipeline would be buried in permafrost areas and carrying prechilled gas. These design proposals present the problem areas which FPC has identified, i.e., frost heave, pipe metallurgy toughness, crack arrestor installation, pressure testing, and valve design—and for which the interagency group has developed solution approaches.

2. El Paso's proposal for pipeline transmission of gas across Alaska and marine shipment to California by tanker as LNG calls for decisions to be made about location of the LNG processing and storage facilities which will assure their safety in active seismic areas. Much discussion still surrounds the specific locations of El Paso's LNG facilities in southern Alaska (Gravina Point or Cape Starichkof) and in California (Point Conception or Oxnard). There are advantages and disadvantages in each proposed site and also a recognized need for further study and refinement of design on a site specific basis. California and Alaska State officials, too, have a major role in the LNG plant siting decision. The interagency group believes that those doubts do not preclude consideration of the pipeline LNG tanker proposal, but much work remains to be done both at the Federal and State levels to facilitate LNG plant site construction.

3. There are significant differences in the approaches each of the applicants would use in solving the problem of frost heave that pipelines can experience when buried in areas of discontinuous permafrost. Each will have to be adapted for the particular conditions encountered on a site-specific basis. Given the time to finalize route survey, field testing to determine soil conditions, and engineering design capability, each of the applicants should be able to solve the problem, although costs for doing so may vary.

4. Federal pipeline safety standards require that pipeline systems be pressure tested before initial operation. The three applicants propose to meet this requirement in different ways. Arctic Gas and Alcan plan to use a hydrostatic test; Arctic Gas would prevent freezing of the test water in permafrost areas by addition of methanol, and Alcan would prevent the test water for this purpose. El Paso would use air as a test medium and thus keep water out of the line. Each proposal has its advantages and disadvantages. Hydrostatic tests permit higher pressure test levels than air testing under the U.S. standards and similarly would permit higher operating pressure under the Canadian standards. Also, the higher hydrostatic test pressure increases the probability of locating pipe defects prior to placing the pipeline in service. The Arctic Gas plan to use a water-methanol mixture presents environmental concerns relating to proper disposal and the effects of spills in the event of test failures. Alcan's plan to use heated water requires precise control to prevent freezing of water in the pipe. Also, heated water could cause degradation of frozen soil surrounding the pipe. Air has environmental advantages, but has limits in providing the highest degree of safety while testing the pipeline.

5. Each of the transportation systems can be adequately maintained, although permafrost soils and remote Arctic areas will require thorough advance planning and specialized equipment. This will be particularly true for the northern-most portions in the continuous permafrost tundra areas. Seismic factors may affect the repairability of a system, but proper design for seismic effects would be the primary means of assuring the safety and reliability of the LNG facilities or a pipeline crossing active faults. Further site specific designs, based upon geotechnic survey and test data, need to be refined to complete the design of the LNG plant and sections of either the El Paso or Alcan line which cross active faults. Testing to confirm presence of bedrock at the Gravina Point site selected by El Paso would be necessary should that proposed system be recommended.

6. In the design of the all-pipeline systems, there will be a need to coordinate specific U.S. and Canadian standards to achieve compatibility in construction, inspection, maintenance, and operation, and thus assure dependability of service.

D. Efficiency

We concur, in general, with the FPC view that natural gas could be delivered and successfully marketed in the U.S. by any of the three proposals. However, there is a significant difference in the efficiency of each system based upon the quantity of gas needed to operate that system. The need to convert the gas to LNG and revaporize it gives a significant efficiency advantage to an all-pipeline system.

E. Potential Service Disruption

The FPC concluded that it is highly probable that each of the three systems can be operated with a reliability acceptable to the gas consumers of the United States. There is some concern about the possibility of a major Alaska seismic event disrupting delivery through the El Paso system. While this cannot be ruled out, we believe that the risk potential for such a disruption is very low. With regard to pipelines, their continuity of service is by far the best of any mode of transportation in the United States, and we believe the Canadian experience is comparable.

F. Expansion of Systems and Design Flexibility

Given the Arctic conditions and terrain, design flexibility and capability of expansion for the proposed systems can be provided best at the initial design stage of the pipeline. This may be done by increasing the diameter of the pipe to permit greater flow capacities and/or increasing the wall thickness or strength of the steel to allow higher operating pressures. Cost of increasing capacity by looping, (placing new pipe parallel to an existing one), a standard procedure in the lower 48, would be virtually prohibitive in the Arctic.

The Arctic Gas and Alcan are all-pipeline systems, and additional capacity may be provided at lower unit capital cost than for the initial capacity. However, for the El Paso combination pipeline and LNG tanker system, cost for additional capacity would increase roughly in proportion to the original unit cost. Arctic Gas and Alcan, utilizing the large diameter pipe with excess capacity, could expand by the addition of compressor horsepower alone. However, El Paso's additional capacity would require process plant additions and additional tankers for the marine leg.

G. Capability of Transporting Other Gas Reserves

In addition to known Prudhoe Bay gas reserves, each of the systems could have future access to reserves developed in the Beaufort Sea, the National Petroleum Reserve in Alaska, or from the Arctic National Wildlife Range. Only the Arctic Gas system would have the capability to transport gas from the Mackenzie Delta or offshore in northern Canada. The El Paso and Alcan systems, with short connecting lines, could transport gas from either the central Alaskan basins, or from the Gulf of Alaska. While the central basins are not considered to have a large gas reserve potential, the Gulf of Alaska could contain considerable gas reserves.

H. FPC Summaries of Evidence and FPC Conclusions on Safety and Design

We have no disagreement with the way FPC summarized evidence and positions of interested parties as they were presented in the FPC Recommendation to the President with regard to safety, design, efficiency, and flexibility. Nor do we have significant differences or criticisms with the way the FPC developed its conclusions.

I. Other Factors for Possible Presidential Consideration

While we do not have additional details with regard to their impact, there is a possibility that reductions in existing gas pipeline system load factors could place detrimental financial effects on some existing gas pipeline systems as a result of the new Alaska natural gas transportation. This would deserve study of cost and economic elements in other issue reports to determine the possible effects upon safety and maintenance of systems already in place. Additional attention also needs to be given to effective monitoring of a gas transportation system as extensive as any of the three proposals.

J. Terms and Conditions

There are a number of significant problems identified in the Terms and Conditions as presented in the FPC Recommendation to the President which will require further definition and clarification. These include, for example, (1) applicability of Terms and Conditions to that portion of the pipeline system in the lower 48 States; (2) Federal Inspector's role in enforcing compliance with the Terms and Conditions; and (3) conflicts of jurisdiction between Federal agencies.

II. PIPELINE AND MARINE SAFETY

A. Introduction

The design, construction, operation, and maintenance of any Alaska natural gas pipeline and LNG terminal facilities must meet the Federal gas pipeline safety standards contained in 49 CFR Part 192; the reporting requirements of Part 191; and with respect to the LNG facility, possibly Part 193, a new part for which an Advance Notice of Proposed Rulemaking was recently issued by the Department of Transportation.

All three applicants plan to utilize advanced technology in the design, construction, and operation of the gas transportation systems proposed, and doubts have been raised as to their ability to comply

with applicable Federal gas pipeline safety standards. In potential noncompliance situations, the operator of the proposed system must change design plans, petition DOT for rulemaking action to modify the regulations, or request a waiver from those regulations providing data to support such a waiver and assure pipeline safety. While we concur with the FPC Recommendation conclusion that "each of the systems can be constructed basically in the manner proposed with the qualifications and conditions contained in our report" . . . "and each of the systems should operate reliably once service begins" (page 4, paragraphs i and j), we have several concerns regarding system safety and design.

REPORT ON NATIONAL ECONOMIC BENEFITS

The FPC "Recommendation to the President" compared the three alternative systems against two criteria:

Net national economic benefits—a measure of the discounted benefits and costs of the projects.

Cost of service—a measure of the cost of delivering natural gas to consumers (including an assumed wellhead price of \$1.00 per MCF).

All systems had substantial net benefits (from \$5.8 billion to \$8.2 billion) and a cost of service that was judged competitive with alternate fuels (a high of \$2.26 per MCF).

Alcan and Arctic had the highest net benefits and a lower cost of service than El Paso.

This Task Force report examines the sensitivity of the FPC findings to different discount rates, cost overruns, and schedule delays and calculates new employment impacts.

The new findings using the expected values for overruns and delays indicate that all of the systems still have positive net benefits (\$3.3 billion to \$4.8 billion) although reduced from the FPC levels and have increased costs of service (a high of \$2.50 per MCF) which are still competitive with alternative fuels.

Alcan has the highest benefits with El Paso second. The rank changes because El Paso was judged to have a lower likelihood of substantial overruns. El Paso remains with the highest cost of service.

A sensitivity analysis shows that net benefits will be reduced to zero if either of the following occurs (assuming a discount rate of 10 percent and constant real gas prices):

a construction delay greater than four years;

construction cost increases of more than 100 percent; and

a reduction in throughput from 2.4 BCFD to less than 1.2

BCFD.

El Paso has claimed large relative employment impacts for the El Paso system (730,000 person years versus 235,000 person years for Alcan). This report finds that the relative differences between systems are considerably smaller (271,000 person years for El Paso versus 240,000 person years for Alcan).

TABLE A.—EFFECT ON NNEB OF EXPECTED PROJECT COST OVERRUN AND SCHEDULE DELAY¹

[In millions of 1975 dollars]

	Arctic			El Paso			Alcan		
	13 percent	10 percent	6 percent	13 percent	10 percent	6 percent	13 percent	10 percent	6 percent
Value of gas ²	7,297	11,056	20,557	7,076	10,551	19,167	7,856	11,649	21,017
Less:									
Field gathering and conditioning.....	858	961	1,124	858	961	1,124	969	1,057	1,192
Field O. & M.....	22	34	64	25	37	67	24	37	67
Transportation facilities.....	4,762	5,503	6,733	3,780	4,361	5,318	4,113	4,701	5,666
Working capital.....	13	15	19	28	34	43	23	28	36
System O. & M.....	166	251	469	538	892	1,458	169	253	463
U.S. other taxes.....	110	154	250	325	449	716	172	235	368
Canadian income taxes.....	503	775	1,440	0	0	0	228	352	657
Canadian other taxes.....	13	53	82	0	0	0	107	162	299
NNEB.....	827	3,311	10,366	1,522	3,908	10,441	2,051	4,825	12,265
Base case ³	4,125	7,298	15,379	3,056	5,800	12,859	3,968	7,113	14,974

¹ Derived from computations detailed in the report of the cost overrun task force.² Assume no growth in unit value of natural gas.³ Working group base case as shown in table IV-1.

TABLE B.—ESTIMATES OF DELIVERED COST, NATIONAL AVERAGE

[Per million Btu in 1975 dollars including an illustrative price of \$1 at Prudhoe Bay and for gas fuel]

	20-yr simple average ¹	Levelled average ²
Arctic Gas: ³		
Applicant costs ⁴	1.72	1.87
Expected value case.....	2.09	2.32
Worst case.....	3.11	3.61
Alcan: ⁵		
Applicant costs ⁴	1.79	1.95
Expected value case.....	2.09	2.33
Worst case.....	2.96	3.39
El Paso: ⁶		
Applicant costs ⁴	2.09	2.26
Expected value case.....	2.76	2.50
Worst case.....	2.78	3.14

¹ Average calculated over 1st 20 yr of flow including years of partial flow except for "applicant cost" case. Here 1st 20 yr of full flow was used.² Flows: Prudhoe Bay, 2.4 B ft³/d; Mackenzie Delta, 1 RR³/d.³ Taken from submittals to the Federal Power Commission.⁴ Flow: Prudhoe Bay, 2.4 B ft³/d.⁵ Flow: Prudhoe Bay, 2.36 B ft³/d.

TABLE C.—TOTAL JOBS GENERATED BY DIRECT AND INDIRECT EXPENDITURES

	El Paso	Alcan	Arctic
1977-78.....	1,850	1,700	0
1978.....	7,150	17,450	21,350
1980.....	80,600	65,500	31,250
1981.....	100,950	92,250	62,850
1982.....	64,550	59,000	67,200
1983.....	15,550	150	22,150
1984-85.....	0	4,400	5,950
Total.....	270,650	240,450	210,750

REPORT ON SUPPLY DEMAND AND ENERGY POLICY

EXECUTIVE SUMMARY

This report combines two working group reports: one on supply of, demand for and cost of Alaska gas,¹ and a second on the relationship of an Alaska gas transportation system project to the President's proposed National Energy Plan (NEP). The first chapter presents a detailed supply-demand analysis of an Alaska gas project by itself, and is an extension of a comment on the findings of the Federal Power Commission (FPC).² Chapter II considers an Alaska gas project in the context of the NEP. The third chapter discusses alternative uses of the Alaska gas resource in the event that none of the proposed transportation systems is determined to be in the national interest.

The FPC found that the Prudhoe Bay Oil Pool contains 22.2 to 23.7 tcf of recoverable gas reserves (40 tcf in-place), enough to support sales of at least 2.0 bcf/d.³ They also found some possibility of increased delivery from the North Slope, and recommended that any certificated transportation system be designed to initially carry 2.0 to 2.5 bcf/d, and be capable of expansion for an additional 1.0-1.5 bcf/d. They also found that gas resources in Canada's Mackenzie Delta are only adequate to support deliverability of 1.0 bcf/d.

In this report, the United States Geological Survey of the Department of the Interior concurs with and elaborates on the FPC findings on gas production potential for Alaska's North Slope, but concludes that a lower figure, 0.6-0.7 bcf/d, is more appropriate for Mackenzie Delta deliverability. Because of the lack of field production experience, assessments of reservoir behavior involve some uncertainty. The unit production plan submitted to the State of Alaska by the Prudhoe Bay producers requests authorization for the sale of a minimum 2.0 bcf/d of gas to a pipeline, on the grounds that such sales can be made without a significant reduction in oil recovery over the life of the field. The producer's plan is based on the results of the reservoir engineering studies which indicate that gas production, accompanied by water injection, will actually increase oil recovery slightly. There is a small risk that gas deliveries from the Prudhoe Bay oil pool would have to be reduced after production has begun, but that risk is considered negligible, particularly as other reserves are available to make up any possible short fall from the main pool.

In a comparison of the effects of the three proposed transportation systems on consumption, shortages and prices, there is no overwhelming evidence that any one of the three proposed systems should be

¹ Throughout this report, the term "Alaska gas" is used to refer to natural gas from the area north of Alaska's Brooks Range, when gas production from south of the Brooks Range was intended to be included, it is specifically identified.

² "Recommendation to the President: Alaska Natural Gas Transportation Systems," Federal Power Commission, May 1, 1977 hereinafter referred to as "the FPC recommendation."

³ bcf/d: billion cubic feet per calendar day.

either chosen or eliminated from consideration. There are differences, but they are so small when compared to the uncertainties in the specification of gas distribution and transportation costs as to prevent the selection of a particular system on this basis.

As Alaska gas will amount to approximately 5 percent of total natural gas consumption at the time it becomes available, the principal impact of Alaska gas on natural gas supply and demand will be a small increase in natural gas consumption and a relatively large reduction in natural gas shortages which are expected in the absence of any other action. By reducing the potential shortage, and thus the demand for substitute fuels, the delivery of Alaska gas will cause oil imports to be less than if no delivery system were constructed.

The delivered price of Alaska gas could be higher than the FPC's estimate of the market value price if: (1) the FPC established a field price that was greater than about \$1.50 in 1985 or about \$2.00 in 1990 (both in 1975 dollars); (2) project cost overruns were such that a fixed field price plus the escalated transportation costs exceeded market value; or (3) cost overruns were such that, under a formula pricing approach, the transportation cost plus the minimum field price exceeded market value. With continued price regulation and rolled-in (average cost) pricing, delivered prices in excess of market value would probably not change the basic conclusion that when significant shortages exist, Alaska gas would be accepted and would increase total consumption by satisfying the demand of industrial customers.

Under rolled-in pricing, the effect of Alaska gas on the average interstate city gate (wholesale) price can be analyzed to determine the marketability of Alaska gas. If we assume that large scale industrial fuel switching may take place only when the average price of gas reaches the price of substitute fuels, such as distillate fuel oil, Alaska gas (as a relatively small portion of total supply) could reach extremely high prices before encountering marketing problems. An analysis of the weighted average city gate price for the Nation and for FEA Region V (6 Midwestern States), which receives a large portion of the Alaska gas, suggests that the Alaska gas delivered price would have to be in excess of \$10/mcf before either the national or regional average price reached parity with distillate.

Under an incremental pricing scheme, which would allocate higher priced gas to lower priority users (the industrial sector), the factor determining the maximum price of Alaska gas will be the nature of the industrial sector demand for gas. Under this pricing scheme, Alaska gas would most likely be competing with other incremental gas, such as imported LNG, in order to serve higher priority industrial customers, rather than with other fuels, such as distillate. The price of incremental LNG in 1985 has been estimated at \$3.70/mcf and in 1990, \$4.50/mcf. These figures probably represent the lower end of a range of prices at which Alaska gas can be marketed, with the upper bound determined by the characteristics of the industrial sector demand.

The FPC recommendation concludes that any decision as to the need for additional new facilities for delivering Alaska gas to the Western States (a Western leg) be deferred for one to two years. This deferral will not delay delivery of gas to the Western States, since the lead

time for construction of the entire pipeline is two to three years greater than that for a Western leg. Moreover, sufficient information is still not available to make an informed judgement as to the extent of idle capacity that may occur in the future on existing gas importation systems as a result of changes in the level of gas exports from Canada. This task force finds no reason to differ with the FPC recommendation on the issue of construction of a Western leg.

A method of distributing Alaska gas within the lower-48 States, known as displacement, has been proposed. By this method, natural gas from existing lower-48 deposits would be rerouted using systems which are, to a large extent, already in place, thus reducing both the time required to effect delivery and the funds required to build a transportation system. Available pipeline capacities in the lower-48 appear to be sufficient to deliver Alaska gas by displacement. Actual physical capacity is not the problem, even if proposed Mexican imports are included in estimates of supply. The real issue in displacement is cost-sharing; as gas shipments change as a result of displacement, the average cost of service to customers will change depending on the magnitude of the change in shipments and other factors. The differential cost changes to customers of different pipelines create a problem of cost distribution directly related to the displacement scheme. All three proposed Alaska gas systems depend on deliveries by displacement to some degree. This report concludes that these problems are manageable; last winter's experience with emergency gas deliveries by displacement confirmed that these problems can be resolved, although not without some difficulties. Special legislative authorities, similar to those granted under the Emergency Natural Gas Act passed last winter, might be helpful to resolve cost-sharing problems during non-emergency circumstances.

The NEP does not contain proposals which directly relate to delivery of Alaska gas. It does, however, propose several actions which could affect the need for this gas or the timing of its delivery by stimulating additional domestic natural gas production and by reducing industrial and utility demand. The proposed plan would stimulate additional production by allowing higher well-head prices for new production. The plan would lower industrial and utility sector demand for natural gas by extending the current mandatory program for conversion to alternative fuels, by imposing fuel use taxes on industrial and utility consumers, and by offering rebates on these gas taxes as consumers install equipment to consume coal.

We project that, in 1985, with the implementation of the NEP, there will be a temporary alleviation of the natural gas shortage. By 1990, substantial shortages reappear. Alaska gas, to the extent that it is available in 1985, will trade off against and thus reduce the level of foreign imports. It could, therefore, serve to reduce our dependence on potentially interruptible foreign sources, regardless of its impact on the gas supply and demand balances. The elimination of a gas shortage is dependent on the achievement of the NEP's objectives in the areas of coal conversion, demand reduction through conservation, and expansion of energy supplies in the lower-48 States. Alaska gas in the mid-1980's would serve as a hedge or cushion to insure that natural gas shortages do not occur even after NEP implementation.

There are additional potential gas resources that have been considered as possible hedges against shortages in the mid 1980's. These include accelerated OCS leasing schedules, coal gasification, increased imports from Mexico, unconventional sources such as Devonian shale, Western tight sands, methane from coal seams and geopressed brines, and other technological advances in resource recovery. Implementation of all of the alternatives which are price-competitive with Alaska gas, and an Alaska gas project itself, are required to close the supply gap projected for 1990.

After 1990, gas from unconventional sources should become available in substantial quantities on the assumption that depletion of conventional gas supplies will have forced prices up to levels where unconventional sources can be competitive. Large-scale coal gasification is the source which is expected to limit the price at which competing sources can be sold. Current estimates place gas from at \$4 to \$5.50 per mcf wholesale (1975 dollars), including 30 cents to \$1.00 per mcf to transport the gas to the city gate.

In 1990 and after, the market position of Alaska gas seems assured. Due to declining deliverability of lower-48 conventional gas reserves, an Alaska gas project would go from a position of one of the more expensive sources of gas in 1985 to one of the less expensive sources in 1990. The timing and nature of this transition presents a possible option to the President of delaying for a few years implementation of one of the competing gas transportation projects. The President, in reaching his decision, should carefully consider the benefits versus the possible consequences of delay.

In the event that implementation of one of the competing gas transportation system proposals is determined not to be in the national interest, there are alternative uses for the Alaska gas resource. Although conversion to methanol results in a substantial loss of the energy value of the gas, there is a large and growing market for that product in the lower 48 states, particularly in the industrial sector. Methanol delivered from the North Slope is not currently competitive with alternative sources, but it may well be before the end of this century.

Another possible use is conversion to ammonia, and urea products. North Slope production costs are naturally quite high. However, the growth in ammonia and urea production itself could absorb all North Slope annual gas production at around the year 2000.

Other gas transportation alternatives considered include icebreaking LNG tankers. There has been recent Canadian interest in using such tankers in bringing out gas from the Arctic Islands. The cost of liquefaction on the North Slope would be higher than in South Alaska, but it is conceivable that gas might be delivered to the East Coast in this manner at a cost comparable to that for East Coast delivery under any of the 3 proposed transportation system projects considered here.

REPORT ON SOCIOECONOMIC IMPACTS

PREFACE

This report is one of several written by agencies of the Federal Government on various issues pertinent to the President's decision on the alternative Alaska natural gas systems. Section 6(a) of the Alaska Natural Gas Transportation Act of 1976 specifies that the Federal agencies must submit by July 1, 1977 any information useful to the President supplementing that contained in the Federal Power Commission Recommendation of May 2, 1977.

This report contains comments on the socioeconomic impact analyses submitted to the Federal Power Commission during its proceedings, and on the Commission Recommendation itself. The purpose of the analyses in the report is to present and discuss some important factors which appear to be significant enough for consideration in the President's overall decision. Given this specific purpose and the massive amount of evidence which has accumulated in the past three years, this report is not intended to be a comprehensive review or an analysis independent of previous work. Detailed questions must be referred to documents such as the Socioeconomic Briefs filed with the FPC, the Interior Department Final Environmental Impact Statement, the Berger Inquiry Report, Judge Litt's Decision, or the Commission Recommendation.

This report was prepared by Ernest S. Ting, Office of Coastal Zone Management, National Oceanic and Atmospheric Administration at the request of Dr. Edward Miller, Acting Deputy Assistant Secretary for Energy and Strategic Resource Policy.

THE COMMISSION RECOMMENDATION, MAY 2, 1977

The Federal Power Commission's overall conclusion was that the socioeconomic impacts of the pipeline proposals "offer little guidance for the final choice among the competing applicants."¹

In the Commission's view the socioeconomic benefits from any of the three proposals are "overwhelming" and are largely independent of the exact route. The primary benefits which were identified by Judge Litt and quoted by the Commission are the large sums received by the State of Alaska in the form of royalty gas payments and severance taxes. Also among the benefits cited were revenues from property taxes, and personal and corporate income taxes. The Commission notes that these benefits will be accompanied by increased public expenditures, but claims that such expenditures will stimulate economic activity and improve the "general economic well-being of Alaska."² Nevertheless, the Commission warns that "substantial social and economic disloca-

¹ Federal Power Commission, "Recommendation to the President," May 1, 1977, p. VI-27.

² "Recommendation to the President," p. I-31.

tions" should be expected in the State of Alaska during the construction phase.³

The Commission concentrates its concern in Alaska, noting that the primary socioeconomic impacts "which are definable," especially for the United States, are in that relatively undeveloped state. For the lower 48 states and Canada increases in public revenues are cited as the principal impacts; other effects are considered minor except for the influence on the traditional lifestyle of native communities in the Yukon and Northwest Territories.

In considering the preferred route among the three systems, the Commission detailed several concerns in Alaska: population growth, employment and unemployment, cost of public services and facilities, effects on income and spending, demand for housing, public safety and recreation, and intrastate use of royalty gas. The report summary asserts that the El Paso system would create the largest impacts with "more jobs, more personal income, more property subject to tax, and more indirect economic activity . . . but would also require more social services and would probably be associated with the highest unemployment."⁴ Impacts associated with the Arctic system would be "much smaller" and the Commission states that Alcan impacts would fall somewhere in between. The FPC decision also notes the possibility that lower transportation costs associated with Arctic may produce greater royalty income to Alaska, but in its final assessment the Commission finds no compelling reason to choose one system over the others on the basis of socioeconomic impacts.

ISSUES DISCUSSED

Issues which have been identified by the Commission and interested parties include:

1. What will be the increase in population associated with each proposal? What will be the availability of housing in the affected communities for the additional population?

2. What are the public fiscal impacts of the various proposals, i.e., what are the effects on State and local revenues, and expenditures for public services and infrastructure? Will there be a strain on available public services and facilities?

3. How much additional employment will be provided by each proposal? What will be the effect on unemployment? Who will obtain any additional jobs: native residents, non-native Alaskans, or immigrating job-seekers? What are the "long-term" employment possibilities associated with each proposal, as opposed to temporary construction employment?

4. What will be the effect of each proposal on personal and corporate income, on the price of goods and services?

5. What will be the effects of each proposal on native community life-styles? What social problems might be expected to arise with the rapid growth or change of the rural villages?

6. Is the intrastate use of royalty gas in Alaska a factor in the consideration of the various proposals? If it is, how does this factor affect the evaluation of each proposal?

³ *Ibid.*

⁴ *Ibid.*, p. IV-27.

7. In terms of the distribution of benefits and costs among regions of the United States, and particularly between Alaska and the lower 48 States, where does the public interest lie? Is it in the public interest to subsidize the economic development of Alaska at the cost to lower 48 States of a higher delivered-gas price?

SUMMARIES OF POSITIONS AND EVIDENCE OF INTERESTED PARTIES

APPLICANTS

1. *Alaskan Arctic Gas Pipeline Company*

In its extensive brief, Arctic maintains that its proposal is the most beneficial to the State of Alaska since it will provide large benefits and cause the least socioeconomic cost.⁵ This assessment is based on the assertion that the major socioeconomic benefits from any pipeline project will be from severance taxes and royalties, and that such benefits are roughly equal for all three projects.⁶

Arctic further states that since its system has only a relatively short section in Alaska, and that section is in the much less accessible northern portion of the State, the impacts of the Arctic Gas System on public facilities and services will be much less than the impacts of the El Paso and Alean systems. The magnitude of the population effects is smaller, fewer communities in the State of Alaska are affected, and prospective immigration by out-of-state job seekers is discouraged by the inaccessibility and seasonal construction schedule of the North Slope.

Arctic responds to the contention that the other two proposals provide greater benefits to the Alaskan economy because of their greater lengths in Alaska by characterizing the severance tax and royalty revenues as primary in magnitude and as long-term benefits as opposed to short-term construction employment.⁷

Excerpts from the Arctic socioeconomic brief illustrate the contentions. "Compared to severance taxes and royalties, all other benefits to the state will be transitory and miniscule. (T)he importance of gas-related employment is . . . negligible . . ." Other revenues, i.e., property tax and corporate income tax revenues, are said to be small; personal income tax revenues important only for the relatively short period of construction.

The Arctic Gas System is the only proposal which would not provide the possibility of delivering royalty gas for use in Southern Alaska. Arctic discounts any benefits claimed by the State of Alaska from industrial development induced by the intrastate availability of North Slope natural gas, alleging that the State has not been able to present any solid evidence either on the basis of past experience in Cook Inlet or firm expressions of industry interest that such industrial uses will occur. In addition, Arctic notes that possibility of an exchange agreement in which Cook Inlet gas could be provided in Southern Alaska in return for North Slope royalty gas.

⁵ Brief of Arctic Gas Project on Socioeconomic Issues, p. 2.

⁶ Arctic points out that if the gas transportation costs are lowest with the Arctic system, as projected, and if wellhead prices are deregulated, severance tax and royalty income to Alaska may actually be largest with the Arctic system.

⁷ Dr. David Kreage, Tr. 33,700-33,710.

⁸ Brief of Arctic Gas Project on Socioeconomic Issues, pp. 12-13.

Arctic cites estimates that in the case of the Alyeska construction as many as 56,000 in-migrants may have entered Alaska in 1975 alone, and that 25 percent of the adult in-migrants had specific job waiting for them. These unemployed increased the public welfare burden in Alaska, and the entire growth in population caused a great increase in demand for public facilities and services. Arctic states that the large increase in demands for goods resulted in shortages and rapid price rises, and alleges that similar occurrences could be expected with the large impacts on the State of either the El Paso or Alcan route.

The following projections of peak construction—induced population increases in Alaska are mentioned by Arctic:⁹

	El Paso	Alcan	Arctic
FPC.....	24,100		3,000
DOI.....	33,300	33,400	4,800
State of Alaska.....	6,470		16,618
El Paso Alaska Co.....	3,900		
URSA (Arctic consultant).....			2,600

The large size of the El Paso and Alcan impacts is emphasized. In addition, Arctic cites an estimate that 40 percent of the Alyeska construction workers sent their paychecks out of state, a statistic which would indicate that much of the increase in per capita income during the construction phase does not remain in the State.

Arctic criticizes the impact of El Paso on small Alaskan communities by citing the El Paso projection of the pipeline—impacted population of the Cordova-McCarthy census division:¹⁰

1977	2,400
1979	0,100
1982	4,100

Once again Arctic emphasizes the strain on and costs of increased but transitory demand for public services and infrastructure.

Arctic claims that its extensive planning with the citizens of Kak-tovik, the principal village impacted by the Arctic System, will "maximize benefits and avoid dislocation."¹¹ Alcan is criticized for not having yet acted on plans to carry out similar activities.

Finally, in Canada Arctic plans to locate hiring halls in larger southern metropolitan areas, thereby discouraging migration of unemployed workers to the more fragile and rural Yukon and Northwest Territories.

2. *El Paso Alaska Company*

After reviewing the methodology behind the projections made by various parties before the Commission, El Paso goes on to state that its projections and those of the FPC and the State of Alaska all agree that the socio-economic impacts from the El Paso proposal would be greater than the impacts from Alcan or Arctic. The key to El Paso's argument is its assertion that the greater impacts reflect greater benefits to the State of Alaska.

⁹ Arctic Brief, pp. 24-26.

¹⁰ Arctic Brief, p. 45.

¹¹ *Ibid.*

After illustrating how its proposal would provide the greatest impact in terms of population and absolute employment, El Paso also asserts that it would provide the greatest impact on aggregate personal income and in-state spending, citing the FPC FEIS projections.¹²

In regard to per capita personal income, the projections of the FPC in its FEIS show a drop after the first several years of construction and operation of the project.¹³ El Paso's consultant on socioeconomic impacts alleges that this downturn can be explained as a lowering of the average as later growth in the economy increases employment in the trades and services industries, which are lower-paying.

El Paso asserts that the "revenues accruing to the State and local governments as a result of the project will exceed increased public service costs throughout the life of the project,"¹⁴ and that the improvement in financial capacity will allow those governments to provide expanded services.

El Paso also cites benefits from the availability of gas to potential consumers along the Trans-Alaska route, and claims that the natural gas pipeline construction will provide employment for some of the Alyeska workers, thereby easing the severe unemployment following completion of the oil pipeline.

The endorsement of both the State of Alaska and the City of Cordova is claimed by the El Paso applicants. The State has expressed public support based on arguments quite similar to those used by El Paso. Among the benefits cited by the Alaska Commissioner of Revenue is his estimate of an additional \$126 million in direct revenues to the State from the El Paso system as compared with the Arctic system.

El Paso cites statements by the City of Cordova, the City Manager and the president of the local Chamber of Commerce expressing support for the economic stimulus effects of the El Paso system. The statement by the City of Cordova indicates recognition of "significant and far-reaching effects on the economic, social and environmental well-being of the Cordova Community," but also expresses the belief that "the great majority" of these effects are "beneficial."¹⁵

The Cordova statement asserts that most elements of the community look forward to increased business from construction workers and "the stabilizing influence on the Cordova economy which the 300 permanent highly-skilled jobs at the LNG will provide, as well as the potential tax base which its siting on Gravina Peninsula will afford." The city also offers the following evaluation, "El Paso's Trans-Alaska Gas Project is precisely the type of controlled development needed by the Cordova community, the State of Alaska and the entire United States."¹⁶

An attorney for Chugach Natives, Inc. and the Eyak Corporation claims support for the Gravina Point terminus for its contribution to diversifying the Cordova economy.¹⁷

El Paso's final point is that since impacts will be concentrated in Alaska and particularly at Cordova, the views of the respective governments and citizens should be "determinative of the question of benefit."¹⁸

¹² El Paso Brief, pp. 9-10.

¹³ FPC FEIS, p. I-C129.

¹⁴ El Paso Initial Brief, p. 15.

¹⁵ El Paso Initial Brief, pp. 17-18.

¹⁶ *Ibid.*, p. 18.

¹⁷ *Ibid.*, pp. 19-20.

¹⁸ *Ibid.*

In its reply brief El Paso criticizes Arctic's suggestion that its lower cost of transportation may provide higher revenues to the State of Alaska, noting that such an outcome is possible only if Congress were to de-regulate the wellhead price of Alaskan gas for intrastate sale.

El Paso also responds by disagreeing with Arctic on the importance of benefits other than royalty payments and severance taxes. Population, employment and income effects are emphasized as substantial benefits to the State of Alaska.

3. Alcan Pipeline Company

Alcan describes the general economic impact of their proposed system as increasing the growth rate of the State of Alaska and directing that growth toward regions affected by the pipeline route. As concluded by other parties in similar statements before the Commission, Alcan says its system "would have a significantly greater economic impact on Alaska than the Arctic Gas proposal, but a somewhat lesser impact than the El Paso proposal."¹⁹

The following impacts are outlined in Alcan's socioeconomic brief:²⁰

(a) Addition to Gross State Product (GSP) peaks during the construction phase in 1980 at \$210 million. GSP impact is concentrated in the Fairbanks and Interior regions during construction (which is completed in 1983) and later increments shift to the Anchorage region. This regional distribution of impacts over time holds true for all of the economic impacts discussed in the brief.

(b) Additional employment peaks in 1980 at 20,278 and drops significantly immediately after completion of construction, rising gradually thereafter. Anchorage region employment is more stable than the Interior and Fairbanks region employment which depends heavily on the construction sector.

Real wages and salaries follow patterns similar to that of employment.

(c) Population impact also peaks in 1980, at 28,692, with regional distribution similar to that of employment impacts.

(d) Personal income peaks in 1980 and 1983. After 1983 the effect of the project is to lower real per capita income. The explanation for this effect is the same as for El Paso; later increments of employment are in lower-paying support services as compared with high-paying construction jobs.

(e) Impact on state revenues in 1984 and 1990,²¹ ranging from \$185 million to \$446 million in 1984, dropping after construction and increasing thereafter to a range of \$182 million to \$387 million in 1990. Local revenues behave similarly, peaking in 1984, 1984, and 1990.

State revenues are largely composed of "petroleum sector taxes and charges" during construction and "direct taxes and royalties" during operations, while increased local revenues are largely from property taxes and sales taxes.²²

¹⁹ Alcan Initial Brief, p. 4.

²⁰ *Ibid.*, pp. 2-10. Quantitative results are from an application of the MAP model by the University of Alaska ISEGR to the Alcan system, construction assumed to begin in 1978, operation in 1981.

²¹ 1990 is the last year of the model simulation.

²² Alcan Initial Brief, p. 9.

Alcan asserts that, "In the case of both state and local governments, expenditure impacts will tend to follow the same pattern as revenue impacts."²³

Regarding negative impacts of their proposal, Alcan states that "the positive benefits to the local communities and people, as well as to the state as a whole, will far exceed any negative social impacts that may occur."²⁴ The claim is made that the Alcan Project will ease the post-Alyeska transition, and that most of the communities to be affected by Alcan have already made some adjustments to accommodate larger-scale development through their Alyeska experience.

It is apparent from Alcan's brief, however, that there are a few native communities along the Alaska Highway portion of the route which certainly will be significantly affected, with a "lessening of cultural traditions" and the emigration of youth in search of high wages in pipeline employment. The most significantly-impacted communities are expected to be Dot Lake, Tanacross, Tetlin and Northway.²⁵

Benefits predicted by Alcan for native communities include additional employment, job training and the "awarding of construction-related contracts to native claims act corporations and other native-owned firms."²⁶

Finally, in Canada Alcan says benefits will be of similar nature as those in Alaska, and socioeconomic costs are minor, in part because of the use of the established Alaska Highway corridor. Regarding native claims, Alcan expresses optimism for settlement in the Yukon while expressing severe doubts about Arctic's ability to surmount native claims disputes in the Mackenzie Valley.²⁷

In its Reply Brief Alcan attacks the arguments of Arctic, asserting that (1) the benefits other than severance taxes or royalties, such as employment, personal income, other government revenues and development of the economy, are undervalued by Arctic, and (2) the transportation cost of the Alcan system is *lower* than Arctic and consequently, if there is any difference, royalties would be higher with the Alcan system.

STATE OF ALASKA

Alaska expresses its strong desire and need to develop a stable, diverse economy and "social environment," in contrast with the boom-bust cycles of previous extractive industries. The State suggests that the Commission should use as a criterion for judging the natural gas systems the "lasting contribution to Alaska's healthy growth each would make."²⁸ The Alaskan Statehood Act is even cited as containing Congressional intent to promote the independence and growth of the State economy.

The State also emphasizes repeatedly the necessity of having royalty gas for use within Alaska to promote industrial development.

Overall the State of Alaska favors a trans-Alaska route, and in particular the El Paso proposal, believing that the greater economic impacts will expand the economy to a more viable size and provide much greater revenues for expenditure on public facilities and services.

²³ *Ibid.*

²⁴ *Ibid.*, p. 11.

²⁵ *Ibid.*, pp. 14-15.

²⁶ *Ibid.*, p. 15.

²⁷ *Ibid.*, p. 18.

²⁸ State of Alaska Initial Brief, p. 3.

OTHER MAJOR RELEVANT REPORTS

INTERIOR DEPARTMENT FEIS (MARCH 1976)

In Alaska the Interior Final Environmental Impact Statement predicts beneficial effects on unemployment, but that assessment was based on the assumption that preparatory construction work would begin in 1976.

The FEIS also indicates the likelihood of "major and significant adverse impacts" from the Arctic system on the wildlife on which the native subsistence lifestyle is based. As a result the loss of traditional culture is accelerated.²⁹

In Canada the economic impact of Arctic would be largely limited to a few communities (Inuvik, Norman Wells and Fort Simpson), according to the FEIS. Employment of local labor would be over 2,000 at peak construction but perhaps only 200 in operation.³⁰

With regard to the native claims issue, the Interior FEIS states:³¹

One of the constraints in the Canadian Government guidelines for northern pipelines (Department of Indian Affairs and Northern Development, 1972) is that; "Any certificate issued will be strictly conditioned in respect of . . . the protection of the rights of northern residents, . . ." Furthermore, the stated government policy is that any decisions made concerning northern pipelines will be without prejudice to Indian land claims and treaty rights.

The extent to which land claim settlements and other legal prerogatives of local residents may determine the granting of the proposed pipeline construction permit is not clear. The attitude of the local residents, as interpreted from limited and subjective surveys, seems to range from full acceptance to complete rejection of the proposed pipeline project. Berger Inquiry—Canada (May 9, 1977 Report).

On May 9, 1977 the Report of Justice Thomas R. Berger on the Mackenzie Valley Pipeline Inquiry was released to the public. The report is an advisory document for the Minister of Indian and Northern Affairs on the social, economic and environmental impacts of a natural gas pipeline through the northern Yukon and Mackenzie Valley.

The major recommendations of the report are that (1) no pipeline should be constructed through the northern Yukon because of environmental impacts, and (2) any Mackenzie Valley pipeline should be postponed for at least ten years to allow for settlement of native claims. In addition, Judge Berger expresses his opinion that the evidence before the Inquiry indicates that the Alcan route may be satisfactory from an environmental viewpoint.

The report discusses the testimony of one thousand witnesses at thirty-five community hearings in the Yukon and Northwest Territories. Judge Berger explains the heavy dependence of native culture on the subsistence lifestyle, on unrestricted use of land for hunting, fishing and trapping, on sharing and strong community identity.

Quoting from the report:³²

²⁹ DOI FEIS (Alaska Volume), p. 293.

³⁰ DOI FEIS (Canada Volume), p. 473.

³¹ *Ibid.*, p. 486.

³² Berger Inquiry Report, pp. xxiv-xxv.

Another recent report of interest is the study of effects on the national economy. "Employment Impact of the Alternative Proposals for the Alaska Natural Gas Pipeline" by the Federal Energy Administration.

The native people insist that the settlement of native claims should be a beginning rather than an end of the recognition of native rights and native aspirations. In my opinion, a period of ten years will be required in the Mackenzie Valley and Western Arctic to settle native claims and to establish the new institutions and new programs that a settlement will entail. No pipeline should be built until these things have been achieved.

It would therefore be dishonest to try to impose an immediate settlement that we know now—and that the native people will know before the ink is dry—will not achieve their goals. They will soon realize—just as the native people on the prairies realized a century ago—that the actual course of events on the ground will deny the promises that appear on paper. The advance of the industrial system would determine the course of events, no matter what Parliament, the courts, this Inquiry or anyone else may say.

CONCEPTUAL AND SUBSTANTIVE DEFICIENCIES IN PRIOR ANALYSES

There are several general concepts or major issues which have not been adequately addressed in most prior analyses and arguments presented before the Commission. These include:

1. *Gross "Benefits" from Employment versus Net Socioeconomic Impacts.*—In the briefs of the State of Alaska and El Paso especially, the socioeconomic impact assessments fail to account for or give sufficient weight to the costs of an expanded population in terms of cost of public services, and capital and operating costs of public facilities. In addition, the question of whether Alaskan or in-migrants fill new pipeline-related jobs is crucial to the accurate measure of net benefits from increased employment.

2. *Aggregate System Impact versus Maximum Local Impacts.*—Emphasis in some of the briefs tends to be on a comparison of the total impacts of each of the three systems. It is important to give due weight to examining the impacts on individual communities, particularly native villages. In addition, the distribution problem created when the taxable property of a project is located in one community, but the public services and facilities are needed in another needs to be examined more thoroughly for each of the proposed routes.

3. One problem concerns the tendency to view the *degree* of change (in population, for example) as the sole relevant measure of socioeconomic impact on a community. Consideration of the *rate* of change might be an important factor in assessing the severity of the impacts from each of the proposals, but little attention is given to this possibility. This point is particularly relevant to the native communities. It is often said that the native economy will undergo a transformation from a subsistence basis to a wage basis regardless of whether a pipeline is constructed. It is nevertheless important to assess the rate of change as a determinant of the magnitude of impacts.

4. *Social and Cultural Problems, Native Claims.*—The briefs filed before the FPC generally focused on the narrower implications of the pipeline systems for state and local economies. The effects of any pipeline system on social and cultural concern such as alcoholism, and the tendency toward cultural breakdown in impacted native villages has not been discussed in enough detail. The entire issue of the desires of native communities and native claims has been given a cursory treatment in several socioeconomic impact discussions.

ANALYSIS

The following discussions are intended to facilitate the evaluation of the Alaska Natural Gas Transportation Systems.

1. Each of the three proposed systems will create a large amount of additional employment during construction and a generally small amount following completion of construction. Since it is unlikely that construction on a natural gas system would start soon enough to capture a large portion of the workers laid off from the Alyeska construction, a large construction work force would tend to continue the disequilibrium characteristic of the Alaskan economy.⁵³ Since it has a much smaller construction workforce than the El Paso and Alcan systems, the Arctic Gas System would have less of the effect of perpetuating large unemployment than would the other two systems. El Paso has the largest long-term operation employment in Alaska with its LNG terminal, but even that number is relatively small (300 at the terminal). Many of the unemployed from Alyeska were originally immigrants who may be encouraged to extend their stay in Alaska in hopes of obtaining a construction job if either the El Paso or Alcan route is certified. In addition, more Alaskan residents and natives will be attracted into the high-wage construction market, leaving behind lower-income but more stable, longer-term livelihoods. Unemployment following the completion of either of the two longer routes is likely to be very high. The development of enough new industry in southern Alaska to absorb the unemployed is highly speculative at this time.

2. It is generally considered in the best interests of the State of Alaska to establish a stable economy, less dependent on the large and transitory disruptions of the extractive industries, particularly oil and gas development. This transformation of the economy can be attained by reducing reliance on large construction projects, diversifying the commercial and industrial base and strengthening long-term employment opportunities. The State of Alaska proposes to accomplish this transformation with a Trans-Alaska natural gas pipeline, thereby encouraging rapid development of infrastructure to support enlarged economic activity and making gas available for new industrial uses. This strategy will work if businesses indeed are willing to make major investment in southern Alaska. If successful the State will have rapid development, but in the interim will incur major socioeconomic dislocations. The El Paso proposals would probably provide the greatest stimulus to the Alaskan economy, with lesser effects attributable to Alcan and the smallest impact by the Arctic system. Combined with the massive revenues from North Slope oil production, however, any of the systems would provide Alaska with sufficient amounts of funds to greatly expand services.

The question of whether the availability of North Slope natural gas is an important ingredient in the diversification of the Alaskan economy is unsettled for at least two reasons. There is the possibility that exchange agreements could provide Southern Alaska with Cook Inlet natural gas in trade for the state's royalty gas from the North Slope,

⁵³ The Anchor Times of May 28, 1977 reports a rise in the state unemployment rate from 14.1 to 15.5 percent during April, attributed by State Labor Department economists to Alyeska lay-offs. Another state economist is quoted as expecting 12,000 additional lay-offs (7.5% of the total state workforce) with the completion of construction.

eliminating the need for a Trans-Alaska pipeline to provide gas for industrial uses within the state. It is not clear, however, whether there are enough natural gas reserves in the Cook Inlet area to provide significant amounts of gas to the state over the next couple of decades.

Second, the potential for industrial development based on the use of natural gas is uncertain. There is only a limited amount of experience from the relatively modest petrochemical development around Cook Inlet as a guide to industry interest in Alaskan gas.

Summarizing, with regard to the royalty gas question El Paso and Alcan may have an advantage, but the magnitude of any such advantage is open to wide debate.

3. In his initial decision, FPC Administrative Law Judge Nathum Litt raised the issue of inter-regional distribution of benefits. Specifically Judge Litt addressed the question of whether it was appropriate for the Commission to consider the benefits of induced economic development for the State of Alaska in its decision on certification. Litt observed that since the transportation cost for gas delivered via the El Paso route would be substantially higher than that of alternative routes, a decision which gave positive weight to the induced development benefits implied a policy of subsidizing Alaskan economic development by forcing the lower 48 States to pay a higher delivered price for North Slope gas. Litt concluded on the basis of legal precedent that such a consideration was an inappropriate basis for a Commission decision. The President, however, has the option of including regional economic benefits in his deliberation.

4. The net revenue benefit of each of the proposals of the State of Alaska and local communities is rarely estimated in the evidence, particularly that presented by the applicants or the state. Since Alaska is largely undeveloped, even relatively small increases in population can put a severe strain on local public services and facilities. A population increase of over 30,000 in the entire state due to the El Paso or Alcan system implies very substantial public expenditures despite the fact that much of the route for those pipelines would be identical to that of Alyeska. Based on induced population and revenue projections, it appears that the *net* revenues from the three systems over the construction period might be comparable; much larger revenues associated with a trans-Alaska route such as El Paso being offset to a substantial degree by much larger public expenditures for expanded facilities and services to support in-migrants.

Of course the longer systems would also provide larger net revenues in later years of operation, after infrastructure adjustments had been made to accommodate the expanded population.²⁴

The preceding net revenue analysis is based on public revenues and expenditures for state, regional and local governments *combined*. In regard to impacts on local government fiscal conditions alone, the selective and *timely* provision of financial assistance by the State of Alaska, regional corporations or pipeline firms will be critical in avoiding the imposition of severe hardships on rural communities along any pipeline route.

²⁴ FPC FEIS, pp. I-C144-148. Arctic Initial Brief, pp. 24-26. Ginstone Associates report for Office of Coastal Zone Management, NOAA, U.S. Department of Commerce, "2nd Technical Memorandum: Per Capita Standardized Unit Costs, Current Cost Multipliers and Local Area Multipliers," pp. 1-7, 1-13.

Communities impacted by Alyeska may be able to absorb the impacts of a natural gas pipeline without severe difficulty. Along the El Paso and Alcan routes cities such as Fairbanks and Delta Junction would utilize their already enlarged capacity of public facilities and services.

Other less developed communities, e.g., Kaktovik along the Arctic route, Dot Lake, Tanacross, Ttelin and Northway along the Alcan route, and Cordova along the El Paso route, will face major challenges to accommodate the effects of nearby construction activity. Those communities which experience a pipeline-induced increase in population may face the following two fiscal problems: (1) the need for increased public expenditures arises immediately, but any property tax revenues do not materialize until later years, and (2) a community that bears the burden of public expenditures may not have taxing powers over the lands through which the pipeline passes. The most dramatic example of these problems would be at Cordova if the El Paso system were constructed. Major population impacts (a four-fold increase in two years, according to El Paso projections) and additional public expenditures associated with the LNG terminal construction would center on Cordova, but property tax revenues would be based at Gravina Point. The state may wish to arrange for a transfer of revenues to resolve the jurisdictional problem and a loan arrangement to resolve the timing ("front-end financing") problem.²⁹

5. In a number of socioeconomic analyses it is stated that the transformation of small communities, particularly native villages, from a subsistence economy to a predominantly wage-based economy will likely occur even if a pipeline is not constructed. Construction of a pipeline will increase the rate at which this transformation takes place.

Such statements, made without further qualification, fail to note the likelihood that rapid development will encourage severe social problems such as crime, family disintegration and alcoholism. Experience with industrial development in Alaska and Northwestern Canada has shown that these tendencies are present to an especially alarming degree when native populations, strongly dependent on cultural ties for personal identity and economic survival, are exposed to the radically different "modern" lifestyle. Native lifestyles, dependent on land which is unrestricted by ownership rights, are incompatible with the foot-loose and money-oriented lifestyles of pipeline construction workers.³⁰

The most sensitive native settlements which could be affected by a natural gas pipeline are probably those in the isolated northern Yukon and Mackenzie Delta along the Arctic route. Native communities along the Alaskan Highway (which is followed by Alcan) have already been exposed to development forces, and pipeline impacts would be less traumatic. Nevertheless, the certification of any pipeline would ac-

²⁹ For facilities supporting energy activities which are coastal-dependent there is currently a Federal assistance program (specifically the Coastal Energy Impact Program administered by the Office of Coastal Zone Management of the National Oceanic and Atmospheric Administration, U.S. Dept. of Commerce) to provide loans and bond guarantees to aid communities with the front-end financing problem.

³⁰ "Northern Frontier, Northern Homeland: The Report of the Mackenzie Valley Pipeline Inquiry" by Justice Thomas Berger contains an illuminating and detailed, if not entirely objective, description of social, cultural, economic, and political problems concerning native communities in Canada.

celerate the weakening of the native lifestyle and the spreading of social problems.

6. Of all the socioeconomic considerations, the most significant factor in a choice among the alternative pipeline proposals may be the Canadian native claims issue. The issue of native claims in the Mackenzie Valley and control over land uses in the region is highly charged, and settlement, viewed by many to be a prerequisite for any development, is not considered likely in the near future.

Justice Berger, in his "Report of the Mackenzie Valley Pipeline Inquiry," expresses the firm belief that:

... the native people must be allowed a choice about their own future. If the pipeline is approved before a settlement of claims takes place, the future of the North—and the place of the native people of the North—, in effect, have been decided for them.²⁷

The apparently poor chances of early settlement combined with the vehement insistence of native groups and the Berger Inquiry that any pipeline through the Mackenzie Valley be delayed until the settlement of native claims, could pose a barrier to early construction of a Trans-Canadian pipeline, especially the Arctic system.

CONCLUSION

The major conclusions are:

The decision of the Government of Canada, currently expected to be announced before the deadline for the final U.S. decision, could rule out either the Arctic or Alcan route because of the adverse effects on the cultural stability of native communities and the resulting social problems.

The El Paso system provides a somewhat greater opportunity for intrastate use of royalty gas than does the Alcan system because of the possibility of coastal industrial development with El Paso. Such additional development could provide beneficial employment and income effects.

In general both the economic development and dislocation impacts in Alaska would be greatest with the El Paso system, smallest with the Arctic system, and would fall in-between with the Alcan system.

Although the public revenue impacts of the three alternative systems would be greatest from El Paso, next largest from Alcan, and least from the Arctic proposal, the public expenditures required to serve the induced population growth also would be in that order. As a result, *net* revenue benefits during the construction period in particular may be much less than some previous analyses have implied.

The El Paso system would concentrate severe disruptive impacts on the City of Cordova, whereas the Alcan system would create significant but much smaller impacts on several native villages along the Alaska Highway.

Since there may be instances (e.g., Cordova) in which local government revenues of impacted rural communities may not cover public expenditures, the selective and timely provision of

²⁷ Berger Inquiry Report, p. xxiv.

financial assistance by the State government, regional corporations or pipeline firms may be helpful in avoiding severe hardships.

In summary, the significance of socioeconomic impacts for the overall route decision depends on the weight given to impacts disruptive of social and cultural structure as opposed to economic development considerations. If factors such as adverse effects on native communities and local lifestyles are given primary importance, the Arctic and El Paso routes would tend to suffer in a comparison with Alcan. If more importance is placed on a route which will stimulate the Alaskan economy, the El Paso route clearly has the advantage, followed by Alcan.

REPORT OF TASK FORCE ON INTERNATIONAL RELATIONS

FPC CONCLUSIONS AND RECOMMENDATIONS

The initial decision on the transportation of Alaskan natural gas, prepared by Administrative Law Judge Litt, and issued by the FPC on February 1, 1977, contains a chapter on Canadian issues. The main points of the chapter are:

Just, reasonable and non-discriminatory provincial treatment of transit pipelines is provided for under the Canadian constitution.

The applicants agree that ratification of the United States-Canada Transit Pipeline Agreement will not end negotiations with Canada.

It is assumed that early development of known hydrocarbons reserves is as important to Canada as to the United States.

It is unlikely that native claims will significantly modify the Canadian Government's energy decisions.

Arctic Gas and Alcan argued that a joint project through Canada is not dependent upon a United States-Canada treaty. However, a treaty would regularize and simplify the procedures for obtaining joint approvals.

The treaty, which spells out reasonable practices of ordinary good business, does not add substantially to the expectation that a relationship which has been historically workable will remain workable.

It is expected that amendments to the treaty will be required and made from time to time.

If a pipeline for Alaskan gas is built across Canada, it is reasonable to assume that the Government of Canada will have an interest in promoting the pipeline's economic viability.

On May 2, 1977, the Federal Power Commissioners recommended that the President select an overland transportation system through Canada, if such a route is made available by the Government of Canada on acceptable terms and conditions. In their analysis, the commissioners confined themselves for the most part to U.S. issues. Only two issues related to United States-Canadian international relations were mentioned:

In reference to the "western leg" of the Arctic Gas Project, the FPC said that if Canadian gas exports to the United States are terminated upon expiration of present licenses, sufficient idle pipeline capacity will be available to move Alaskan gas to the West Coast without construction of the western leg.

Arctic Gas and Alcan will have similar socio-economic impacts in Canada. Total population and employment changes will not be great. The major impact will be on the traditional life-style of native communities along the pipeline right-of-way.

POSITIONS OF THE PARTIES

The Federal Power Commission heard evidence concerning (1) United States-Canadian relations, (2) the Canadian decision process, (3) Canadian constitutional law.

The briefs submitted by the three applicants on the United States-Canadian issues involved in transporting Alaskan gas across Canada covered security, taxation, and political factors. El Paso emphasized the uncertainties and compromises inherent in dealing with a foreign government. Arctic Gas and Alcan argued that the Government of Canada would have an interest in the success of a commercial venture for the transportation of Alaskan gas which involves Canadian companies. Canada would therefore be unlikely to take action contrary to the interests of its own citizens. In addition, the United States and Canada have a long tradition of successful cooperation which can reasonably be expected to continue in the case of a transportation system for Alaskan gas.

The Federal Power Commission also heard evidence concerning the Canadian decision process on the pipeline. The argumentation focused on the settlement of native claims along the proposed pipeline right-of-way. El Paso pointed out the problems involved in the settlement of native claims along the rights-of-way of Arctic Gas and Alcan. El Paso expressed the opinion that the Government of Canada's failure to settle the claims could delay a trans-Canadian pipeline decision for years.

Alcan argued that the claims problem is less serious along its proposed right-of-way in the southern Yukon than along the Arctic Gas route in the Mackenzie Valley.

The Commission also heard several days of testimony on Canadian constitutional law. El Paso's witnesses described the powers exercised by the Canadian provinces and implied that the provinces could delay or prevent construction of a transit pipeline, or could impose intolerable tax burdens.

Arctic Gas and Alcan witnesses argued that Canadian constitutional law confers upon the Federal Government of Canada unquestionable authority to implement a decision in favor of a transit pipeline.

RELEVANT FACTORS

Canadian Decision Process

The Government of Canada has been studying the proposals for the transportation of Alaskan natural gas across its territory since 1974. Separate studies are being conducted by the National Energy Board (NEB), the Berger Commission, the Alaska Highway Gas Pipeline Inquiry Board, and the Alaska Highway Gas Pipeline Environmental Assessment and Review Panel.

The National Energy Board is analyzing the relationship of the Canadian Arctic Gas, the Alcan, and the Mapleleaf projects to Canada's energy needs. The Board must determine whether any of the pipeline projects are and will be required by the present and future public convenience and necessity. The Board's findings will be submitted to the Government of Canada for its consideration in early July. The Canadian Cabinet may accept or reject the NEB's decision on a pipeline, but may not change it except by legislation.

The Berger Commission is looking into the social, economic and environmental impact of the Canadian Arctic Gas and Mapleleaf Pipeline projects in the Yukon and Northwest Territories. The Commission released the first part of its report on May 9, 1977. It recommended that no pipeline be built across the Northern Yukon, and that 10 years elapse before a pipeline is built in the Mackenzie River Valley. Part II of the report, recommending terms and conditions to be applied in the event that a pipeline is built, is expected later during the summer of 1977. The report is not binding on the Government of Canada and does not address all the factors which the Canadian Government will consider before reaching a final decision.

The Alaska Highway Gas Pipeline Inquiry Board will report on the social and economic aspects of the Alcan project in the southern Yukon. The report is to be submitted to the Canadian Cabinet by August 1, 1977.

The Alaska Highway Gas Pipeline Environmental Assessment and Review Panel, directed by Dr. H. M. Hill, is analyzing the environmental impact of the Alcan project in the Yukon. Dr. Hill's report is to be completed by August 1.

On April 28, 1977, Canadian Prime Minister Trudeau appointed Mr. Basil Robinson as Northern Pipeline Commissioner. Mr. Robinson will coordinate the activities of the various agencies of the Canadian Government in reaching a decision, and will be the Canadian Government's point of contact with the U.S. Government as the two decision-making processes unfold.

All inputs related to the pipeline decision required by the Government of Canada are expected to be at hand by early August 1977. The Canadian parliament is expected to debate the pipeline issue in July, before the Canadian Government makes its decision, and again in August.

Commenting upon the timing of the Canadian decision, Canadian Prime Minister Trudeau, during his visit to Washington in February, 1977, indicated that Canada would make a determined effort to accommodate to the anticipated U.S. decision timetable.

Settlement of Native Claims

It is the policy of the Federal Government of Canada to recognize the existence of a native interest in those areas of Canada in which the native interest has not been settled by treaty or superseded by law. The Government of Canada believes it is desirable to address the native claims issue expeditiously and, if at all possible, before a pipeline is built. However, the Government of Canada has never taken the position that it is necessary to reach a settlement before hand. It is expected that the Government of Canada will reach a decision on the pipeline issue within the anticipated US timetable, regardless of the status of the settlement of native claims. Moreover, if the United States and Canada agree to cooperate on a gas pipeline, that agreement would have to be based on an understanding that construction can be carried out expeditiously. Construction would not, therefore, be delayed by the settlement of native claims which could, if necessary, go forward concurrently.

Canadian Legal Environment

Two procedures exist for seeking review of an NEB decision related to the gas pipeline. First, Section 18 of the NEB Act permits parties to NEB proceedings to appeal questions of law or jurisdiction to the Federal Court of Appeals of Canada. Such appeals are discretionary for the Court; a court must grant leave to appeal. An application for appeal must be filed within one month of the NEB's action, unless the court or a judge finds that special circumstances allow some longer time. Once leave is granted, the appeal must be entered within 60 days.

We are informed by Canadian authorities that there should be no plausible challenge to the jurisdiction of the NEB or any significant question of law arising from its decisions. Section 44 of the NEB Act gives the NEB broad discretion in deciding on applications of public convenience and necessity for pipelines.

Judicial review of NEB action would more likely be sought under the Federal Courts Act. Under that Act, the NEB could be overturned if it "failed to observe a principle of natural justice", "acted beyond or refused to exercise its jurisdiction", "erred in law in making its decisions", or "based its decision or order on an erroneous finding of fact that it made in a perverse or capricious manner or without regard to the material before it".

We understand that the Canadian courts have left great discretion to the administrative board or body involved. We know of no case in which an NEB decision to issue a certificate of public convenience and necessity has been effectively challenged in the courts.

It should also be noted that Canadian law places comparatively stringent limits on standing to sue. We understand that, in general, only parties to Administrative proceedings can seek judicial review of agency action.

Under Canadian law, the scope of review of NEB decisions is narrower than comparable review of the decisions of U.S. regulatory agencies.

If the Federal Government of Canada makes a decision in favor of an overland route for Alaskan gas, no further provincial permits are required. The successful applicant will be authorized to proceed in acquiring land for the pipeline right-of-way through normal commercial contract negotiations. If necessary, the Federal Government of Canada will exercise the right of eminent domain to assure that a right-of-way can be obtained.

Implementation of a Canadian decision in favor of a trans-Canadian gas pipeline will require a permit from the Department of Indian and Northern Affairs to allow use of federally-owned land in the Yukon and Northwest Territories. However, it is expected that issuance of such a permit would be pro forma if a favorable decision is reached by the Federal Government of Canada.

The Canadian procedures for implementing a decision on the gas pipeline appear to be less complicated than procedures in the United States where state approvals are required for right-of-way acquisition, exploitation of mineral resources, and construction of port and regasification facilities. Delays related to approval by regulatory authorities are less likely to occur in Canada than in the United States.

United States-Canada Transit Pipeline Agreement

The Trans-Alaska Pipeline Authorization Act of 1973 (Public Law 93-152) authorized and requested the President to determine whether the Government of Canada would be willing to permit the construction of pipelines across Canada to carry oil and gas from Alaska's North Slope to markets in the lower 48 states and terms and conditions which might apply to such a pipeline. In response to this Congressional mandate, the Department of State began negotiations in 1974 which led to the Transit Pipeline Agreement signed on January 28, 1977. The President sent the Agreement to the Senate on March 30, 1977, for advice and consent to ratification. The Senate Foreign Relations Committee held hearings on June 7, 1977, and its report is expected to be complete in July. The agreement includes the following basic elements:

It covers all existing or future pipelines which transit the territory of each party;

It covers all forms of hydrocarbons including crude oil, petroleum products, natural gas, petrochemical feedstocks and coal slurries;

It provides for reciprocity of obligations on the part of both parties;

It does not provide for approval of any specific proposals to construct a transit pipeline across the territory of either country, but it makes provision for possible protocols on specific pipeline projects if they are deemed necessary;

It provides a guarantee of throughput, by which public authorities in both countries are prohibited, except under specified emergency circumstances, from interfering with or impeding hydrocarbons moving in transit pipelines;

It provides for non-discriminatory treatment of hydrocarbons transiting either country, which ensures that public authorities in both countries will be prevented from discriminating against transit pipelines with regard to taxes and other monetary charges;

It assures "in bond" treatment for hydrocarbons moving in transit pipelines;

It confirms the jurisdiction of normal regulatory authorities over transit pipelines and requires that their action be reasonable and non-discriminatory;

It provides for equitable sharing of pipeline capacity in the event of emergencies on a predetermined basis;

It provides for binding arbitration in the event of disputes which cannot be resolved by negotiation; and

It is of long duration—thirty five years—and may be terminated after the end of this period only if ten years prior notice is given.

The Agreement provides very strong assurances of non-interference with the flow of hydrocarbons in transit. Even in emergency situations, the Agreement spells out the terms governing the operation of pipelines carrying hydrocarbons in transit commingled with indigenously-produced hydrocarbons. Both the United States and Canada recognize that security of throughput is a fundamental requirement, and both

countries have made binding, reciprocal commitments to non-interference.

The Agreement does not bar real property taxes by either provinces or states. However, under the provisions of the British North American Act and the terms of the Agreement, the provinces would be prevented from taxing the throughput of pipelines or levying discriminatory charges on transit pipelines. The Federal Government of Canada has accepted the obligation to ensure that the exercise of the taxing power of the provinces shall be applied in a non-discriminatory manner.

In the United States, where a ratified treaty becomes the supreme law of the land, the U.S. Federal Government has the authority to prevent states from discriminating against transit pipelines and is committed to do so by the Agreement.

Whether discrimination against a transit pipeline exists is determined by comparison with similar pipelines. The Agreement provides that "similar" pipelines include both inter-provincial and inter-state pipelines and intra-provincial and intra-state pipelines. This definition is sufficiently broad to assure that an adequate basis for comparison can be found within the jurisdictions which would be involved if a trans-Canadian route for Alaskan gas is approved.

The hydrocarbons moving through a transit pipeline are accorded the equivalent of "in bond" treatment under the terms of the Agreement and may not be taxed by provincial, state, or Federal authorities in either country.

The non-discrimination protections contained in the Agreement prevent the imposition of taxes on transit pipelines which are not also applicable to similar, non-transit pipelines. Therefore, the Agreement assures that transit pipelines will not be taxed in a discriminatory manner to generate funds for the settlement of native claims.

The United States-Canada Transit Pipeline Agreement does not settle all issues related to a trans-Canadian pipeline for Alaskan natural gas. Rather, the Agreement provides fundamental guarantees and a framework for the terms and conditions which would be applicable. If Canada decides to offer an overland route, further discussions with the Government of Canada will be needed to answer specific questions related to financing arrangements, pipeline tariffs, expansion of the pipeline's capacity, requirements for purchasing goods and services in Canada, the possibility of construction delays, and arrangements for inspection of the pipeline.

Financing

The question of financing a trans-Canadian pipeline for Alaskan gas has not been formally discussed with the Government of Canada. If an overland route is offered by Canada, and if it is necessary for either Government to participate in financing, financial arrangements could be dealt with in a protocol to the United States-Canada Transit Pipeline Agreement.

Impact on United States-Canadian Relations

The United States and Canada have a long tradition of cooperation on mutually beneficial projects, such as the Saint Lawrence Seaway, the Alaskan Highway, the environmental clean-up of the Great Lakes, and the transportation of Canadian hydrocarbons across the United States. A decision to construct a trans-Canadian pipeline for Alaskan

natural gas would be in keeping with this cooperative tradition which is in the interest of both countries. However, both Governments have made clear that a decision on the gas pipeline will be made on its own merits.

Regardless of the outcome of the gas pipeline decision, a community of interest will remain, tending to draw the United States and Canada together. A relationship which is basically friendly and cooperative will continue.

Canadian Transit Pipelines in the United States

Most of Canada's oil and natural gas reserves are located in the western provinces of Alberta, Saskatchewan, and British Columbia. However, energy consumption is greatest in the industrialized, eastern provinces of Ontario and Quebec.

Canadian crude oil moves from the producing provinces in the west to the consuming provinces in the east via the Interprovincial Pipeline System. The two branches of the Interprovincial system transit the United States; one north of Lake Michigan, and the other to the south of the Lake.

Canadian natural gas is carried from west to east via the Trans-Canada/Great Lakes Gas Transmission system. The system transports about 300 billion cubic feet of gas per year across the United States to markets in eastern Canada. In addition, TransCanada/Great Lakes delivers Canadian gas to U.S. markets in the Midwest.

Imported crude oil is carried via a transit pipeline from Portland, Maine to Montreal. In 1976, 300,000 barrels per day of crude oil were delivered to Montreal through the Portland pipeline.

CONCLUSION

It is the conclusion of the Task Force on International relations that a viable option exists for the transportation of Alaskan natural gas across Canada, provided that the Government of Canada offers an overland route across its territory. A trans-Canadian gas pipeline would benefit from the protection afforded by the United States-Canada Transit Pipeline Agreement, and from the long tradition of cooperation between the two countries.

Canadian constitutional law provides clear authority to the Federal Government of Canada to make and implement a decision concerning a transit pipeline for Alaskan gas. In addition, the Government of Canada has accepted the obligation to ensure that the exercise of the taxing power of the provinces shall be applied in a non-discriminatory manner.

The Task Force agrees with Federal Power Commission Administrative Law Judge Litt that in light of the history of successful cooperation with Canada in other areas, it is reasonable to expect the Government of Canada to act responsibly in the case of a pipeline carrying Alaskan gas.

The Task Force further concludes that regardless of the outcome of the gas pipeline decision, United States-Canadian relations will continue to be friendly and cooperative.

REPORT ON NATIONAL SECURITY IMPLICATIONS

INTRODUCTION

The Federal Power Commission "Recommendation To The President, Alaska Natural Gas Transportation Systems" did not include a statement on the national security implications of the proposed transportation systems. The Department of Defense (DOD) provided a study which addressed that subject to the Department of Interior (DOI) and the Federal Power Commission (FPC). Both agencies included the study in their evaluations of the proposed transportation systems. The following report summarizes the consideration given to national security during the review and evaluation of the three proposed Alaska Natural Gas Transportation Systems.

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DISCUSSION OF PRINCIPAL ELEMENTS

1. THE DOD POSITION ON NATIONAL SECURITY IMPLICATIONS

In accordance with Public Law 93-153 the Secretary of the Interior submitted a report to Congress¹ regarding the feasibility of two systems for transporting Alaskan North Slope natural gas to the contiguous 48 States. The DOI report covered the results of a study

¹ Alaskan Natural Gas Transportation Systems, a Report to Congress Pursuant to Public Law 93-153, U.S. Department of Interior, December 1975.

predicated upon an analysis of two hypothetical competitive delivery systems similar in certain respects to the proposals of the Alaskan Arctic Gas Pipeline Company, which would traverse Canada from the North Slope to the northern border of the lower 48 States; and the El Paso Alaska Company, which would traverse Alaska to its southern coast and then continue via liquefied natural gas (LNG) tanker to California.

The DOD submitted a study to the DOI for inclusion in the report which addressed the national security implications of these two hypothetical systems. The study was prepared by the Joint Staff of the Office of the Joint Chiefs of Staff. This study was the basis for the National Security Section (pages 170-172) of the DOI report. The conclusions of the DOD study, and as reflected in the DOI report, were that "analysis of military factors alone would not indicate an overriding preference for one route over the other." The DOI report further concluded that, "... where a foreign country is involved, it would appear that the nonwar security risks may be greater." These conclusions were reached prior to submission of the Alcan Trans-Canada route proposed by the Northwest Pipeline Company. It is the opinion of the DOD that the evaluation of national security factors related to the hypothetical Trans-Canada route is equally applicable to a route similar to that proposed for the Alcan route.

2. SUMMARY OF DOD TESTIMONY BEFORE THE FEDERAL POWER COMMISSION

The DOD Director for Energy, Rear Admiral C. Monroe Hart in testimony before the FPC Administrative Law Judge Nahum Litt, validated for the record that the national security section of the DOI report to Congress was provided by the DOD. Admiral Hart was examined by Judge Litt; directly examined by Mr. Heisler, an FPC lawyer; and cross-examined by Mr. R. Clyde Hargrove, representing Alaskan Arctic Gas Pipeline Co., and by Mr. William Wise, representing El Paso Alaska Co. The examinations by these persons were concerned with the relative ease of protection of the two transportation systems and in that context addressed both military and civilian law enforcement, their availability and probable use in peace and war. Also, the key points of system vulnerability which would offer the greatest potential for maximum disruption to system operation were discussed; these were:

(a) Typical points at which concentration of pipeline or facilities would offer the greatest attraction and opportunity for greatest crippling damage such as:

- (1) The Yukon River crossing in Alaska where both gas and oil lines will cross the river on a single bridge.
- (2) The gas liquefaction plant on Prince William Bay.
- (3) The parallel crude oil and gas pipelines through Alaska.
- (4) The Prudhoe Bay producing fields and the gas and oil processing plants.

(5) The length of the gas pipeline in Northwest Canada which would be more difficult to patrol. It was noted that threats of sabotage against the Alaskan Arctic Gas pipeline have already been made.

(b) The relative difficulty of providing protection for key points such as the above examples was examined and the following criteria were considered.

(1) Points of concentration such as the Yukon River crossing and the processing facilities at Prudhoe Bay and Prince William Sound offer attractive targets for terrorists, saboteurs, para military groups and wartime attack, but they also offer the greatest opportunity for concentrated protection.

(2) Remote portions of a pipeline, particularly those portions through the northernmost sections of Northwest Canada, offer an attraction for destruction because of the difficulties of restoration due to long distances for transportation of repair equipment plus weather and physical limitations of access. However, for similar reasons the successful completion of an act of destruction is also much more difficult to accomplish in such remote and environmentally hostile areas.

(3) With regard to the protective forces which would be available in peacetime and wartime, it is considered that in both the United States and Canada peacetime security will be provided by company surveillance and inspection and by the normal law enforcement organizations, and in wartime these organizations would continue their service with military assistance as needed.

The testimony and examination did not alter the conclusions of the DOD study on National Security that an analysis of military factors alone would not indicate an overriding preference for one route over the other.

3. DEFENSIBILITY

(a) Peacetime—It will be the responsibility of each nation to provide internal national security for those portions of the Alaska natural gas transportation system and facilities within its borders. It is expected that the security provided for the Alaska natural gas system will be no different than that currently provided for oil and gas pipelines now operating in both nations where the companies which own and operate those systems provide for their day-to-day security and are dependent upon local police and law enforcement officials for additional protection when necessary.

(b) Wartime—

(1) If both nations are involved.

The established Canadian-United States defense arrangements for the North American continent are predicated upon mutual defense through binational coordination. No specific civilian installation or locality is singled out for added protection, only the umbrella of continental military defense will normally be provided. If necessary, military assistance would be furnished in support of the normal company and local police and law enforcement organizations. For example, no unusual military precautions were taken for the United States owned and operated Haines-Fairbanks Alaskan petroleum pipeline during the Korean War, 295 miles of which traverse Canadian soil.

(2) If the United States is unilaterally involved.

Canada and the United States are bound together by tradition and treaty and have a long record of close cooperation in national security

matters. Materials are readily available to each country under normal conditions. It is considered that this long-standing cooperation would continue to exist and all materials normally available would continue to be available from Canada as a matter of mutual need, friendly cooperation and treaty obligation.

4. VULNERABILITY

National security rests heavily upon readily available energy from secure sources and the growing dependence of the nation upon imported oil from non-secure sources poses grave dangers to national security. Oil imports now amount to approximately 49 percent of the total national petroleum consumption and the addition of the Alaskan natural gas to the national energy matrix will help to minimize the current requirement for imported oil and reduce that dependence. The completion of a transportation system for delivery of Alaskan North Slope natural gas to the contiguous 48 States must be considered an *important national security objective*.

Summary of the Position of Interested Parties Before the Federal Power Commission

Representatives of the Alaskan Arctic Gas Pipeline Company, the El Paso Alaska Company and the Alcan Pipeline Company appeared before the Federal Power Commission. The positions of the first two companies regarding national security were as described in Discussion paragraph 2 above. Neither they nor the Alcan Pipeline Company disagreed with the Department of Defense position on national security as described in Discussion paragraph 1 above. The consensus was that the problems are primarily systems related and that danger due to hostile acts is of concern but is considered to be less likely to disrupt pipeline operation than system failures.

Federal Power Commission Conclusion on the Implications to National Security

The study on national security prepared by the Joint Staff of the Joint Chiefs of Staff, as it appeared in the December 1975 Department of Interior Report to Congress, was incorporated into the evaluation of the Federal Power Commission without objection.

CONCLUSIONS

The growing dependence of the nation upon imported oil presents a grave danger to the national security. The addition of the Alaskan North Slope natural gas to the energy matrix of the nation can help reduce the volume of imported oil requirements and thereby contribute to an improved national security posture. The completion of a transportation system for delivery of Alaskan North Slope natural gas to the contiguous 48 States must be considered an important national security objective. Of the three transportation systems proposed, there is no overriding preference for one route over another when analysis is based on military factors alone.

REPORT ON FINANCING AN ALASKA NATURAL GAS TRANSPORTATION SYSTEM

(July 1, 1977)

EXECUTIVE SUMMARY AND CONCLUSIONS

The Alaska Natural Gas Transportation Act of 1976 ("the Act") permits Executive Branch Departments and Agencies to comment upon the Federal Power Commission's May 1, 1977, *Recommendation to the President*. One specific subject appropriate for comment under the Act is "sources of financing for capital costs."

The Act also requires the President to submit to Congress "a financial analysis for the transportation system designated for approval," along with a determination of whether he "reasonably anticipates that the system designated by him can be privately financed, constructed, and operated."

The following Report on Financing Issues is submitted in response to the above statutory provisions. The Report was written by the Department of the Treasury (the Lead Agency) with the direct contribution of other interested Federal agencies. Pursuant to the Act, the views of all interested Federal officers and agencies were solicited and have been incorporated into this Report.

The basic issue addressed in this report is *how each of the three proposed projects could be financed*. The sources of funds available are therefore identified.

The principal conclusion of this report is *that there is good reason to anticipate that an economically viable system to transport natural gas from Alaska to the lower 48 states can be privately financed*—that is, without Federal financing assistance. A private financing, however, will be difficult, if not impossible, to arrange without *prior resolution of a number of issues*. In fact, the actual likelihood that a private financing may be accomplished can be determined only *after* these issues have been resolved.

Certain of the unresolved issues directly affect the economic viability of a transportation system, and, as such, the willingness of the private sector to invest in such a project. Other unresolved issues bear upon what party or combination of parties would assume the unusual risks perceived to be associated with the construction of such a system.

The most important issues that must be resolved before any financing can be arranged include:

1. The mechanism by which the wellhead price for gas is determined;
2. The method by which gas will be priced to the ultimate consumer;
3. The authorization of a sufficient flow of gas by the State of Alaska;

4. Negotiation of sales contracts between gas producers and gas transmission companies;

5. A determination of the rate of return that the Government will allow on investment in a transportation system;

6. Formation of a final consortium of equity investors in the project;

7. Determination of the extent to which benefiting parties (including the producers of the gas, the State of Alaska, and gas consumers) will provide financing support to the project.

As stated above, there is good reason to anticipate that, once these issues are resolved, an economically viable Alaska natural gas transportation system could be financed without Federal financing assistance.

The Federal Government has the ability to resolve a number of the issues

The report discusses how the resolution of these issues would affect the overall financeability of an Alaskan gas transportation system and thereby affect the need for Federal financing assistance. The discussion on each issue is summarized below.

1. *The price gas producers will receive for the gas (the "field price").*—The Federal Power Commission is currently responsible for establishing a field price. In its *Recommendation to the President*, the Commission noted that prompt establishment of the field price of Alaskan gas was important, but to date the Commission has not made any publicly announced moves to establish the price. The Administration's selection of an acceptable methodology for determining the field price would facilitate a financing.

2. *The price gas consumers would pay for Alaskan gas.*—Two methods of pricing the gas to the ultimate consumer were suggested by the Federal Power Commission:

(a) "rolled-in" pricing, which averages the cost of Alaskan gas with that of gas from other sources, and

(b) "incremental" pricing, under which consumers pay the full marginal costs associated with producing and transporting Alaskan gas.

A third approach to pricing of gas in general is identified in the Administration's National Energy Plan, which combines aspects of both roller-in and incremental pricing. Adoption by the Administration of "rolled-in" pricing for Alaskan gas would go farthest to facilitate financing the transportation system. The approach recommended in the National Energy Plan could go equally far if the Administration properly structures the pricing mechanism contained in that approach. Fully "incremental" pricing would make the financing more difficult.

3. *Approval of sales contracts.*—The Federal Power Commission's authority to approve sales contracts allows it to condition approval upon formation of a large creditworthy sponsoring consortium. Specific direction for such action from the President would facilitate a private financing.

4. *Rate of return.*—Government approval of an adequate rate of return on investment in the project would facilitate a financing.

5. *Consumer participation in the financing.*—Finally, approval by the Administration of a method to allow consumer participation in

the financing would facilitate a financing. Consumers could participate by securing the project's debt through a tariff that would be paid under any circumstances.

The Federal Power Commission Recommendation to the President

In its May 1 recommendation, the Federal Power Commission found that the private benefits of a system are substantial and *did not recommend* Federal financing assistance for an Alaskan gas transportation system. It further outlined financing methods under which the Commission found the project's risks bearable without Federal financing assistance.

The Commission broadly illustrated two financing plans—the first pressing oil companies (who will produce the gas) to help sponsor the project, and the second requiring consumers to participate in the financing.

The most important aspect of the Commission's Recommendation was its apparent willingness to place substantial financial risks on gas consumers if it is ultimately found necessary—that is, if such groups as gas pipeline companies, the gas producers, and the State of Alaska together are unable to fully secure the project debt.

The discussion of financing in the Commission's *Recommendation* was general and theoretic; it lacked a detailed financial analysis of capital market capacity and an analysis of the financial capacity of the potential project sponsors.

While the Commission did not resolve any major issues in its Recommendation, it in no way restricted the President's decision in regard to the financing. The net result is that all options for financing of an Alaskan gas transportation system are open.

Financing Without Federal Financing Assistance

As noted, the report concludes that there is good reason to anticipate a private financing of an economically viable transportation system. The analysis shows that *the capital markets do not have the capacity to supply the basic funds required by any of the three projects*. The analysis also shows that *the capacity exists in the private sector to finance any of the proposed projects*.

The report contains a financial analysis of the capacity of the private parties who would benefit directly from an Alaskan gas transportation system to invest directly in or otherwise assist the financing of a system. The potential direct beneficiaries are identified below:

1. *Gas transmission and distribution companies.*—The analysis concludes that a consortium composed of those companies that have shown an interest in a project have *ample* capacity to provide the equity portion of any of the proposed projects (and have sufficient capacity to provide the equity even in the event of 80% cost overruns). This conclusion even assumes there would be *no* payments made by potential consumers during the construction period.

2. *The gas producers.*—The producers (essentially three major oil companies—Exxon, Atlantic Richfield, and Standard Oil of Ohio) stand to benefit handsomely from the sale of their gas, and such sale requires a transportation system.

These companies clearly have the financial capacity to support the financing of a gas transportation system.

3. *The State of Alaska.*—Alaska will benefit from royalties on the sale of the gas, the construction activity itself, and the availability of the gas for industrial development in the State. Revenues accruing to the State from the production and sale of *oil* are being channeled into a fund dedicated to Alaska's future development. Such a fund gives the State substantial capacity with which to support a financing.

4. *Potential gas consumers.*—Consumers could provide a substantial source of financial support for a transportation system.

Financing Alternatives

The report discusses four distinct financing alternatives.

1. *Sponsor Guaranteed Financing* (illustrated in the Federal Power Commission *Recommendation to the President*).—The analysis concludes that a traditional financing guaranteed by gas pipeline companies and the State of Alaska, while preeminently desirable, would be difficult to arrange. The gas transmission and distribution companies do not have sufficient financing capacity to underwrite an entire project. *Were the gas producers to participate substantially in the financing, this alternative would be viable.*

2. *Consumer Guaranteed Financing* (also illustrated in the Federal Power Commission *Recommendation to the President*).—The analysis shows that gas consumers have the capacity to guarantee the debt and equity financing, thereby reducing the financing costs. However, this alternative presents important questions of public policy and energy financing policy which remain to be resolved.

3. *Mixed Sponsor and Consumer Alternative.*—The report concludes that participation by all the potential beneficiaries—including gas transmission and distribution companies, the gas producers, the State of Alaska, and consumers—would form the most equitable and practical approach to financing a transportation system. One feasible method would be for each potential beneficiary to guarantee the debt of an identifiable segment of whichever system is designated.

4. *Federal Financing Assistance Alternative.*—A number of methods by which the U.S. Government could assist the financing are discussed in the report. None is recommended because Federal financing assistance was found unnecessary.

Canadian Issue

The two trans-Canada projects propose to raise substantial funds in Canada. The Canadian Department of Finance thus far has opposed governmental guarantees for a project. If ultimately a trans-Canada route is selected and governmental debt guarantees are found necessary, the nature and negotiation of those guarantees will present complex issues requiring close cooperation with the Government of Canada.

Federal Financing Assistance

In general, capital is allocated and utilized most efficiently when its movement is subject to the disciplines and the profit incentives of the market system. Thus, if energy or other government policy imperatives dictate that Federal financial assistance be provided, the degree of such assistance *should be the minimum necessary to achieve such policy objectives.* Also, the financial assistance should be provided in a manner that will facilitate, rather than impede, the operations of

the market system. Finally, *the interests of the taxpayers granting such assistance must be vigilantly protected* and taxpayers should be adequately compensated for their financial support.

If overriding energy policy and credit market considerations do dictate that government assistance be provided for the Alaskan gas project, care must be taken to offset the serious possible consequences of Federal assistance. One serious concern is that Federal financial assistance will create *subsidies which may cause an underpricing of gas and a misallocation of scarce energy and economic resources*. Another serious concern is that assistance by the government in this instance will set a precedent which will make it difficult to find willing parties to support other large energy projects without government assistance. Such a precedent could have long term adverse consequences for the national economy.

Even if Federal assistance were ultimately found necessary to finance the project, it should not be provided *in lieu of risk bearing* by other parties. *Direct beneficiaries of the project should remain obligated to bear the project risks to the largest extent feasible*, and any taxpayer risk should be residual and subordinate.

NATIONAL ENERGY BOARD, OTTAWA, CANADA

FACT SHEET REGARDING NATIONAL ENERGY BOARD DECISION ON THE NORTHERN GAS PIPELINE APPLICATIONS

The National Energy Board on 4 July 1977 released its decision on the Northern Gas Pipeline Applications. The following information concerning the functions and responsibilities of the Board, the Applications and the Board's Findings, Decisions and Recommendations is provided for ease of reference.

THE BOARD

The National Energy Board—NEB or Board—is an agency established by legislation by the Government of Canada enacted in 1959. The agency consists of nine full-time members and a staff of some 325 employees, among whom are engineers, environmentalists, economists, accountants, lawyers and other specialists, who act as advisers to the Board.

The Board's responsibility is to control and regulate certain aspects of the energy industry in Canada to ensure that the public interest is protected at all times. It does this by the issuance of certificates of public convenience and necessity which authorize the construction and operation of interprovincial and international pipelines and international power lines and by the issuance of licenses for the export of oil, the import and export of natural gas and the export of electricity.

No pipeline can be built or operated in Canada across provincial or international boundaries unless a certificate has been issued by the NEB. The certificate becomes effective only with the approval of the Governor in Council.

Before the Board reaches a decision on any major pipeline project, it holds a public hearing to examine the proposal and to afford an opportunity for those found to be interested persons under the NEB Act to take part in, adduce evidence, and argue their case or otherwise make submissions.

THE APPLICANTS

During 1974 and 1975, the Board received competing applications and submissions related to the planned construction of a northern gas pipeline. The first application to move northern gas to southern markets was submitted in March 1974 by Canadian Arctic Gas Pipeline Limited under Part III of the NEB Act to construct and operate a new 48-inch diameter main pipeline system and interconnections with existing and proposed new facilities, for the purpose of transporting Prudhoe Bay and Beaufort Basin gas southward. The most northerly section of mainline would run 178 miles from the Alaska-Yukon border to Tununuk Junction, N.W.T.; a supply line would run 19 miles from the Taglu Field on Richards Island to Tununuk Junction to join the

main line. The main line would continue south to Parsons Lake junction where it would be joined by a 30-inch diameter supply lateral from Parsons Lake on the east. The main line would then proceed south along the Mackenzie River Valley into Alberta where, near Caroline, it would split into two delivery lines—one a 48-inch diameter line to Empress, Alberta and thence a 42-inch diameter line to Monchy, Saskatchewan; and the other a 36-inch diameter line to Coleman, Alberta, where the delivery lines would interconnect with the facilities of other pipeline companies. In June 1975, Alberta Natural Gas Company Ltd. applied to the Board for a certificate to construct additional facilities required to transport gas to be obtained through the proposed CAGPL system.

In a competing application, Foothills Pipe Lines Ltd. applied in March of 1975 for a certificate of public convenience and necessity to construct and operate a pipeline and connected works to move natural gas from the Beaufort Basin of the western Arctic to southern Canada and Northwest Territories communities. The proposed pipeline would connect with facilities of Trunk Line (Canada) and Westcoast just north of the 60th parallel. Foothills proposed to construct some 817 miles of 42-inch diameter line from Richards Island along the Mackenzie River Valley. It also proposed to construct 15 miles of 30-inch diameter line as a lateral connection from a point east of Parsons Lake, N.W.T. to a point of connection with the main transmission line some 51 miles south of the Richards Island point of commencement of the main line.

In May 1975, the Alberta Gas Trunk Line (Canada) Limited applied to construct and operate approximately 81 miles of the Foothills 42-inch diameter line from a point 6.5 miles north of the 60th parallel to existing or new Alberta Gas Trunk Line facilities at a point near Zama Lake, Alberta.

The Alberta Gas Trunk Line Company Limited owns and operates a natural gas gathering and transmission system within Alberta. It did not file an application but in a submission in May 1975 undertook to construct and operate certain facilities of Trunk Line (Canada) subject to federal jurisdiction. Originally in the hearings Westcoast Transmission Company Limited submitted an application with respect to an extension of its main line as a companion application in the Foothills project. On July 1, 1976 Westcoast proposed to extend its facilities to interconnect with those of CAGPL if that project were approved.

In August and September 1976 a third set of applications for pipeline construction by a group of associated companies generally called the Foothills (Yukon) Project Group was filed with the Board. These applicants, Foothills (Yukon), Westcoast and Alberta Gas Trunk Line (Canada), proposed to move Alaska gas through Canada to markets in the lower 48 states of the United States. This proposal included construction of a Foothills (Yukon) 42-inch diameter line from an interconnection with Alcan Pipeline Company at the Alaska-Yukon border, through the Yukon to the B.C. border where it would connect with a 42-inch diameter extension of Westcoast; a 36-inch diameter Trunk Line (Canada) line would interconnect existing facilities of Trunk Line in Alberta with another extension of Westcoast, and a Foothills (Yukon) 36-inch diameter line would be constructed from

Trunk Line's facilities at Empress, Alberta to the international border near Monchy, Saskatchewan.

In late February 1977 the Foothills (Yukon) Group filed with the Board an alternative proposal to construct a 48-inch diameter pipeline system, without using the existing Westcoast and Trunk Line facilities. It involved the construction of an "express line" through Yukon, and generally along existing routes in northern British Columbia and Alberta, plus a new Westcoast line parallel to the existing Alberta Natural Gas route in southeaster British Columbia.

On 16 March 1977 the Foothills (Yukon) Group withdrew the 42-inch diameter system applications; thus the only Foothills (Yukon) system considered by the Board in its report is the 48-inch diameter line.

FINDINGS

Based on all the evidence adduced at hearings and submitted by applicants, intervenors and interested persons, the Board has made a number of findings, upon which its decisions were based. The more significant of the findings, contained in its Reasons for Decision dated June 1977, are outlined below.

The Board finds that a pipeline to transport Mackenzie Delta gas to Canadian markets will be needed during the first half of the 1980's. In support of this finding the Board can do the following conclusions:

(1) There will be a need for additional gas for Canadian markets over and above that forecast to be available from conventional areas to meet the "Most Likely" forecast of Canadian demand plus existing export commitments as early as 1981 or as late as 1985 depending on certain policy options open to governments.

(2) If existing authorized exports of gas were eliminated or were phased out, the "Most Likely" Canadian requirements could be met until about 1990, but the Board does not recommend such action.

(3) The Board endorses a vigorous conservation policy and in its "Most Likely" forecast of Canadian gas demand has endeavoured to realistically assess the degree to which Canadians will be responsive to the conserver ethic; however the Board rejects the proposition urged on it by several public interest groups that a pipeline from the Mackenzie Delta should be denied so as to reinforce the limitation in the rate of growth of the demand for energy.

(4) The current established reserves of the Mackenzie Delta total 5.3 Tcf, with 5.1 of this being economic to connect to planned gas processing plants. Having in mind a pipeline to the south, these reserves would support deliverability of 700 to 800 MMcf per day.

(5) Of the several new large sources of energy available to Canada in the near future, Delta gas is about the lowest cost, in current dollar terms.

Although additional work would be required in the final design process for each of the pipelines being applied for, the Board believes that from an engineering point of view any of these could be built to the satisfaction of the Board.

The Board has specific socio-economics concerns related to a pipeline route up the Mackenzie Valley.

The Board has specific environmental concerns related to a pipeline route from the Alaska-Yukon border to Tununuk Junction.

The social and economic impact of the Foothills (Yukon) project could be held to tolerable levels. The environmental concerns associated with this project can be overcome by avoidance or mitigative measures.

A crucial question in regard to any land bridge proposal for the transmission of United States gas through Canada is whether the project has the potential for bringing Delta gas to Canadian markets and the Foothills (Yukon) project has such a potential in the form of a Dempster link.

The precise timing of the need of a Dempster link is not known today, but the planning for the Foothills (Yukon) project should be compatible in all respects with the addition of such a link, if certificated in the near future.

A necessary complement to the undertaking given by the principals of Foothills (Yukon) to undertake the construction of a Dempster link would be a rerouting of the Alaska Highway line via Dawson, Yukon. Such diversion would reduce the cost of transportation of Delta gas by some 12 cents per Mcf while increasing the cost of transmission of United States gas by six cents per Mcf or less. In certificating the Foothills (Yukon) project, the Board would require a diversion of the route through Dawson. The preliminary financing plan of CAGPL would be acceptable to the Board, with two exceptions—

(a) CAGPL would have to provide for majority Canadian control of the equity of its company; and

(b) the Board rejects the recommendation of CAGPL that the Canadian Government should provide financial backstopping to the project.

The Board shares the view of the financial advisers to the Foothills project that it could not be financed at this time on the basis of MacKenzie Delta reserves already discovered and could not be justified on economic grounds.

The Foothills (Yukon) Project Group did not request backstopping by the Canadian Government. There are matters of fundamental concern to the Board, however, in the financing and ownership of the Foothills (Yukon) project. These relate to the possible impairment of the credit capability of Trunk Line and Westcoast by their unequivocal undertakings to complete the project irrespective of cost overruns, in providing a land bridge for United States gas. The Board believes some restructuring of the corporate setup of the Foothills (Yukon) project would be necessary. Furthermore, the financial plan of the project should exclude any possible inhibition in providing a Dempster link at a later stage.

To ensure that the objectives of the companies owning and operating each segment of the Foothills (Yukon) project would be consistent with the broader purposes of an integrated interprovincial pipeline, with uniformity of design and tariffs but with decentralization of construction and operation to those companies operating pipelines in the same area, the Board would favour having the pipeline segments south of the 60th parallel owned by federally incorporated subsidiaries of Foothills (Yukon) with, say, 51 per cent ownership and the re-

mainder, say 49 per cent ownership, vested in the pipeline company operating in the area.

The Board believes that construction of the pipeline segments south of the 60th parallel should be carried out by the companies familiar with the areas concerned and would favour the proposed ANG pipeline subject to the corporate restructuring mentioned above. Similarly, while having no corresponding application, the Board would look favour on the construction and operation of the pipeline segment in Saskatchewan by TransCanada on a basis similar to that outlined for Trunk Line, Westcoast and ANG.

The Board believes that innovative tariffs would be needed to provide for maximum private sector financing of a northern pipeline. To this end, for this project, it endorses the principle of an "all events" tariff and the need for supplemental agreements with shippers covering the period before the tariff proper comes into effect.

Using the unit costs of transportation filed by the Applicants, and recognizing some limits on comparability, the Board finds that:

(1) For the transportation of Alaska gas from Prudhoe Bay to the 49th parallel, the differences in the unit costs of transportation via CAGPL and via Foothills (Yukon) are relatively small;

(2) the CAGPL project would provide significantly lower unit costs for the transportation of Delta gas to Empress than the Foothills project;

(3) providing the Dempster link to Dawson, which would involve the re-routing of the Foothills (Yukon) 48-inch diameter pipeline in the Yukon, would increase the unit costs of transporting Prudhoe Bay gas to the lower 48 states slightly while providing significantly lower transportation costs to Canadian shippers of Delta gas;

(4) With a throughput of 12 Bcf per day from the Delta and 2 Bcf per day from Alaska, the cost of transmission of Delta gas to Empress appears to be approximately the same for the CAGPL and Foothills (Yukon) projects.

As to the total estimated capital costs, due to the difficult conditions for the northern Yukon and Cross-Delta sections, the Board could visualize a cost overrun of 20 to 35 per cent occurring in the CAGPL project. In the case of Foothills (Yukon) the Board judges that the cost of construction has been under-estimated and it could visualize a cost overrun of 20 to 30 per cent occurring.

The Applicants all estimated relatively high levels of Canadian content for their proposed pipelines—in the range of 80 to 90 percent. The Board's overall assessment is that Foothills and Foothills (Yukon) projects showed overall Canadian content estimates averaging somewhat higher than those indicated by CAGPL.

The evidence of the effect of the pipeline projects on the macro-economy of Canada was uniform in assessing that none of them would cause severe problems.

The results of cost-benefit analyses, which excluded environmental and social costs and which would differ between CAGPL and Foothills (Yukon), indicate that the net economic benefits would be somewhat greater for the CAGPL project than for the Foothills (Yukon) project.

The Board is not involved in the merits of native land claims per se, or their settlement; these are matters under direct negotiation between

the native peoples and the federal government. The Board was concerned, however, with the interrelation of the resolution of a land claims settlement with the perceptions of Northerners of whether a pipeline should be built, and if, so, where and when.

The Board's assessment of the socio-economic impact of a pipeline in the north is one of broad judgment. The north at this time may be said to be a land in transition and for the individual native northerner, the situation seems to be one of turmoil caused by fear of farther white encroachment, and a striving to retain the essentials of a life close to the land from a non-viable base in a community. The added problems relating to the possible construction of a pipeline only compound an already confused situation. In the Yukon, the opening up of the Alaska Highway in 1942 and the fact that the Yukon economy and institutions are more developed, that the land claims negotiations appear to be more advanced, that a smaller number of native peoples would be affected and that the Yukon Indians do not appear to be passing through the phase of a major restructuring of their society, as the Dene appear to be, lead the Board to conclude that the socio-economic impact on the pipeline corridors would, on balance, be more favorable along the Alaska Highway than in the Mackenzie Valley.

The Board believes that identifiable indirect costs of a pipeline project north of the 60th parallel should be borne by the pipeline company. These costs, related to such things as in-migration, provision of additional municipal, social, and health services, are difficult to measure with precision, and it would recommend to the government that an agreement be entered into with a certificate holder to provide funds for such costs. The Board would further recommend that the obligation be limited to \$200 million.

There would be need of a government agency to monitor socio-economic matters, and if a certificate were granted, the Board would recommend to the government that it immediately create effective machinery for this purpose.

Based on the evidence put before it, the Board has concluded that the CAGPL Prime Route, both the Northern Yukon coastal and Cross-Delta sections, would be environmentally unacceptable. The Interior Route, presented as a less desirable alternative by CAGPL, would also be environmentally unacceptable to the Board.

The Board has concluded that the environmental concerns associated with the Foothills (Yukon) route relate to impacts which can be overcome by avoidance or mitigative measures.

Environmental information on a Dempster link is sparse and an application for a certificate to construct and operate a pipeline from the Delta to connect with the 48-inch diameter pipeline would have to be supported by detailed environmental studies. Likewise, environmental studies related to a diversion of the 48-inch diameter pipeline through Dawson would require the immediate study of related environmental impacts and subsequent filing of such studies with the Board.

DECISIONS AND RECOMMENDATIONS

The Board's decisions and recommendations to the Governor in Council follow:

(1) The Foothills pipeline cannot be financed; it would not offer the lowest cost means of transporting Mackenzie Delta gas to market

and a pipeline should not be built along the Mackenzie Valley at this time. The Board therefore denies the application of Foothills Pipe Lines Ltd.

(2) For the reasons stated in (1), the Board also denies the applications of Westcoast Transmission Company Limited and Alberta Gas Trunk Line (Canada) Limited for certificates for facilities which would interconnect with those of Foothills.

(3) The CAGPL project is based on incompatible time constraints; on the one hand the urgent need to connect Alaska gas to United States markets and on the other, the need for more time to resolve socio-economic concerns before a pipeline could be built in the Mackenzie Valley.

(4) The Prime Route proposed by CAGPL from the Alaska-Yukon border to Tununuk Junction, including the Cross-Delta segment, is environmentally unacceptable to the Board, as is the alternative Interior Route.

(5) For the reasons stated in (3) and (4), the Board denies the application of CAGPL.

(6) The Foothills (Yukon) project generally offers the preferred route for transporting Alaska gas to markets in the lower 48 States. However, the Board believes certain changes to the project as applied for are desirable in the Canadian public interest.

(7) The Board is prepared to issue certificates of public convenience and necessity for the various pipeline segments of the Foothills (Yukon) project subject to conditions. The Board is recommending to the Governor in Council, however, that approval be withheld until the following have been accomplished:

(i) That appropriate amendments to existing applications have been filed with the issuance of the certificates in the names of subsidiary companies of Foothills (Yukon) for the segments of the project in northern British Columbia, Alberta and south-eastern British Columbia. Fifty-one percent of the voting shares in each of the subsidiary companies would be owned by Foothills (Yukon) and 49 percent in each by Westcoast, Alberta Gas Trunk Line and ANG (or Westcoast, if not acceptable to ANG), respectively.

(ii) That agreements have been entered into by Foothills (Yukon) with the Government of Canada whereby Foothills (Yukon) or any successor, would undertake the following:

(a) to conduct feasibility studies with respect to the construction of a gas pipeline of no less than 30-inch diameter from the Mackenzie Delta parallel to the Dempster Highway connecting Delta gas to the Foothills (Yukon) system near Dawson City, Yukon, and on or before 1 July 1979 make an application to the National Energy Board for a certificate of public convenience and necessity for such pipeline;

(b) to agree to provide capacity in the main 48-inch diameter pipeline from the point of connection of the Dempster lateral to such point or points on the 48-inch diameter system in Canada deemed necessary to effect delivery of Delta gas to southern Canadian markets, such capacity to be provided by 1 January 1984 or such later date as deemed necessary by the government; and

(c) to provide payment upon the request of the Government of Canada of a sum of money which would be used by the government to pay for socio-economic indirect costs of the pipeline project north of the 60th parallel incurred during a period expiring two years after leave had been granted by the Board to open the pipeline. The Board recommended that the obligation be limited to \$200 million.

REPORT TO THE PRESIDENT ON ENVIRONMENTAL IMPACTS OF PROPOSED ALASKA GAS TRANSPORTATION CORRIDORS BY THE COUNCIL OF ENVIRONMENTAL QUALITY

SUMMARY

BACKGROUND

Since the discovery of large oil and natural gas reserves in the Prudhoe Bay fields in Alaska, several routes have been proposed to transport this gas to the lower 48 states.

A North Slope/MacKenzie Valley corridor, sponsored by Alaskan Arctic Gas Company, would traverse Alaska's North Slope, cross into Canada at the MacKenzie River Delta, and run south along the river and hence into the Midwest; a western leg would transport gas to the western states.

An Alaska LNG route proposed by the El Paso Alaska Company would follow the oil pipeline to a new terminal site on Prince William Sound where the gas would be liquefied and shipped by tanker to southern California.

The Fairbanks Alternative corridor sponsored by the Alcan Pipeline Company would parallel the existing oil pipeline as far as Fairbanks and then follow the Alcan Highway through Canada. Some of the gas would be routed to the West Coast via a western leg, and most would go through Alberta and Saskatchewan to U.S. markets in the Midwest and the East.

All three corridors were analyzed in the environmental impact statement process of the Department of the Interior and the Federal Power Commission.

Recognizing an urgent national need for additional natural gas supplies, the Congress enacted the Alaska Natural Gas Transportation Act of 1976 to provide the means for a sound and expeditious decision by the President and the Congress on which, if any, transportation system should be built. To avoid the delays of possible litigation, the Act precludes judicial review of the environmental impact statements required by the National Environmental Policy Act (NEPA).

Under Section 6(d) of the Alaska Gas Act, the Council on Environmental Quality is directed to present to the President its views on the legal and factual sufficiency of the impact statements and on other environmental matters that we consider relevant. CEQ is also directed to provide members of the public with an opportunity to present oral and written data, views, and arguments on the impact statements. A total of four days of public hearings were held in Anchorage and Washington, D.C., with written and oral testimony submitted by over 70 persons and organizations representing a wide spectrum of interests. These hearings were extremely informative and helpful to the Council in reaching its conclusions.

VIEWS OF THE COUNCIL ON ENVIRONMENTAL QUALITY

Sufficiency of the Environmental Impact Statements

Because of the magnitude of the competing proposals and the abbreviated schedule for decisionmaking under the Alaska Gas Act, the decision at hand is to select a particular gas transportation route. It is the sufficiency of the environmental impact statements *for this limited purpose* that is considered here—not their sufficiency for determining precise alignments, facility locations, and other site-specific data.

After careful review of the impact statements and testimony submitted at our hearings, we have concluded that:

Although they have shortcomings, the environmental impact statements are legally and factually sufficient under the National Environmental Policy Act for purposes of selecting the corridor and basic technology for a gas transportation system. Indeed, the NEPA process led directly to the development of the Fairbanks Alternative, the corridor that we believe to be environmentally preferable, as noted below.

Although the impact statements provide the information necessary to select a corridor and the basic technology for a gas transportation system, they lack the data required for specific decisions concerning route alignments, project designs, mitigation measures, and facility siting. NEPA requires a continuous review of environmental factors and alternatives by agencies with authority over the approved gas transportation system. Environmental assessments, EIS supplements, or new impact statements may be required, depending upon the significance of impacts and the degree to which they have already been treated. Major design, engineering, or other site-specific decisions that follow the selection of a corridor and technology must be considered in one of these types of NEPA analyses.

Environmental Impacts of Alternative Corridors

The impact statements and other public documents provide a wealth of information on the environmental impacts of each of the three corridors. Altogether, they permit a fair comparison of the significant environmental impacts that we believe are most relevant to the decision before the President and the Congress. We found that:

The North Slope/MacKenzie Valley corridor is the most environmentally destructive of the three routes being considered. Intrusion into the wilderness stretching from the Canning River in Alaska to the MacKenzie Delta in Canada would be massively disruptive. We disagree strongly with the Federal Power Commission's conclusion that this corridor is environmentally acceptable.

This corridor would pass through parts of Alaska and Canada that are now hardly affected by industrial man's influence: Of its 195 miles in Alaska, 135 miles would cross the narrow coastal plain of the 8.9-million acre Arctic National Wildlife Range established to preserve unique wildlife, wilderness, and recreational values, the Range stands out as the last unspoiled area of its kind in the entire Northern Hemisphere.

The proposed North Slope/MacKenzie Valley pipeline would cut an east-west corridor across this unmarred landscape, requiring new port facilities, airstrips, helipads, gravel borrow areas and compressor stations as well. Although the land loss seems insubstantial when

compared to the total Range, the harm likely to occur to wildlife and wilderness values there is vastly out of proportion to acreage figures.

The litany of measures proposed to protect the Range from pipeline construction is a testimony to scientific, technological, and management ingenuity. The applicant proposes to build that portion of the pipeline entirely in one winter, using only snow roads that vanish with the spring melt. We are skeptical about whether it could be done. The risks of failure are impressive and their consequences irremedial. Experience suggests that economic pressure to complete such a pipeline on schedule would not yield to the onset of spring and the wildlife that might stand in the way.

We must also note the widespread concern that such a gas line could invite an oil line and perhaps a permanent road, so as eventually to become a permanent corridor. A gas line across the Arctic Range and Northern Yukon to the MacKenzie Delta would invite the exploration of oil and gas that may well exist within the Range or in the Beaufort Sea. The future of the Arctic Range must lie in the permanent dedication of this rich and unique area to wilderness. This is also the conclusion of the State of Alaska and every environmental organization appearing at our hearings.

The wilderness and wildlife values of the Range, along with the pipeline route, also extend into Canada, to the MacKenzie Delta. Natives there, who constitute the majority of the population in the Northern Arctic, have vigorously opposed any pipeline either across the North Slope or up the MacKenzie River, fearing its effects on their way of life and its interference with their land claims settlement. Canadian Justice Thomas Berger, who investigated the social and environmental impacts of this route for the Canadian government, recommended that to protect these people and the environment on which they depend, no pipeline be built across the North Slope.

The *Fairbanks Alternative* corridor would largely follow existing transportation corridors, with no large-scale intrusion into wilderness areas or destruction of wilderness values. We find, in agreement with the Federal Power Commission, that it is the most environmentally acceptable of the three corridors.

But some of its environmental risks are still unknown. The preliminary state of the design effort suggests substantial uncertainty about fundamental concepts. Measures to deal with frost heave, thaw settlement, and summer construction, for example, are only roughly sketched. Still to be developed is site-specific information, such as stream crossings and additional workpad construction mileage.

On the other hand, it appears that the gas line could be safely constructed relatively near the oil pipeline across the existing workpad. The existing haul road along the oil pipeline would also be used, as would many of the existing campsites and other facilities. Further advantages can result from the availability of information on the geology, soils, stream characteristics, and wildlife, all of which would aid in controlling impacts of the Fairbanks Alternative as far as Delta Junction, where it would depart from the oil pipeline.

Social and growth impacts of both the Fairbanks Alternative and the Alaska LNG route will obviously be greater in Alaska than those of the North Slope/MacKenzie Valley corridor. Although no accurate measures of these impacts have been made, the Alyeska experi-

ence has prepared residents for what to expect. Many government, labor, and business interests as well as some Alaskan natives desire the growth effects of another pipeline project and believe its impacts can readily be absorbed.

A Canadian Inquiry headed by Dean K.M. Lysyk is now investigating the effects of the Fairbanks Alternative on the native claims settlement issue in the Southern Yukon. The report is intended to provide Canada with the social impact information needed to make a decision on this route.

The Alaska LNG alternative presents risks to the environment, to public safety, and to system integrity not present with the overland corridors. Its significantly greater consumption of energy should also be viewed as an environmental cost, and it would have the greatest impact on Alaskan fisheries. It is possible that the Alaska LNG corridor and technology can be environmentally acceptable. At present, however, we are faced with significant uncertainties about thermal impacts, seismic design, ultimate suitability of the LNG plant sites proposed in Alaska and southern California, and the safety risks of LNG tanker traffic. This system would be environmentally acceptable only on condition that more specific analyses of alternative LNG facility sites and mitigation measures are conducted prior to any certification.

Because the Alaska LNG pipeline corridor makes the most extensive use of the existing oil pipeline corridor, its social, economic, and environmental impacts in Alaska would be similar to those of the Fairbanks Alternative. In its last 43 miles, however, the corridor would cross the Chugach National Forest, a roadless area of great scenic beauty, to Point Gravina, where the gas would be liquefied, and from there transported by tankers to California, gasified, and sent to U.S. markets.

The most serious potential impacts of the LNG facility at Point Gravina are those associated with the seawater cooling system. According to the best evidence, the LNG plant as proposed would probably affect the marine ecology of Orea Bay substantially. Because the area is a valuable source of salmon and other commercial species, it could have profound effects on the local economy as well. But precise conclusions cannot be drawn because no substantial investigation of the Bay has been undertaken, and the water-related LNG plant systems remain undefined. Without this information it is impossible to determine whether the site at Point Gravina is environmentally acceptable or another is preferable. It seems likely, however, that an environmentally acceptable plant could be designed and constructed.

Similar problems arise with seismic design at the Gravina site. Earthquakes and resultant tsunamis present serious threats. The applicant asserts that a safe plant could be designed once Gravina conditions (e.g., the existence and depth of bedrock) are satisfactorily investigated. Although this assertion has not been successfully challenged, the necessary proof must await further site investigation and actual plant design.

From Point Gravina LNG tankers would leave for a California gasification site—Point Conception or Oxnard appear to be the current leading alternatives. Here complex land use, thermal discharge,

and safety issues must still be resolved by the state and federal governments.

LNG tanker accidents can have major consequences. Tanker collisions or ramblings and groundings could lead to vapor clouds, LNG pool fires, and accidents at the LNG facility—with possibly fatal effects. The analyses of LNG public safety risks on the record are inconclusive. Although it is not now possible to establish the level of public safety risk imposed by an LNG facility, it is possible to reduce substantially the consequences of events by remote location of facilities away from people.

The Alaska LNG system is therefore unique, and it is difficult to analyze because of the inherent uncertainties posed. Mitigation of its environmental impacts and safety risks will be possible, but only at considerable, heretofore unestimated, expense.

We must note that the environmental damage inflicted by any of these transport systems will be significant. Thus we recommend that the need for Alaska gas, the parts of the country that it would benefit, and the alternative energy supplies that they might receive now or at some later date be subject to the most careful scrutiny before a final decision is reached.

We have defined our environmental impact considerations as solely a function of corridor and technology, independent of the project sponsor. Although Alean has proposed the least environmentally risky corridor—the Fairbanks Alternative—its proposal is the least well-developed of the three. And although we find the North Slope/Mackenzie Valley corridor unacceptable on environmental grounds, we note that Arctic Gas has provided environmental analyses of a depth and quality clearly superior to those of the other applicants.

Our conclusion that the Fairbanks Alternative corridor is the least environmentally damaging route assumes the strict application of environmental criteria in a full interdisciplinary review during the engineering design, construction scheduling, and route selection process. We also assume that the federal government will establish coherent stipulations, terms, and conditions and stringently enforce the environmental and public safety conditions in the field.

It will not suffice to rely on the project sponsor's "quality control" to protect the environment or to ensure compliance with government-imposed conditions. Effective enforcement will require a central federal authority and a new organizational structure to resolve inter-agency conflicts over jurisdiction and policy. In any case, we believe that the public would be well served by a citizen monitoring capability, staffed and federally supported to observe and report on pipeline construction, and well coordinated with the government monitoring structure.

PUBLIC VIEWS PRESENTED TO THE COUNCIL ON ENVIRONMENTAL QUALITY

Witnesses found the environmental impact statements in compliance with the National Environmental Policy Act but several shortcomings were noted. Critics argued that the statements were too long and cumbersome and lacked explicit comparisons of the three corridors. Some also believed that the statements had omitted specific information or analyses, such as recent design and alignment changes

in two of the proposals, long-range effects of pipeline construction, and comprehensive information on impacts in Canada.

The issues of greatest concern to witnesses included:

Impacts on the Arctic National Wildlife Range.

Social and economic impacts in Alaska.

Impacts on Canada, especially on Canadian natives.

The net national economic costs and benefits of transporting Alaskan natural gas.

Regional distribution of Alaskan gas to the lower 48 states.

Implications for future resource development in the North.

Pipeline construction monitoring.

Other prominent issues were impacts on Alaska's fisheries and effects on coal gasification development.

Environmental groups testifying and the State of Alaska were unanimous in their opposition to the North Slope/MacKenzie Valley corridor; most environmental organizations strongly preferred the Fairbanks Alternative to the other corridors. Representatives of the State of Alaska and Alaskan business, labor, and local governments testifying favored the Alaska LNG route, believing it to hold the greatest social and economic benefits for the state. Many major Midwest, East Coast, and California gas distributors and transmission companies support the North Slope/MacKenzie Valley corridor. They believe the Arctic Gas proposal to be the most reliable and one that will ensure delivery of the greatest volumes of gas directly to markets.

MAY 9, 1977.

**REPORT OF JUSTICE THOMAS R. BERGER ON THE MACKENZIE VALLEY
PIPELINE INQUIRY**

"It will be for the Government of Canada, when my report and the National Energy Board's report is before it, to weigh Canada's need for frontier gas, and the impact of the construction of a pipeline on the north and on northern peoples, and then to decide if a pipeline should be built and, if it is to be build, then where and by whom it should be built. These are political decisions, to be taken by those who have been elected to make such decisions."

Thomas R. Berger. *Queens Quarterly*,
Vol. 83, No. 1, Spring 1976.

The Mackenzie Valley Inquiry was established on March 21, 1974 by Order-in-Council of the Government of Canada. The attached is the first of a two-volume advisory report to the Minister of Indian and Northern Affairs, prepared by the Commissioner of Inquiry, Justice Thomas R. Berger. In this first volume, Justice Berger addresses the overall social, environmental and economic impacts of proposed natural gas transportation systems on the Yukon and Northwest Territories. Specific emphasis is placed on the possible impacts of competing Mackenzie Valley pipeline projects sponsored by Canadian Arctic Gas Pipeline Ltd. and Foothills Pipelines Ltd. The second volume, scheduled for later release, will present recommended terms and conditions that might be imposed on the right of way if a pipeline is built.

The recommendations flowing from the Mackenzie Valley Pipeline Inquiry should not be construed as representing the policies of the Canadian Government or any Department thereof. It is common practice in Canada to establish Commissions of this kind to study policy options. While the Government is under no obligation to accept Justice Berger's recommendations, they will, of course, be given serious consideration.

The Berger reports, the National Energy Board findings and inputs from Government and public sources will all contribute to the review process leading toward final Government decisions.

**MACKENZIE VALLEY PIPELINE INQUIRY, COMMISSIONER,
MR. JUSTICE THOMAS R. BERGER**

OTTAWA,
May 9, 1977.

Berger Report: Northern Frontier, Northern Homeland.

Mr. Justice Thomas R. Berger's report of the Mackenzie Valley Pipeline Inquiry, tabled in the House of Commons today, recommends that, on environmental grounds, no pipeline should be built across the

Northern Yukon. It is, on the other hand, feasible, from an environmental point of view, to build a pipeline along the Mackenzie Valley to transport gas from the Arctic. However, construction of a pipeline along the Mackenzie Valley should be postponed for 10 years to allow sufficient time for a just settlement of native claims. The Judge indicates that on the basis of the evidence brought before the Inquiry, the alternative overland route to carry Alaskan gas to markets in the United States, along the Alaska Highway crossing the southern Yukon is environmentally preferable to the proposed crossing of the Northern Yukon.

Judge Berger's recommendations do not mean that Canadians "must renounce their northern gas and oil." The report said that if the Government of Canada accepts the recommendations contained in this report, Canadians can build "a Mackenzie Valley pipeline at the time of their own choosing, along a route of their own choice."

Judge Berger said that the decisions facing Canadians about the North

are not . . . simply about northern pipelines. They are decisions about the protection of the northern environment and the future of the northern peoples. . . . The North is a region of conflicting goals: preferences and aspirations . . . [where] the pipeline represents the advance of the industrial system to the Arctic. . . . The impact of a pipeline will bear especially upon the native people. . . . The conflict focuses on the pipeline. For some in Northern Canada, the North is a frontier, for others, it is a homeland, Judge Berger said.

Judge Berger set out the assumptions behind his recommendations:

I have proceeded on the assumption that, in due course, the industrial system will require the gas and oil of the Western Arctic, and that they will have to be transported along the Mackenzie Valley to markets in the South. I have also proceeded on the assumption that we intend to protect and preserve Canada's northern environment and that, above all else, we intend to honour the legitimate claims and aspirations of the native people. All of these assumptions are embedded in the federal government's expressed northern policy for the 1970s.

Two pipeline companies, Canadian Arctic Gas Pipeline L'd. and Foothills Pipe Lines Ltd., have proposed pipelines to bring gas from the Arctic along the Mackenzie Valley to consumers in the South. Arctic Gas proposes to bring Alaskan gas from Prudhoe Bay via the Northern Yukon, hook up with gas from the Mackenzie Delta and deliver to markets in Canada and the United States. Foothills proposes to bring Canadian gas south from the Mackenzie Delta.

The mandate of the Mackenzie Valley Pipeline Inquiry was to determine the social, environmental and economic impact of the construction of a gas pipeline and the cumulative impact of an energy corridor from the Arctic, and to recommend the terms and conditions that ought to be imposed on any right-of-way if such a pipeline were to be built.

This is Volume I of the report of the Inquiry. It deals with the broad social, economic and environmental impacts of the pipeline and

corridor. It contains basic recommendations to assist the Government in determining when a pipeline should be built, where it should be built and who should build it.

Volume II of the report is in preparation and will be available this summer. It will contain terms and conditions to be imposed if a pipeline is built.

Volume I includes an opening letter to Mr. Allmand, the Minister of Indian and Northern Affairs, which is a summary of Judge Berger's recommendations.

Key recommendations are as follows:

Judge Berger said: "I recommend that no pipeline be built and no energy corridor be established across the Northern Yukon along either route." This means that the report rejected both the Coastal and Interior Routes proposed by Arctic Gas to bring gas from Alaska to the United States.

Judge Berger said that if the pipeline is built along the Coastal Route and an energy corridor is established, "I foresee that, within our lifetime, the Porcupine caribou herd [one of the last great caribou herds in North America], will be reduced to a remnant." "The preservation of the Porcupine caribou herd is incompatible with the building of a gas pipeline and the establishment of an energy corridor through its calving grounds."

The Arctic Gas pipeline and energy corridor along the Interior Route in the Northern Yukon "would have a devastating impact on the people of Old Crow," Judge Berger said. "All the people in the village told me they are opposed to the pipeline. They fear it will destroy their village, their way of life, and their land."

The report recommended that a National Wilderness Park be established in the Northern Yukon contiguous to Alaska's Arctic National Wildlife Range "to protect the wilderness, the caribou, birds and other wildlife." "Oil and gas exploration, pipeline construction and industrial activity must be prohibited within the Park and the native people must continue to have the right to hunt, fish and trap."

Regarding the alternate proposal to carry Alaskan gas along the Alaska Highway Route across the southern Yukon, Judge Berger said:

Some of the concerns about wildlife, wilderness, and engineering and construction that led me to reject the corridor across the Northern Yukon do not appear to apply in the case of the Alaska Highway Route. It is a route with an established infrastructure. In my view, the construction of a pipeline along this route would not threaten any substantial populations of any species in the Yukon or in Alaska. But I am in no position to endorse such a route: an assessment of social and economic impact must still be made and native claims have not been settled.

Judge Berger views the Mackenzie Delta-Beaufort Sea area as a "major petroleum province in the making" and regards the pipeline as the trigger for expanded oil and gas exploration and development. He rejected the Arctic Gas proposed route across the Mackenzie Delta in order to protect the Delta's unique ecosystem, the birds and the white whales.

Judge Berger recommended a white whale sanctuary be established in west Mackenzie Bay to protect the calving grounds for the 5,000-strong white whale herd. "If the herd is driven from its calving area, it will die out," Judge Berger said. In the sanctuary, "oil and gas exploration and development would be forbidden at any time of the year."

Much of the oil and gas potential of the region is believed to lie offshore beneath the Beaufort Sea. The report recognized that it has been considered to be in the national interest to begin delineating the extent of these reserves but urged restraint in approving future exploration and development. "The greatest concern in the Beaufort Sea is the threat of oil spills," Judge Berger said: "In my opinion, the techniques presently available will not be successful in controlling or cleaning up a major spill in this remote [Arctic] area."

"Therefore, I urge the Government of Canada to ensure that improvements in technology for prevention . . . and clean-up of spills precede further advance of industry in the Beaufort Sea." In addition, Canada is "pioneering on this frontier and establishing the standards that may well guide other circumpolar countries in future Arctic drilling."

Another key recommendation is that "a period of 10 years will be required in the Mackenzie Valley and Western Arctic to settle native claims, and to establish the new institutions and new programs that a settlement will entail. No pipeline should be built until these things have been achieved." But solely from an environmental point of view, Judge Berger said, "I have concluded that it is feasible . . . to build a pipeline and to establish an energy corridor along the Mackenzie Valley, running south from the Mackenzie Delta to the Alberta border."

"The pipeline companies see the pipeline as an unqualified gain to the North," but "it is an illusion to believe that the pipeline will solve the economic problems of the North," the report said. The Arctic Gas project has been described as one of the greatest construction projects, in terms of capital expenditure, ever contemplated by private enterprise. The Arctic Gas pipeline would require 6,000 construction workers North of 60, a huge infrastructure of wharves, warehouses and airstrips, and fleets of aircraft, tractors, earth-movers, trucks and trailers. "The pipeline contractors and unions have made it plain that native northerners are not qualified to hold down skilled positions in pipeline construction." Once the pipeline is built there will be about 250 jobs, mostly of a technical nature, that will require qualified personnel from the South.

Judge Berger said:

I am convinced that non-renewable resources need not necessarily be the sole basis of the northern economy in the future. . . . A strengthening of renewable resource harvesting in the North—the fortification of the native economy—would enable native people to enter the industrial system without becoming completely dependent on it.

An economy based on modernization of hunting, fishing and trapping, on efficient game and fisheries management, on small-scale enterprise, and on the orderly development of gas and oil resources over a period of years—this is no retreat

into the past; rather, it is a rational program for northern development based on the ideals and aspirations of northern native peoples.

The report stated: "The social costs of building a pipeline now will be enormous, and no remedial programs are likely to ameliorate them." The great majority of the 1,000 witnesses that spoke to the Inquiry in the 35 community hearings expressed their fears of what a pipeline would bring: "an influx of construction workers, more alcoholism, tearing of the social fabric, injury to the land, and the loss of their identity as a people." Judge Berger said, "I am persuaded that these fears are well founded."

The report recommended that "the native people must be allowed a choice about their own future. If the pipeline is approved before a settlement of claims takes place, the future of the North—and the place of the native people in the North—will, in effect, have been decided for them." "It would therefore be dishonest to try to impose an immediate settlement that we know now—and that the native people will know before the ink is dry—will not achieve their goals. They will soon realize—just as the native people on the prairies realized a century ago as the settlers poured in—that the actual course of events on the ground will deny the promises that appear on paper."

The report pointed out that "the pipeline companies are obviously having trouble in designing their proposal to deal with frost heave" of the buried refrigerated pipeline. Judge Berger expressed his concern about construction scheduling too: "I am not persuaded that Arctic Gas can meet its construction schedule across the Northern Yukon."

Given such uncertainties "it seems to me unreasonable that the Government of Canada should give unqualified approval to a right-of-way or provide financial guarantees to the project without a convincing resolution of these concerns."

The report also recommended that the Government develop an independent body of knowledge on the northern environment, environmental impact, and engineering design and construction under Arctic and permafrost conditions to fill critical gaps in information and to provide government with the knowledge it will need in making an intelligent disposition of northern development proposals.

In the epilogue to the report, Judge Berger referred to the statements made at the Inquiry by native people who said they would be prepared to give up their lives to stop the pipeline if it were to proceed before there had been a settlement of native claims. He said: "I have given the most anxious consideration to whether or not I should make any reference in this report" to the statements made at the Inquiry about possible "violent reaction to the pipeline if it were built without a just settlement of native claims." "I have concluded that they cannot be ignored." "No one who heard them could doubt that they were said in earnest." "I do not want anyone to think I am predicting an insurrection. But I am saying there is the real possibility of civil disobedience and civil disorder that—if they did occur—might well render orderly political evolution of the North impossible."

Public Law 94-586
94th Congress

An Act

To expedite a decision on the delivery of Alaska natural gas to United States markets, and for other purposes.

Oct. 22, 1976
[S. 3521]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

Alaska Natural Gas Transportation Act of 1976.
15 USC 719 note.

SHORT TITLE

SECTION 1. This Act may be cited as the "Alaska Natural Gas Transportation Act of 1976".

CONGRESSIONAL FINDINGS

SEC. 2. The Congress finds and declares that—

15 USC 719.

(1) a natural gas supply shortage exists in the contiguous States of the United States;

(2) large reserves of natural gas in the State of Alaska could help significantly to alleviate this supply shortage;

(3) 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; and

(4) the determinations whether to authorize a transportation system for delivery of Alaska natural gas to the contiguous States and, if so, which system to select, involve questions of the utmost importance respecting national energy policy, international relations, national security, and economic and environmental impact, and therefore should appropriately be addressed by the Congress and the President in addition to those Federal officers and agencies assigned functions under law pertaining to the selection, construction, and initial operation of such a system.

STATEMENT OF PURPOSE

SEC. 3. The purpose of this Act is 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 for construction and initial operation by providing for the participation of the President and the Congress in the selection process, and, if such a system is approved under this Act, to expedite its construction and initial operation by (1) limiting the jurisdiction of the courts to review the actions of Federal officers or agencies taken pursuant to the direction and authority of this Act, and (2) permitting the limitation of administrative procedures and effecting the limitation of judicial procedures related to such actions. To accomplish this purpose it is the intent of the Congress to exercise its constitutional powers to the fullest extent in the authorizations and directions herein made, and particularly with respect to the limitation of judicial review of actions of Federal officers or agencies taken pursuant thereto.

15 USC 719a.

DEFINITIONS

15 USC 719b.

SEC. 4. As used in this Act:

- (1) the term "Alaska natural gas" means natural gas derived from the area of the State of Alaska generally known as the North Slope of Alaska, including the Continental Shelf thereof;
- (2) the term "Commission" means the Federal Power Commission;
- (3) the term "Secretary" means the Secretary of the Interior;
- (4) the term "provision of law" means any provision of a Federal statute or rule, regulation, or order issued thereunder; and
- (5) the term "approved transportation system" means the system for the transportation of Alaska natural gas designated by the President pursuant to section 7(a) or 8(b) and approved by joint resolution of the Congress pursuant to section 8.

FEDERAL POWER COMMISSION REVIEWS AND REPORTS

Proceedings,
suspension.
15 USC 719c.
15 USC 717w.

SEC. 5. (a) (1) Notwithstanding any provision of the Natural Gas Act or any other provision of law, the Commission shall suspend all proceedings pending before the Commission on the date of enactment of this Act relating to a system for the transportation of Alaska natural gas as soon as the Commission determines to be practicable after such date, and the Commission may refuse to act on any application, amendment thereto, or other requests for action under the Natural Gas Act relating to a system for the transportation of Alaska natural gas until such time as (A) a decision of the President designating such a system for approval takes effect pursuant to section 8, (B) no such decision takes effect pursuant to section 8, or (C) the President decides not to designate such a system for approval under section 8 and so advises the Congress pursuant to section 7.

(2) In the event a decision of the President designating such a system takes effect pursuant to this Act, the Commission shall forthwith vacate proceedings suspended under paragraph (1) and, pursuant to section 9 and in accordance with the President's decision, issue a certificate of public convenience and necessity respecting such system.

(3) In the event such a decision of the President does not take effect pursuant to this Act or the President decides not to designate such a system and so advises the Congress pursuant to section 7, the suspension provided for in paragraph (1) of this subsection shall be removed.

Recommendation,
submission,
to President.

(b) (1) The Commission shall review all applications for the issuance of a certificate of public convenience and necessity relating to the transportation of Alaska natural gas pending on the date of enactment of this Act, and any amendments thereto which are timely made, and after consideration of any alternative transportation system which the Commission determines to be reasonable, submit to the President not later than May 1, 1977, a recommendation concerning the selection of such a transportation system. Such recommendation may be in the form of a proposed certificate of public convenience and necessity, or in such other form as the Commission determines to be appropriate, or may recommend that no decision respecting the selection of such a transportation system be made at this time or pursuant to this Act. Any recommendation that the President approve a particular transportation system shall (A) include a description of the nature and route of the system, (B) designate

a person to construct and operate the system, which person shall be the applicant, if any, which filed for a certificate of public convenience and necessity to construct and operate such system. (C) if such recommendation is for an all-land pipeline transportation system, or a transportation system involving water transportation, include provision for new facilities to the extent necessary to assure direct pipeline delivery of Alaska natural gas contemporaneously to points both east and west of the Rocky Mountains in the lower continental United States.

(2) The Commission may, by rule, provide for the presentation of data, views, and arguments before the Commission or a delegate of the Commission pursuant to such procedures as the Commission determines to be appropriate to carry out its responsibilities under paragraph (1) of this subsection. Such a rule shall, to the extent determined by the Commission, apply, notwithstanding any provision of law that would otherwise have applied to the presentation of data, views, and arguments. Rule.

(b) The Commission may request such information and assistance from any Federal agency as the Commission determines to be necessary or appropriate to carry out its responsibilities under this Act. Any Federal agency requested to submit information or provide assistance shall submit such information to the Commission at the earliest practicable time after receipt of a Commission request. Cooperation.

(c) The Commission shall accompany any recommendation under subsection (b) (1) with a report, which shall be available to the public, explaining the basis for such recommendation and including for each transportation system reviewed or considered a discussion of the following: Report, public availability.

(1) for each year of the 20-year period which begins with the first year following the date of enactment of this Act, the estimated—

(A) volumes of Alaska natural gas which would be available to each region of the United States directly, or indirectly by displacement or otherwise, and

(B) transportation costs and delivered prices of any such volumes of gas by region;

(2) the effects of each of the factors described in subparagraphs (A) and (B) of paragraph (1) on the projected natural gas supply and demand for each region of the United States and on the projected supplies of alternative fuels available by region to offset shortages of natural gas occurring in such region for each such year;

(3) the impact upon competition;

(4) the extent to which the system provides a means for the transportation to United States markets of natural resources or other commodities from sources in addition to the Prudhoe Bay Reserve;

(5) environmental impacts;

(6) safety and efficiency in design and operation and potential for interruption in deliveries of Alaska natural gas;

(7) construction schedules and possibilities for delay in such schedules or for delay occurring as a result of other factors;

(8) feasibility of financing;

(9) extent of reserves, both proven and probable and their deliverability by year for each year of the 20-year period which

begins with the first year following the date of enactment of this Act;

(10) the estimate of the total delivered cost to users of the natural gas to be transported by the system by year for each year of the 20-year period which begins with the first year following the date of enactment of this Act;

(11) capability and cost of expanding the system to transport additional volumes of natural gas in excess of initial system capacity;

(12) an estimate of the capital and operating costs, including an analysis of the reliability of such estimates and the risk of cost overruns; and

(13) such other factors as the Commission determines to be appropriate.

(d) The recommendation by the Commission pursuant to this section shall not be based upon the fact that the Government of Canada or agencies thereof have not, by then rendered a decision as to authorization of a pipeline system to transport Alaska natural gas through Canada.

(e) If the Commission recommends the approval of a particular transportation system, it shall submit to the President with such recommendation (1) an identification of those facilities and operations which are proposed to be encompassed within the term "construction and initial operation" in order to define the scope of directions contained in section 9 of this Act and (2) the terms and conditions permitted under the Natural Gas Act, which the Commission determines to be appropriate for inclusion in a certificate of public convenience and necessity to be issued respecting such system. The Commission shall submit to the President contemporaneously with its report an environmental impact statement prepared respecting the recommended system, if any, and each environmental impact statement which may have been prepared respecting any other system reported on under this section.

Transportation system recommendation, submittal to President.

15 USC 717w.

Environmental impact statement, submittal to President.

OTHER REPORTS

SEC. 6. (a) Not later than July 1, 1977, any Federal officer or agency may submit written comments to the President with respect to the recommendation and report of the Commission and alternative methods for transportation of Alaska natural gas for delivery to the contiguous States. Such comments shall be made available to the public by the President when submitted to him, unless expressly exempted from this requirement in whole or in part by the President, under section 552(b)(1) of title 5, United States Code. Any such written comment shall include information within the competence of such Federal officer or agency with respect to—

- (1) environmental considerations, including air and water quality and noise impacts;
- (2) the safety of the transportation systems;
- (3) international relations, including the status and time schedule for any necessary Canadian approvals and plans;
- (4) national security, particularly security of supply;
- (5) sources of financing for capital costs;
- (6) the impact upon competition;
- (7) impact on the national economy, including regional natural gas requirements; and

Comments, submittal to President.
15 USC 719d.

Public availability.

(8) relationship of the proposed transportation system to other aspects of national energy policy.

(b) Not later than July 1, 1977, the Governor of any State, any municipality, State utility commission, and any other interested person may submit to the President such written comments with respect to the recommendation and report of the Commission and alternative systems for delivering Alaska natural gas to the contiguous States as they determine to be appropriate.

Comments,
submittal to
President.

(c) Not later than July 1, 1977, each Federal officer or agency shall report to the President with respect to actions to be taken by such officer or agency under section 9(a) relative to each transportation system reported on by the Commission under section 5(c) and shall include such officer's or agency's recommendations with respect to any provision of law to be waived pursuant to section 8(g) in conjunction with any decision of the President which designates a system for approval.

Report to
President.

(d) Following receipt by the President of the Commission's recommendations, the Council on Environmental Quality shall afford interested persons an opportunity to present oral and written data, views, and arguments respecting the environmental impact statements submitted by the Commission under section 5(c). Not later than July 1, 1977, the Council on Environmental Quality shall submit to the President a report, which shall be contemporaneously made available by the Council to the public, summarizing any data, views, and arguments received and setting forth the Council's views concerning the legal and factual sufficiency of each such environmental impact statement and other matters related to environmental impact as the Council considers to be relevant.

Report to
President.

PRESIDENTIAL DECISION AND REPORT

SEC. 7. (a)(1) As soon as practicable after July 1, 1977, but not later than September 1, 1977, the President shall issue a decision as to whether a transportation system for delivery of Alaska natural gas should be approved under this Act. If he determines such a system should be so approved, his decision shall designate such a system for approval pursuant to section 8 and shall be consistent with section 5(b)(1)(C) to assure delivery of Alaska natural gas to points both east and west of the Rocky Mountains in the continental United States. The President in making his decision shall take into consideration the Commission's recommendation pursuant to section 5, the report under section 5(c), and any comments submitted under section 6, and his decision to designate a system for approval shall be based on his determination as to which system, if any, best serves the national interest.

15 USC 719e.

(c) The President, for a period of up to 90 additional calendar days after September 1, 1977, may delay the issuance of his decision and transmittal thereof to the House of Representatives and the Senate, if he determines (A) that there exists no environmental impact statement prepared relative to a system he wishes to consider or that any prepared environmental impact statement relative to a system he wishes to consider is legally or factually insufficient, or (B) that the additional time is otherwise necessary to enable him to make a sound decision on an Alaska natural gas transportation system. The President shall promptly, but in no case any later than September 1, 1977, notify the House of Representatives and the

Transmittal to
Congress, delay.

Notice to
Congress.

Senate if he so delays his decision and submit a full explanation of the basis of any such delay.

(3) If, on or before May 1, 1977, the President determines to delay issuance and transmittal of his decision to the House of Representatives and the Senate pursuant to paragraph (2) of this subsection, he may authorize a delay of not more than 90 days in the date of taking of any action specified in sections 5 and 6. The President shall promptly notify the House of Representatives and the Senate of any such authorization of delay and submit a full explanation of the basis of any such authorization.

(4) If the President determines to designate for approval a transportation system for delivery of Alaska natural gas to the contiguous States, he shall in such decision—

(A) describe the nature and route of the system designated for approval;

(B) designate a person to construct and operate such a system, which person shall be the applicant, if any, which filed for a certificate of public convenience and necessity to construct and operate such system;

(C) identify those facilities, the construction of which, and those operations, the conduct of which, shall be encompassed within the term "construction and initial operation" for purposes of defining the scope of the directions contained in section 9 of this Act, taking into consideration any recommendation of the Commission with respect thereto; and

(D) identify those provisions of law, relating to any determination of a Federal officer or agency as to whether a certificate, permit, right-of-way, lease, or other authorization shall be issued or be granted, which provisions the President finds (i) involve determinations which are subsumed in his decision and (ii) require waiver pursuant to section 8(g) in order to permit the expeditious construction and initial operation of the transportation system.

(5) After a decision of the President designating an Alaska natural gas transportation system takes effect under section 8, the President shall appoint an officer of the United States, with the advice and consent of the Senate, or designate a board (consisting of such an officer, so appointed with the advice and consent of the Senate, as chairman and such other individuals as the President determines appropriate to serve on such board by reason of background, experience, or position) to serve as Federal inspector of construction of such transportation system, except that no such individual or officer may have a financial interest in the approved transportation system. Upon enactment of a joint resolution pursuant to section 8 approving such a system the Federal inspector shall—

(A) establish a joint surveillance and monitoring agreement, approved by the President, with the State of Alaska similar to that in effect during construction of the trans-Alaska oil pipeline to monitor the construction of the approved transportation system within the State of Alaska;

(B) monitor compliance with applicable laws and the terms and conditions of any applicable certificate, rights-of-way, permit, lease, or other authorization issued or granted under section 9;

(C) monitor actions taken to assure timely completion of construction schedules and the achievement of quality of construction, cost control, safety, and environmental protection objectives and the results obtained therefrom;

Notice to
Congress.

Chairman,
appointment.

Joint surveillance
and monitoring
agreement,
establishment.

(D) have the power to compel, by subpoena if necessary, submission of such information as he deems necessary to carry out his responsibilities; and

(E) keep the President and the Congress currently informed on any significant departures from compliance and issue quarterly reports to the President and the Congress concerning existing or potential failures to meet construction schedules or other factors which may delay the construction and initial operation of the system and the extent to which quality of construction, cost control, safety and environmental protection objectives have been achieved.

(6) If the President determines to designate for approval a transportation system for delivery of Alaska natural gas to the contiguous States, he may identify in such decision such terms and conditions permissible under existing law as he determines appropriate for inclusion with respect to any issuance or authorization directed to be made pursuant to section 9.

(b) The decision of the President made pursuant to subsection (a) of this section shall be transmitted to both Houses of Congress and shall be considered received by such Houses for the purposes of this section on the first day on which both are in session occurring after such decision is transmitted. Such decision shall be accompanied by a report explaining in detail the basis for his decision with specific reference to the factors set forth in sections 5(c) and 6(a), and the reasons for any revision, modification of, or substitution for, the Commission recommendation.

Transmittal to Congress.

(c) The report of the President pursuant to subsection (b) of this section shall contain a financial analysis for the transportation system designated for approval. Unless the President finds and states in his report submitted pursuant to this section that he reasonably anticipates that the system designated by him can be privately financed, constructed, and operated, his report shall also be accompanied by his recommendation concerning the use of existing Federal financing authority or the need for new Federal financing authority.

Financial analysis.

(d) In making his decision under subsection (a) the President shall inform himself, through appropriate consultation, of the views and objectives of the States, the Government of Canada, and other governments with respect to those aspects of such a decision that may involve intergovernmental and international cooperation among the Government of the United States, the States, the Government of Canada, and any other government.

(e) If the President determines to designate a transportation system for approval, the decision of the President shall take effect as provided in section 8, except that the approval of a decision of the President shall not be construed as amending or otherwise affecting the laws of the United States so as to grant any new financing authority as may have been identified by the President pursuant to subsection (c).

CONGRESSIONAL REVIEW

Sec. 8. (a) Any decision under section 7(a) or 8(b) designating for approval a transportation system for the delivery of Alaska natural gas shall take effect upon enactment of a joint resolution within the first period of 60 calendar days of continuous session of Congress beginning on the date after the date of receipt by the Senate and House of Representatives of a decision transmitted pursuant to section 7(b) or subsection (b) of this section.

15 USC 719f.

(b) If the Congress does not enact such a joint resolution within such 60-day period, the President, not later than the end of the 30th day following the expiration of the 60-day period, may propose a new decision and shall provide a detailed statement concerning the reasons for such proposal. The new decision shall be submitted in accordance with section 7(c) and transmitted to the House of Representatives and the Senate on the same day while both are in session and shall take effect pursuant to subsection (a) of this section. In the event that a resolution respecting the President's decision was defeated by vote of either House, no new decision may be transmitted pursuant to this subsection unless such decision differs in a material respect from the previous decision.

(c) For purposes of this section—

(1) continuity of session of Congress is broken only by an adjournment sine die; and

(2) the days on which either House is not in session because of an adjournment of more than 3 days to a day certain are excluded in the computation of the 60-day calendar period.

(d)(1) This subsection is enacted by Congress—

(A) as an exercise of the rulemaking power of each House of Congress, respectively, and as such it is deemed a part of the rules of each House, respectively, but applicable only with respect to the procedure to be followed in that House in the case of resolutions described by paragraph (2) of this subsection; and it supercedes other rules only to the extent that it is inconsistent therewith; and

(B) with full recognition of the constitutional right of either House to change the rules (so far as those rules relate to the procedure of that House) at any time, in the same manner and to the same extent as in the case of any other rule of such House.

(2) For purposes of this Act, the term "resolution" means (A) a joint resolution, the resolving clause of which is as follows: "That the House of Representatives and Senate approve the Presidential decision on an Alaska natural gas transportation system submitted to the Congress on _____, 19____, and find that any environmental impact statements prepared relative to such system and submitted with the President's decision are in compliance with the Natural Environmental Policy Act of 1969"; the blank space therein shall be filled with the date on which the President submits his decision to the House of Representatives and the Senate; or (B) a joint resolution described in subsection (g).

(3) A resolution once introduced with respect to a Presidential decision or an Alaska natural gas transportation system shall be referred to one or more committees (and all resolutions with respect to the same Presidential decision on an Alaska natural gas transportation system shall be referred to the same committee or committees) by the President of the Senate or the Speaker of the House of Representatives, as the case may be.

(4)(A) If any committee to which a resolution with respect to a Presidential decision on an Alaska natural gas transportation system has been referred has not reported it at the end of 30 calendar days after its referral, it shall be in order to move either to discharge such committee from further consideration of such resolution or to discharge such committee from consideration of any other resolution with respect to such Presidential decision on an Alaska natural gas transportation system which has been referred to such committee.

"Resolution"

42 USC 4321
note.

Referral to
congressional
committees.

(B) A motion to discharge may be made only by an individual favoring the resolution, shall be highly privileged (except that it may not be made after the committee has reported a resolution with respect to the same Presidential decision on an Alaska natural gas transportation system), and debate thereon shall be limited to not more than 1 hour, to be divided equally between those favoring and those opposing the resolution. An amendment to the motion shall not be in order, and it shall not be in order to move to reconsider the vote by which the motion was agreed to or disagreed to.

Debate
limitation.

(C) If the motion to discharge is agreed to or disagreed to, the motion may not be made with respect to any other resolution with respect to the same Presidential decision on an Alaska natural gas transportation system.

(5) (A) When any committee has reported, or has been discharged from further consideration of, a resolution, but in no case earlier than 30 days after the date of receipt of the President's decision to the Congress, it shall be at any time thereafter in order (even though a previous motion to the same effect has been disagreed to) to move to proceed to the consideration of the resolution. The motion shall be highly privileged and shall not be debatable. An amendment to the motion shall not be in order, and it shall not be in order to move to reconsider the vote by which the motion was agreed to or disagreed to.

(B) Debate on the resolution described in subsection (d)(2)(A) shall be limited to not more than 10 hours and on any resolution described in subsection (g) to one hour. This time shall be divided equally between those favoring and those opposing such resolution. A motion further to limit debate shall not be debatable. An amendment to, or motion to recommit the resolution shall not be in order, and it shall not be in order to move to reconsider the vote by which such resolution was agreed to or disagreed to or, thereafter within such 60-day period, to consider any other resolution respecting the same Presidential decision.

(6) (A) Motions to postpone, made with respect to the discharge from committee, or the consideration of a resolution and motions to proceed to the consideration of other business, shall be decided without debate.

(B) Appeals from the decision of the Chair relating to the application of the rules of the Senate or the House of Representatives, in the case may be, to the procedures relating to a resolution shall be decided without debate.

(c) The President shall find that any required environmental impact statement relative to the Alaska natural gas transportation system designated for approval by the President has been prepared and that such statement is in compliance with the National Environmental Policy Act of 1969. Such finding shall be set forth in the report of the President submitted under section 7. The President may supplement or modify the environmental impact statements prepared by the Commission or other Federal officers or agencies. Any such environmental impact statement shall be submitted contemporaneously with the transmittal to the Senate and House of Representatives of the President's decision pursuant to section 7(b) or subsection (b) of this section.

42 USC 4321
note.

Submittal to
congressional
committees.

(f) Within 20 days of the transmittal of the President's decision to the Congress under section 7(b) or under subsection (b) of this section, (1) the Commission shall submit to the Congress a report commenting on the decision and including any information with regard to that decision which the Commission considers appropriate,

Report, submittal
to Congress.

90 STAT. 2912

PUBLIC LAW 94-586—OCT. 22, 1976

Hearings.
Report, submittal
to Congress.

Congressional
committee
hearings.

Waiver, submittal
to Congress.

and (2) the Council on Environmental Quality shall provide an opportunity to any interested person to present oral and written data, views, and arguments on any environmental impact statement submitted by the President relative to any system designated by him for approval which is different from any system reported on by the Commission under section 5(c), and shall submit to the Congress a report summarizing any such views received. The committees in each House of Congress to which a resolution has been referred under subsection (d) (3) shall conduct hearings on the Council's report and include in any report of the committee respecting such resolution the findings of the committee on the legal and factual sufficiency of any environmental impact statement submitted by the President relative to any system designated by him for approval.

(g) (1) At any time after a decision designating a transportation system is submitted to the Congress pursuant to this section, if the President finds that any provision of law applicable to actions to be taken under subsection (a) or (c) of section 9 require waiver in order to permit expeditious construction and initial operation of the approved transportation system, the President may submit such proposed waiver to both Houses of Congress.

(2) Such provision shall be waived with respect to actions to be taken under subsection (a) or (c) of section 9 upon enactment of a joint resolution pursuant to the procedures specified in subsections (c) and (d) of this section (other than subsection (d) (2) thereof) within the first period of 60 calendar days of continuous session of Congress beginning on the date after the date of receipt by the Senate and House of Representatives of such proposal.

(3) The resolving clause of the joint resolution referred to in this subsection is as follows: "That the House of Representatives and Senate approve the waiver of the provision of law () as proposed by the President, submitted to the Congress on , 19 ." The first blank space therein being filled with the citation to the provision of law and the second blank space therein being filled with the date on which the President submits his decision to the House of Representatives and the Senate.

(4) In the case of action with respect to a joint resolution described in this subsection, the phrase "a waiver of a provision of law" shall be substituted in subsection (d) for the phrase "the Alaska natural gas transportation system."

AUTHORIZATIONS

15 USC 719g.

Sec. 9. (a) To the extent that the taking of any action which is necessary or related to the construction and initial operation of the approved transportation system requires a certificate, right-of-way, permit, lease, or other authorization to be issued or granted by a Federal officer or agency, such Federal officer or agency shall—

(1) to the fullest extent permitted by the provisions of law administered by such officer or agency, but

(2) without regard to any provision of law which is waived pursuant to section 8(g) issue or grant such certificates, permits, rights-of-way, leases, and other authorizations at the earliest practicable date.

(b) All actions of a Federal officer or agency with respect to consideration of applications or requests for the issuance or grant of a certificate, right-of-way, permit, lease, or other authorization to which subsection (a) applies shall be expedited and any such application or

request shall take precedence over any similar applications or requests of the Federal officer or agency.

(c) Any certificate, right-of-way, permit, lease, or other authorization issued or granted pursuant to the direction under subsection (a) shall include the terms and conditions required by law unless waived pursuant to a resolution under section 8(g), and may include terms and conditions permitted by law, except that with respect to terms and conditions permitted but not required, the Federal officer or agency, notwithstanding any such other provision of law, shall have no authority to include terms and conditions as would compel a change in the basic nature and general route of the approved transportation system or those the inclusion of which would otherwise prevent or impair in any significant respect the expeditious construction and initial operation of such transportation system.

Terms and conditions.

(d) Any Federal officer or agency, with respect to any certificate, permit, right-of-way, lease, or other authorization issued or granted by such officer or agency, may, to the extent permitted under laws administered by such officer or agency add to, amend or abrogate any term or condition included in such certificate, permit, right-of-way, lease, or other authorization except that with respect to any such action which is permitted but not required by law, such Federal officer or agency, notwithstanding any such other provision of law, shall have no authority to take such action if the terms and conditions to be added, or as amended, would compel a change in the basic nature and general route of the approved transportation system or would otherwise prevent or impair in any significant respect the expeditious construction and initial operation of such transportation system.

(e) Any Federal officer or agency to which subsection (a) applies, to the extent permitted under laws administered by such officer or agency, shall include in any certificate, permit, right-of-way, lease, or authorization issued or granted those terms and conditions identified in the President's decision as appropriate for inclusion except that the requirement to include such terms and conditions shall not limit the Federal officer or agency's authority under subsection (d) of this section.

JUDICIAL REVIEW

Sec. 10. (a) Notwithstanding any other provision of law, the actions of Federal officers or agencies taken pursuant to section 9 of this Act, shall not be subject to judicial review except as provided in this section.

15 USC 719b.

(b) (1) Claims alleging the invalidity of this Act may be brought not later than the 90th day following the date a decision takes effect pursuant to section 8 of this Act.

(2) Claims alleging that an action will deny rights under the Constitution of the United States, or that an action is in excess of statutory jurisdiction, authority, or limitations, or short of statutory right may be brought not later than the 90th day following the date of such action, except that if a party shows that he did not know of the action complained of, and a reasonable person acting in the circumstances would not have known, he may bring a claim alleging the invalidity of such action on the grounds stated above not later than the 90th day following the date of his acquiring actual or constructive knowledge of such action.

(c) (1) A claim under subsection (b) shall be barred unless a complaint is filed prior to the expiration of such time limits in the United States Court of Appeals for the District of Columbia acting as a

Special Court. Such court shall have exclusive jurisdiction to determine such proceeding in accordance with the procedures hereinafter provided, and no other court of the United States, of any State, territory, or possession of the United States, or of the District of Columbia, shall have jurisdiction of any such claim in any proceeding instituted prior to or on or after the date of enactment of this Act.

(2) Any such proceeding shall be assigned for hearing and completed at the earliest possible date, shall, to the greatest extent practicable, take precedence over all other matters pending on the docket of the court at that time, and shall be expedited in every way by such court and such court shall render its decision relative to any claim within 90 days from the date such claim is brought unless such court determines that a longer period of time is required to satisfy requirements of the United States Constitution.

(3) The enactment of a joint resolution under section 8 approving the decision of the President shall be conclusive as to the legal and factual sufficiency of the environmental impact statements submitted by the President relative to the approved transportation system and no court shall have jurisdiction to consider questions respecting the sufficiency of such statements under the National Environmental Policy Act of 1969.

USC prec. title 1.

42 USC 4321
note.

SUPPLEMENTAL ENFORCEMENT AUTHORITY

Compliance order
or civil action.
5 USC 719f.

SEC. 11 (a) In addition to remedies available under other applicable provisions of law, whenever any Federal officer or agency determines that any person is in violation of any applicable provision of law administered or enforceable by such officer or agency or any rule, regulation, or order under such provision, including any term or condition of any certificate, right-of-way, permit, lease, or other authorization, issued or granted by such officer or agency, such officer or agency may—

(1) issue a compliance order requiring such person to comply with such provision or any rule, regulation, or order thereunder,

or

(2) bring a civil action in accordance with subsection (c).

(b) Any order issued under subsection (a) shall state with reasonable specificity the nature of the violation and a time of compliance, not to exceed 30 days, which the officer or agency, as the case may be, determines is reasonable, taking into account the seriousness of the violation and any good faith efforts to comply with applicable requirements.

Civil penalty.

(c) Upon a request of such officer or agency, as the case may be, the Attorney General may commence a civil action for appropriate relief, including a permanent or temporary injunction or a civil penalty not to exceed \$25,000 per day for violations of the compliance order issued under subsection (a). Any action under this subsection may be brought in any district court of the United States for the district in which the defendant is located, resides, or is doing business, and such court shall have jurisdiction to restrain such violation, require compliance, or impose such penalty or give ancillary relief.

Jurisdiction.

EXPORT LIMITATIONS

15 USC 719j.
15 USC 717w.

SEC. 12. Any exports of Alaska natural gas shall be subject to the requirements of the Natural Gas Act and section 103 of the Energy

Policy and Conservation Act, except that in addition to the requirements of such Acts, before any Alaska natural gas in excess of 1,000 Mcf per day may be exported to any nation other than Canada or Mexico, the President must make and publish an express finding that such exports will not diminish the total quantity or quality nor increase the total price of energy available to the United States.

42 USC 6212.

Presidential
finding.
publication.

EQUAL ACCESS TO FACILITIES

Sec. 13. (a) There shall be included in the terms of any certificate, permit, right-of-way, lease, or other authorization issued or granted pursuant to the directions contained in section 2 of this Act, a provision that no person seeking to transport natural gas in the Alaska natural gas transportation system shall be prevented from doing so or be discriminated against in the terms and conditions of service on the basis of degree of ownership, or lack thereof, of the Alaska natural gas transportation system.

15 USC 719k

(b) The State of Alaska is authorized to ship its royalty gas on the approved transportation system for use within Alaska and, to the extent its contracts for the sale of royalty gas so provide, to withdraw such gas from the interstate market for use within Alaska; the Federal Power Commission shall issue all authorizations necessary to effectuate such shipment and withdrawal subject to review by the Commission only of the justness and reasonableness of the rate charged for such transportation.

ANTITRUST LAWS

Sec. 14. Nothing in this Act, and no action taken hereunder, shall imply or effect an amendment to, or exemption from, any provision of the antitrust laws.

15 USC 719l

AUTHORIZATION

Sec. 15. There is hereby authorized to be appropriated beginning in fiscal year 1978 and each fiscal year thereafter, such sums as may be necessary to carry out the functions of the Federal inspector appointed by the President with the advice and consent of the Senate under section 7.

15 USC 719m

REPARABILITY

Sec. 16. If any provision of this Act, or the application thereof, is held invalid, the remainder of this Act shall not be affected thereby.

15 USC 719n

CIVIL RIGHTS

Sec. 17. All Federal officers and agencies shall take such affirmative action as is necessary to assure that no person shall, on the grounds of race, creed, color, national origin, or sex, be excluded from receiving, or participating in any activity conducted under, any certificates, permit, right-of-way, lease, or other authorization granted or issued pursuant to this Act. The appropriate Federal officers and agencies shall promulgate such rules as are necessary to carry out the purposes of this section and may enforce this section, and any rules promulgated under this section through agency and department provisions and rules which shall be similar to those established and in effect under title VI of the Civil Rights Act of 1964.

Discrimination
prohibition.
15 USC 719o

Rules.

42 USC 2006a
et seq.

REPORT ON THE EQUITABLE ALLOCATION OF NORTH SLOPE CRUDE OIL

Report to
Congress.
43 USC 1651
note.

43 USC 1651
note.

SEC. 18. Within 6 months of the date of enactment of this Act, the President shall determine what special expediting procedures are necessary to insure the equitable allocation of north slope crude oil to the Northern Tier States of Washington, Oregon, Idaho, Montana, North Dakota, Minnesota, Michigan, Wisconsin, Illinois, Indiana, and Ohio (hereinafter referred to as the "Northern Tier States") to carry out the provisions of section 410 of Public Law 93-453 and shall report his findings to the Congress. In his report, the President shall identify the specific provisions of law, which relate to any determination of a Federal officer or agency as to whether to issue or grant a certificate, permit, right-of-way, lease, or other authorization in connection with the construction of an oil delivery system serving the Northern Tier States and which the President finds would inhibit the expeditious construction of such a system in the contiguous States of the United States. In addition the President will include in his report a statement which demonstrates the impact that the delivery system will have on reducing the dependency of New England and the Middle Atlantic States on foreign oil imports. Furthermore, all Federal officers and agencies shall, prior to the submission of such report and further congressional action relating thereto, expedite to the fullest practicable extent all applications and requests for action made with respect to such an oil delivery system.

ANTITRUST STUDY

Report to
Congress.
15 USC 719 note.

SEC. 19. The Attorney General of the United States is authorized and directed to conduct a thorough study of the antitrust issues and problems relating to the production and transportation of Alaska natural gas and, not later than six months following the date of enactment of this Act, to complete such study and submit to the Congress a report containing his findings and recommendations with respect thereto.

EXPIRATION

15 USC 719 note.

SEC. 20. This Act shall terminate in the event that no decision of the President takes effect under section 8 of this Act, such termination to occur at the end of the last day on which a decision could be, but is not, approved under such section.

Approved October 22, 1976.

LEGISLATIVE HISTORY

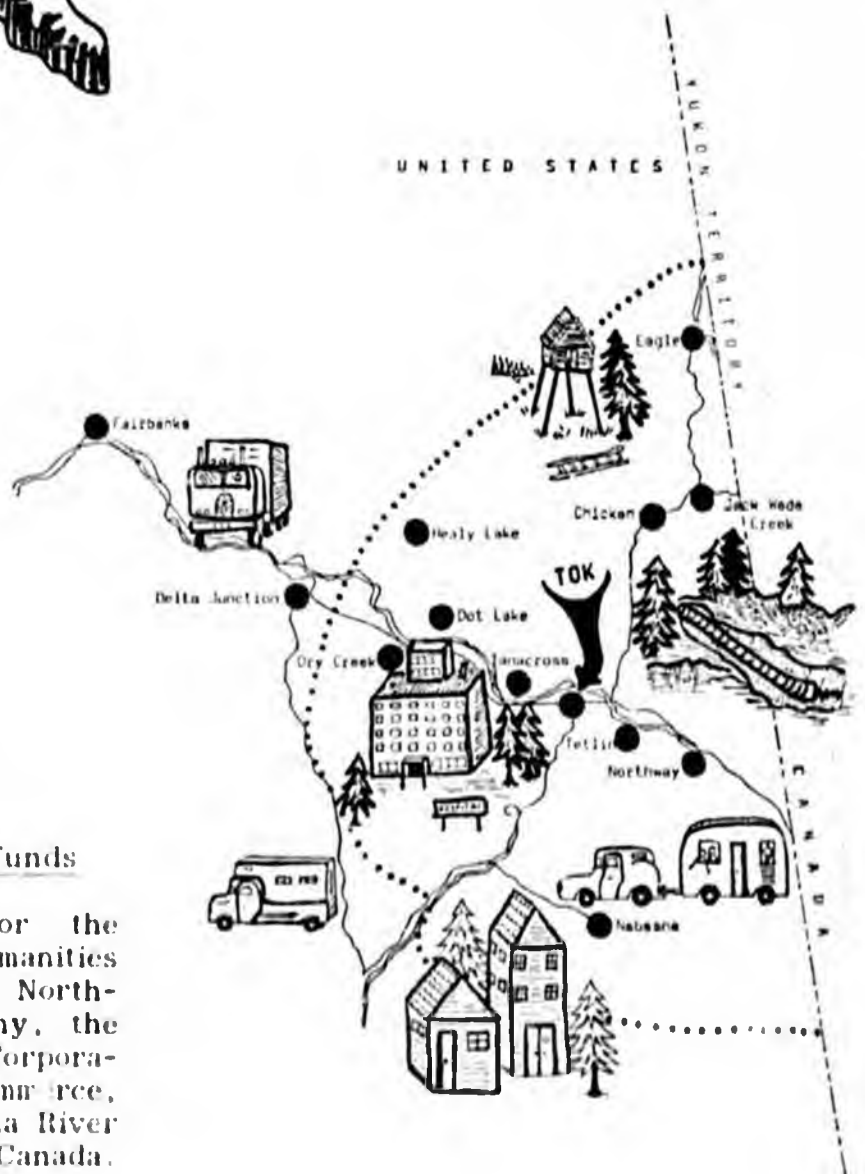
- HOUSE REPORT No. 94-1658, Pt. 1 (Comm. on Interstate and Foreign Commerce).
SENATE REPORT No. 94-1020 (Comm. on Commerce and Comm. on Interior and Insular Affairs).
CONGRESSIONAL RECORD, Vol. 122 (1976):
July 1, considered and passed Senate.
Sept. 30, considered and passed House, amended.
Oct. 1, Senate agreed to House amendments.
WEEKLY COMPILATION OF PRESIDENTIAL DOCUMENTS, Vol. 12, No. 44
Oct. 22, Presidential statement.

A REPORT OF THE UPPER TANANA REGIONAL FORUM
ON THE IMPACT OF CONSTRUCTION AND OPERATION OF THE
ALCAN GAS PIPELINE



Held April 8-9, 1978 at the Tok School in Tok, Alaska

Published September, 1979 by
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Fairbanks Town & Village
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for
Development, Incorporated



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To the Residents of the Upper Tanana River Basin:

At the annual Board of Directors meeting in December 1977, Mellie Terwilliger, representing the Tok community, asked for Board support for a forum to be held in Tok, Alaska to give residents in the area an opportunity to have a general discussion about the Alcan Gas Pipeline.

The Board agreed and authorized the Executive Director, Mr. Smetzer, to work with community leaders and with organizations in the region already active in discussions with gas pipeline officials to help set up a public forum.

Through the enthusiastic and capable effort of dozens of people in the area a forum steering committee was formed, topics selected, agendas established, publicity issued, people invited, and the forum conducted. The forum could never have occurred without the efforts of these dedicated people.

Funds for preliminary work and for the main costs of the forum were approved by the Alaska Humanities Forum and the National Endowment for the Humanities with supplemental travel funds for outlying villages supplied by Northwest Alaskan Pipeline Company. Funds for the preparation of this report were provided through the State of Alaska by means of a legislative appropriation initiated by the Upper Tanana region's representative in the Alaska Senate, Senator John Sackett.

Participation in the forum itself by residents in the region, by state and federal officials, by visiting Canadians, and by officials of Northwest Energy Company was well over 350 people.

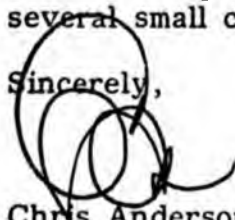
Both the staff of the Association and the many Board members who attended the forum in April 1978 were pleased to have had the opportunity to work with and to assist the people of Tok and the Upper Tanana in meeting with key gasline officials and in discussing the many, many, significant issues and problems which must be considered and resolved in the construction and operation of the project.

Though almost everyone at the forum expressed their pleasure with it, it is within this crucible of the project itself that the success or failure of the forum will be determined.

President Carter, speaking from Kansas City on July 15th of this year pledged the full resources of the federal government to assure early construction of the gasline. The federal Congress is considering legislation designed to provide impact assistance to areas like the Upper Tanana which must, ultimately, live with and deal with the human, social, economic, and political disruption and opportunity which accompanies such massive projects.

In view of these things, we believe this report is most timely. We sincerely hope it is also useful to those of you who live in Tok and the several small communities in the headwaters of the Tanana River.

Sincerely,

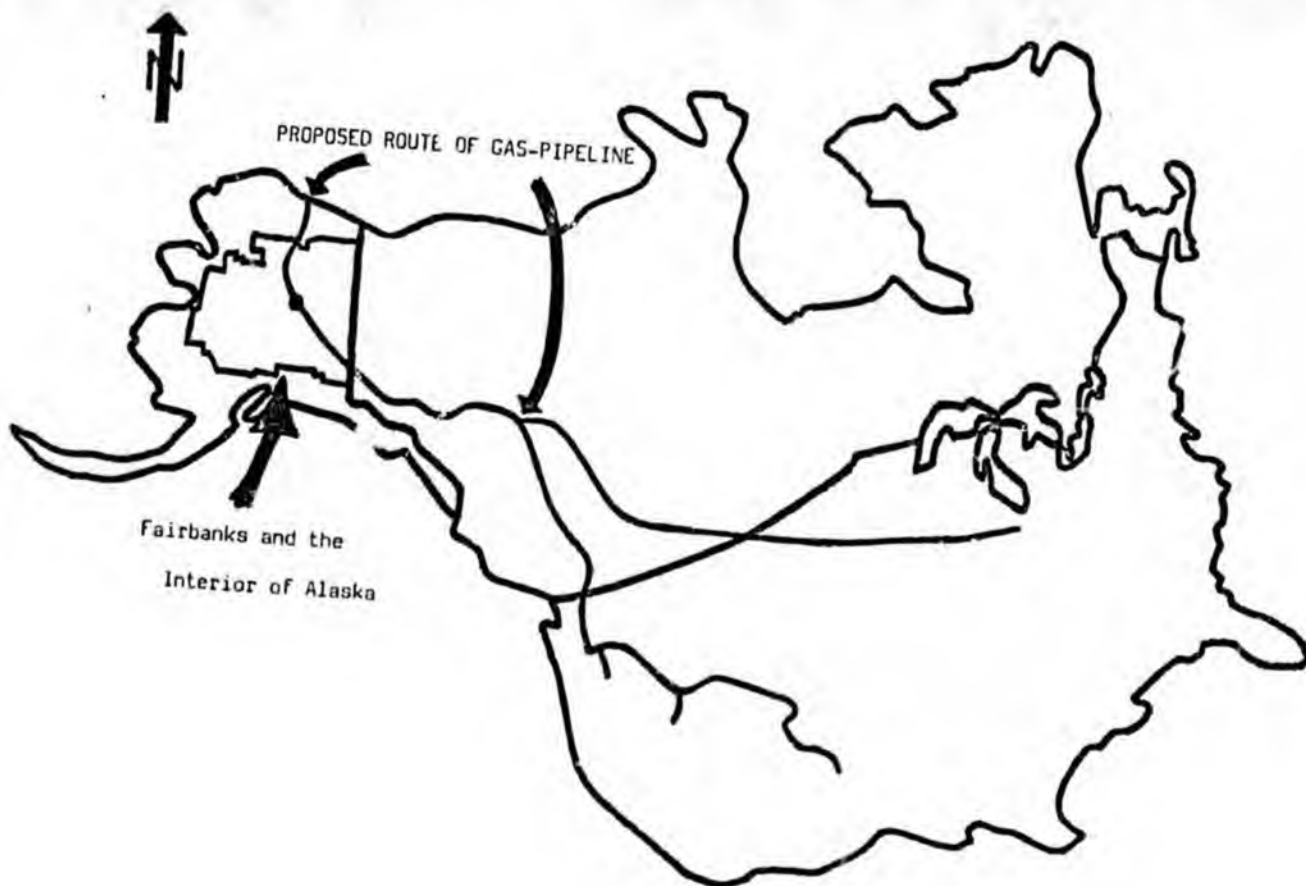


Chris Anderson, President
FTWAD Board of Directors

CA:JES:bjs

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Organization: Barbara Sepelak - Fairbanks	



PREFACE

Residents of the Upper Tanana Region are asking questions today about changes that will come about in their communities over the next three to five years with construction of the Northwest Alaskan Pipeline Project. Approximately 140 miles of the 731-mile Alaskan section of the gasline will pass through the region and close to the "highway communities".

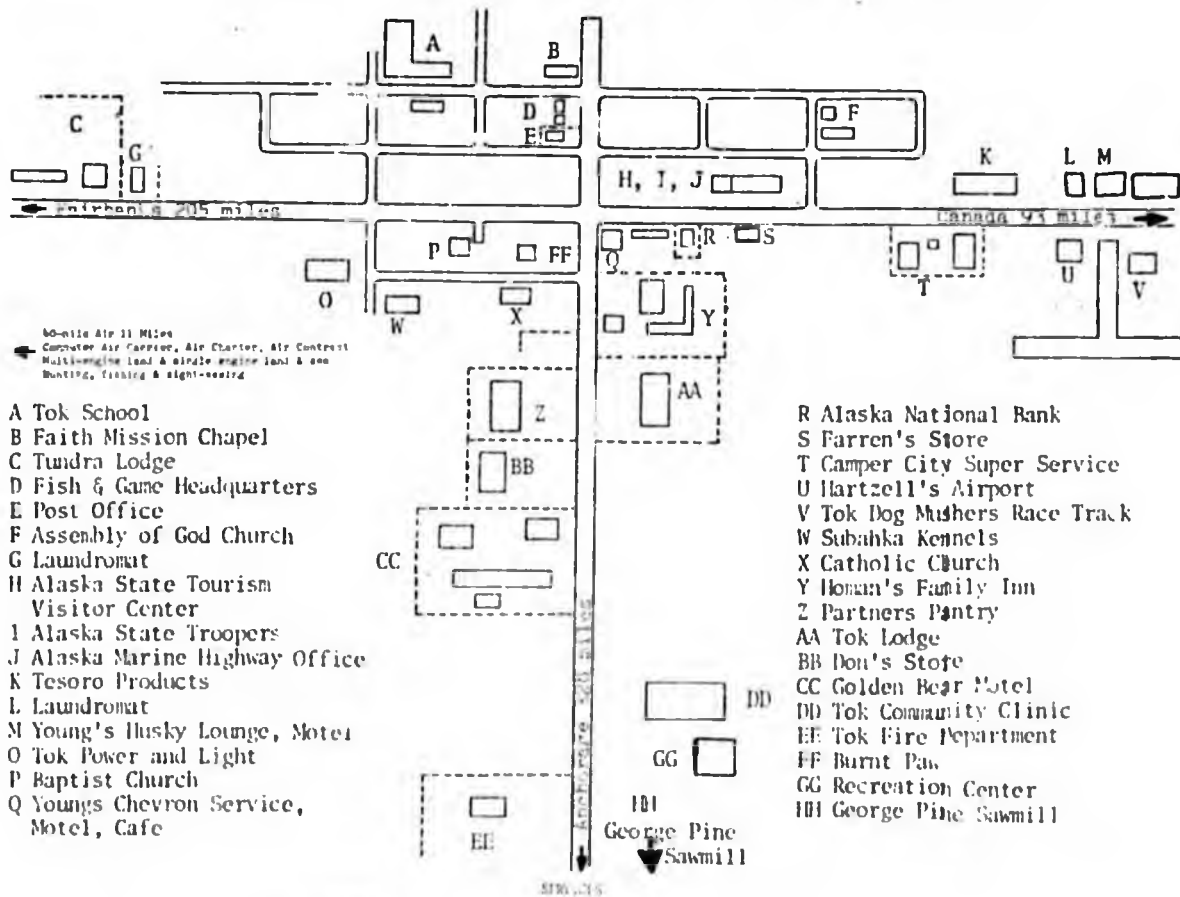
In order to prepare and plan for the activity to be generated by a project of this size, residents of the region need information. They had some questions they wanted answered:

- How many people will the project bring?
- Will there be employment opportunities for residents?
- How will it affect existing lifestyles in the area?
- Will it tap our existing resources and services and to what extent?

These questions were but a few raised at the Upper Tanana Regional Forum, held in Tok, Alaska, April 8 and 9, 1978. Nearly 400 residents of the area met to ask these questions of each other, gasline officials and resource people from state, federal and Canadian government agencies. The forum, sponsored by the Fairbanks Town and Village Association for Development, Inc., at the request and with the extensive cooperation of the Tok Chamber of Commerce, the Upper Tanana Development Corporation and many residents, and with financing through a grant from the Alaska Humanities Forum, provided as many new questions as it did answers. But those attending expressed in their evaluations of the two-day event, that it was an opportunity to begin the information exchanging process. It was a chance to identify areas of common concern and avenues of communication for making those concerns known to the parties who can do something about them.

This report is a summary of the meetings and discussions at the forum, and an update on gasline impact related activities in the Upper Tanana Region since the forum.

tok business district



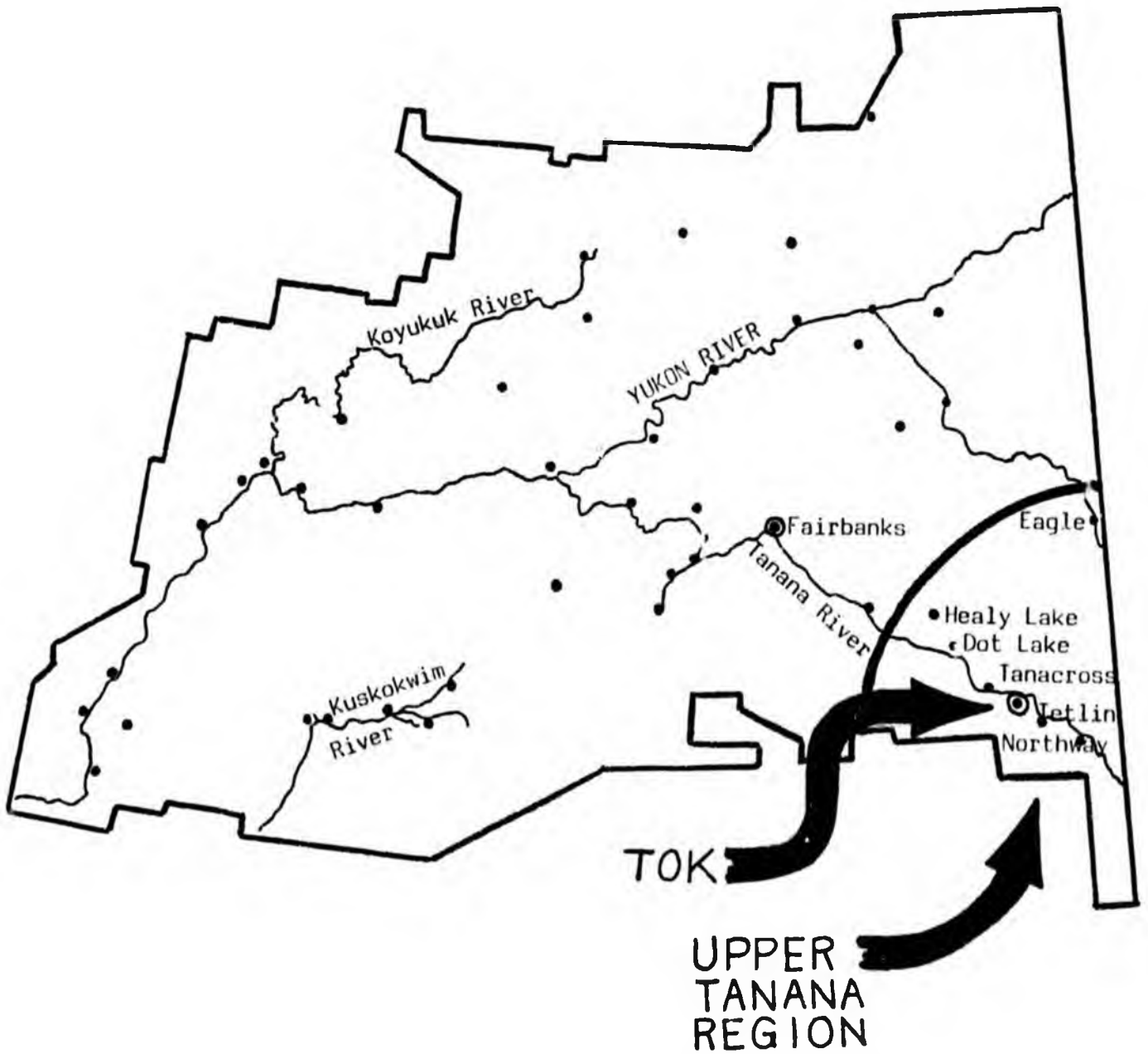
- A Tok School
- B Faith Mission Chapel
- C Tundra Lodge
- D Fish & Game Headquarters
- E Post Office
- F Assembly of God Church
- G Laundromat
- H Alaska State Tourism Visitor Center
- I Alaska State Troopers
- J Alaska Marine Highway Office
- K Tesoro Products
- L Laundromat
- M Young's Husky Lounge, Motel
- O Tok Power and Light
- P Baptist Church
- Q Youngs Chevron Service, Motel, Cafe

- R Alaska National Bank
- S Farren's Store
- T Camper City Super Service
- U Hartzell's Airport
- V Tok Dog Musers Race Track
- W Subakka Kennels
- X Catholic Church
- Y Homan's Family Inn
- Z Partners Pantry
- AA Tok Lodge
- BB Don's Store
- CC Golden Bear Motel
- DD Tok Community Clinic
- EE Tok Fire Department
- FF Burnt Paw
- GG Recreation Center
- HH George Pine Sawmill

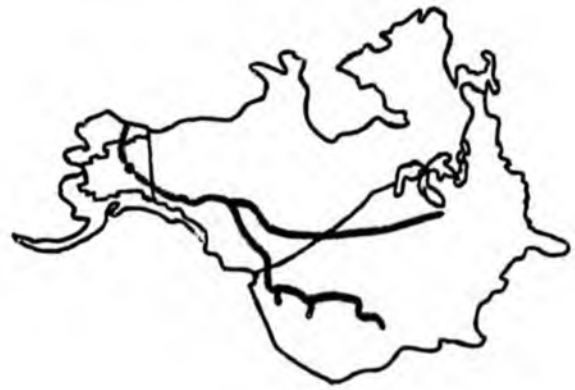
- Travel information
 - Bus service
 - Alaska Marine Highway
 - Ferry information office
 - Highway information
- Campgrounds
- Food and lodging
 - Excellent hotels and lodges
 - Fine restaurants
 - Cocktail lounges
- Churches
 - Roman Catholic
 - Methodist
 - Assembly of God
 - Faith Chapel
 - Chapel of the North
- Automotive service and repair
 - Auto servicing
 - Car wash
 - Auto parts
 - bodying
 - Auto body repair
 - wreck and towing service
- Local air charter flights
- 2 Newspapers, 1 AM local radio station, 1 AM local TV station
- Liquor stores

- Gift shops
- Lace shops
- Medical and ambulance service
- Post office
- Commercial bank service
- Hunting, fishing, photography
- Game service
- Charter flights
- Game coat curing and wrapping
- Fur dealer
- Recreation center and movie theatre
- Sawmill
- State operated services
 - Alaska State Troopers
 - Tourism facilities
 - Fish and Game office
- Locally sponsored government service organizations
 - Tanana Chiefs Conference
 - Boiled Creek Band
 - Upper Tanana Development Corporation
 - Upper Tanana Societal Council on Alcoholism
- General merchandise
 - Clothing
 - Hardware
 - Shoe stores
 - Shoes and drug stores, etc.
 - Household goods and appliances
 - Camera equipment and supplies

UPPER TANANA REGION



100 MILES
Scale



INTRODUCTION TO TOK AND
THE UPPER TANANA REGION

INTRODUCTION

1. HISTORY AND GEOGRAPHY

The Upper Tanana Region lies in the southeastern corner of the Yukon River drainage of Interior Alaska. The area includes several early settlements of the Tanana and Nabesna Indians, a nomadic hunting, fishing and trading people who occupied the territory since before written history.

The oldest known archeological site in Alaska was found at Healy Lake and radiocarbon dated to 11,000 years ago.

Non-natives began settling in the area in the later 1800s in order to trade furs, and, near the turn of the century, to mine gold. The Forty-Mile area - Chicken, Jack Wade Creek, Nabesna - is mineral rich with approximately 505,000 ounces of lode and placer extracts recorded.

Permanent non-native settlement after Alaska statehood has always been marked by military interest beginning with the development of Fort Egbert at Eagle, Alaska. Eagle is also the site of the first incorporated municipal government in the Interior, and it continues to be the only municipal government in the Upper Tanana region.

With the beginning of World War II major developments began occurring in the region with the construction of the Alcan Highway and the lend lease exchange program with Russians. Most recently the Coast Guard has completed construction of a Loran C site at Tok thus continuing the military's active interest in the community.

Renewable resource potential is high in the area with several hydro-electric sites, arable lands for agriculture and potentially abundant commercial forests.

Continued uncertainty surrounding Alaska's federal lands have stifled development in the region as it has in the rest of Alaska.

2. PEOPLE AND ECONOMY

The region is primarily a trade and service center for overland transportation, including a strong tourist trade of visitors entering the state via the Alaska Highway. Many residents work construction trades during the summer months and trap and hunt during the winter. The primary employment of the region is in state or federal government or in service jobs catering to the tourist, transportation, energy and communications industries. Recently with the completion of a Loran C Navigation System operated by the Coast Guard Tok also has a large permanent military establishment.

Alaska Power and Telephone Company serves Tok and Tanacross; all other communities in the region generate their own electrical power. All water systems in the region are privately owned wells, and sewerage systems consist of septic tanks and cisterns. Solid waste disposal is managed at a landfill in the Tok area. Public safety is provided by six Alaska State Troopers: four in Tok and two in Northway. A volunteer fire department serves Tok, Tanacross and nearby residents. Medical services are available at a clinic in Tok, served by a physician's assistant, and first aid and preventive medicine services are provided through village clinics, staffed by health aides. One ambulance serves the entire region, with about six people trained as emergency medical technicians. Social services are provided through a variety of state and native corporation agencies. The Alaska Gateway School District operates schools in five communities for 434 students. Twenty-two students in Tetlin attend an eight grade school operated by the Bureau of Indian Affairs, and about 75 students are enrolled in correspondence programs. The University of Alaska has an extension office in Tok.

Location

Tok is located at the junction of the Alaska and Glenn Highways. It is 205 miles from Fairbanks, 328 miles from Anchorage, 555 miles from Juneau and 1577 miles from Seattle via the Alaska Marine Highway.

Population as of December 31, 1977*

Tok	735
Dot Lake	266
Mentasta	152
Northway	378
Tanacross	128
Tetlin	107
Eagle	150

In addition, the region is home to a few hundred "bush" residents.

* Source: Division of Public Health, Department of Health and Services, Tok Office.

Climate

Period	Average Temperature			
	Min.	Mean	Max.	
January	-27.8	-15.3		- 2.7
July	42.8	55.8		69.3
Annual	11.7	25.0		38.3

Average annual precipitation: 8.9 inches
Elevation: 1,635 feet

Local Government

Eagle, the oldest incorporated city in the region, was allowed by the U.S. federal government to incorporate at the turn of the century. The remaining communities in the region are unincorporated. None is in an organized borough. The region is served by six Alaska State Troopers.

Industry

Tok is the major overland point of entry from Canada. Another point of entry is located at Boundary, Alaska on the road from Dawson City, Yukon Territory. The region is primarily a trade and service center for overland transportation, including a strong tourist trade.

Regional Employment (Estimated Year-Round)

Agriculture	0
Construction	40-60
State & Fed. Govt.	73
Finance	4
Mining	10
Manufacturing/processing	20-30
Service	50
Trade	30
Transportation, communication	10
Education	47

Hunting, Fishing, Trapping

Many area residents are employed in construction industries during summers and trap and hunt for a living during winters. Over 170,000 acres in the region are traversed by traplines.

Military

The United States Coast Guard maintains and operates a Loran C station in Tok. The station transmits radio-navigational signals and services the Gulf of Alaska. The signal power of the transmitter is 1 million watts. Twelve people are attached to this full-time facility.

Regional Medical Facilities

One clinic, serviced by a physician's assistant; one Public Health Service nurse. Hospitalization is available in Glennallen, Fairbanks, and Anchorage. Tok has ambulance and emergency medical technician service.

Regional Educational Facilities

Rural Educational Attendance Area #16 operated schools with 35 classrooms for 434 students, 36 teachers, and 2 principals in Tok, Dot Lake, Mentasta, Eagle, and Northway. The Bureau of Indian Affairs operates an 8-grade school in Tetlin for 22 students and 1 teacher. Tanacross will have a school in September 1979. Completion of the new school is set for the second semester.

Transportation

Trucking: Lynden Transfer; K & W Trucking; Tok Distributors; Midnight Sun Distributing; Sea-Land; Weaver Brothers
Airlines: 40-Mile Air Taxi - charter service
Bus Service: Alaska-Yukon Motorcoaches - scheduled service
Taxi: Rapid Richard's Taxi Service in Tok serves communities within a 50-mile radius

Churches

Roman Catholic Assembly of God
Baptist Faith Chapel

Public Utilities as of Spring '978

Tok is serviced by Alaska Power & Telephone Company. Utility rates for private residences are:

First 100 kwh	\$.13/kwh
Second 100 kwh	.12/kwh
Next 800 kwh	.095/kwh
Over 1,000 kwh	.08/kwh

Telephone monthly rates are \$15 for businesses and \$12 for private residences.

Housing

1-bdrm. apt. rent: \$250/month
2-bdrm. apt. rent: \$350/month
3-bdrm. apt. rent: \$400/month

Communications

Radio Station: Armed Forces Radio Network, received locally
Television Stations: KTVF and KUAC, Fairbanks, received locally via repeaters
Newspapers: Mukluk News, published in Tok on first and third Thursdays of month; The Spieler, published in Tok on second and fourth Thursdays of month

Recreational Facilities

Tok: VFW Hall; Recreation Center and movie theater; gymnasium; hockey rink; dog-mushing trails; campgrounds

Dot Lake, Eagle, Mentasta, Northway: gymnasiums; hockey rinks

Recreation in the Tok region also includes hunting, fishing, hiking, snowmobiling, snowshoeing, cross-country skiing.

* * * * *

These facts were in part gathered by the State Department of Commerce and Development. Although for the Tok area, they are fairly representative of the entire region; Tok is the center of activity for the surrounding communities.

3. POLITICS AND GOVERNMENT

From the Native population to the Alaskan individualists in both the bush and town, Tok area residents seem to enjoy the status quo, with its freedom from governmental taxation. (All Alaska Weekly April 14, 1978.)

Eagle is the oldest and only incorporated city in the Upper Tanana Region. The remaining communities have no formalized local government and none is in an organized borough. Access to governmental agencies that provide services in the region is fairly open to residents who have some intermediary, such as a regional or village corporation, or an interest group such as the Chamber of Commerce. On an individual basis, some residents find communication with state agencies and pipeline officials a simple matter; others do not.

Within the region support for a concept of local or regional government to act as the representative for the interests of the area is mixed, and discussion of local government is heated.

"Interest groups" in the area who act, to some extent, as channels for information to and from residents with regard to impact include: Tanana Chiefs Health Authority, United Crow Band, Upper Tanana Development Corporation, Tanana Community Clinic, Tok Chamber of Commerce, Alaska Public Health Service, Alaska Division of Tourism; (Tok Visitors Center), Alaska State Troopers, Upper Tanana Regional Council on Alcoholism and other state and private agencies.

4. THE ALCAN GAS PIPELINE

Northwest Alaskan Pipeline Company is a subsidiary of Northwest Pipeline Corporation of Salt Lake City, and will be the operating partner of six major U.S. gas companies to construct a natural gas pipeline from Prudhoe Bay to the Canadian border.

The pipeline route will parallel the Alyeska oil pipeline for 539 miles to Delta Junction. It will then proceed southeasterly toward Canada along the Haines utility corridor and the Alaska Highway. The Alaskan section of the project will consist of 48-inch pipe.

Design and planning for the line have begun and will continue through 1980. It was anticipated that civil construction would begin in 1980, with pipeline construction start-up in 1981. Delays with financing, however, have pushed back the construction schedule at least one year, according to pipeline company officials.

The project is estimated to provide some 1,500 to 10,000 jobs in Alaska, with some permanent staff in Alaska after the pipeline construction is completed.

The State of Alaska has developed stipulations for a lease agreement with the pipeline company, and hearings have been held in Fairbanks and in Tok to gather public comment on the stipulations, which cover areas ranging from right-of-way and land acquisition to provision of impact information services by the company.

While many unanswered questions still exist with regard to the project, observers have noted the Northwest Alaskan Pipeline Company is gathering information from communities along the route at a much earlier time and in a much more comprehensive fashion that was done prior to construction of the trans-Alaska oil pipeline in 1974.

5. THE ISSUES

Gas Pipeline Employment

One of the most talked about issues regarding the gasline construction is employment. Some observers in the Upper Tanana Region have commented that they fear people in the region are counting too heavily on pipeline jobs to solve the area's unemployment problems, which are significant.

Exact unemployment figures for the Upper Tanana are difficult to come by because of the regional statistical boundary designations used to show workforce and unemployment used by the State Department of Labor (Tok, Tetlin and Northway are part of the "Fairbanks District" and the remainder of the region is lumped in with the "Upper Yukon District", which stretches from Boundary and Eagle to Fort Yukon). An informed source in the department suggested that a reasonable estimate for rural areas in the Interior would be triple the rate for the Fairbanks District unemployment figures. In July 1978, that figure was 14.1. According to recent Alaska Department of Labor statistics for March 1979 the Fairbanks rate is 15.5. This would put unemployment in the Upper Tanana Region, according to the informal formula, at more than 46.5%.

The Northwest Alaskan Pipeline Company has said it is committed to using qualified Alaskans as much as possible in the construction of the gasline, but there are still several problems associated with viewing the gasline as the employment panacea in the Upper Tanana Region:

- There will be an estimated 1,300 to 10,000 jobs on the total project, significantly fewer than on the oil pipeline;
- Many of the jobs available require skills that few people in the region have; and the laborer's jobs will be short-term at best;
- Training programs, though available through the University of Alaska extension in Tok, do not focus on construction employment. Training for construction jobs comes primarily through union apprenticeship programs;
- While the project will provide some permanent jobs, they will be of the type that require specialized skills that cannot be gained in short courses or on-the-job training in the period of time left before construction begins. In the 200-mile stretch between Delta Junction and the Canadian border, fewer than 50 permanent operations and maintenance jobs may be available;
- Even with local hire preference and job training, experience with the oil pipeline showed that people from rural areas could not afford to wait for dispatch from union halls in Fairbanks, and the time required for notification and travel from a village to Fairbanks often meant the job was gone by the time a worker got to the union hall.

State and Federal Government

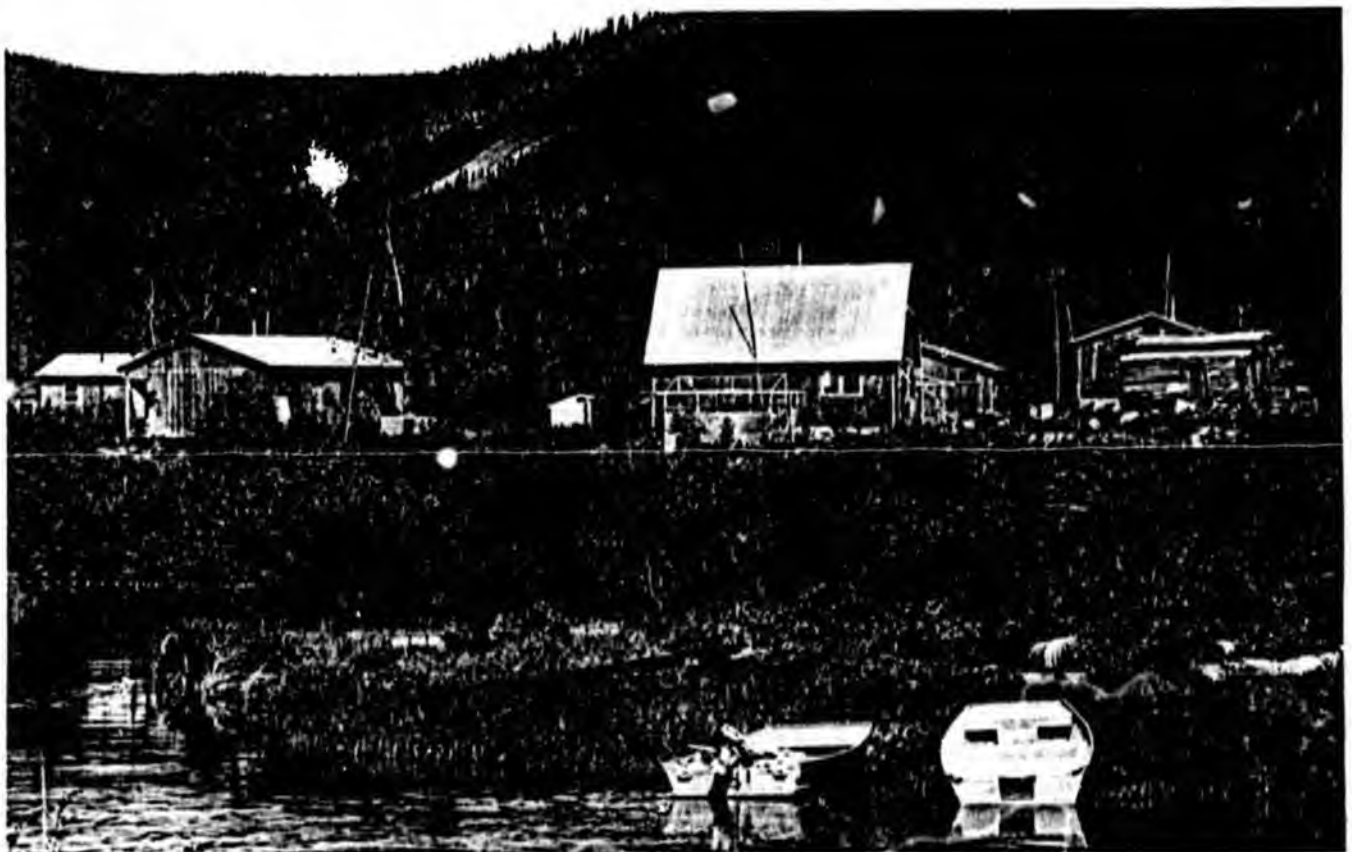
Residents of the Upper Tanana whether or not they choose to adopt some form of local or regional government will have to rely heavily on the sovereignty and public protection responsibilities of state and federal governments during the period of construction and operation of the gas pipeline to protect their individual and community interests.

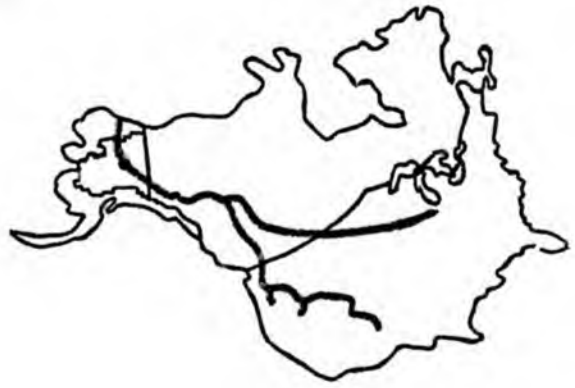
Despite expressions of concern and despite some isolated efforts to deal with the problems of "impact", neither the state nor the federal government have established either plans, programs, procedures or policies necessary for the exercise of those responsibilities.

In the 18 months since the forum, other than the work by the state's single socio-economic impact coordinator on stipulations - a position vacant since September 1 - there has been no significant effort by the state to examine the record of Trans-Alaska pipeline impact and to define its responsibilities to protect the public interest.

In order to anticipate problems similar to TAP which will surely accompany Alcan construction precious time is being lost which cannot be regained.

The federal government has progressed somewhat further on the issue in that the President has recommended and Congress is actively considering legislation to assist small communities in their efforts to cope with National Interest Energy Projects. There are some important concepts within the proposed federal legislation which it is in the state's interest to consider. However no such consideration is underway.





METHODOLOGY AND ORGANIZATION
OF THE FORUM

METHODOLOGY AND ORGANIZATION

The methodology and organization of the Upper Tanana Regional Forum was similar to the organization of a forum held in April, 1975 in Fairbanks and titled "Fairbanks and Interior Alaska; a one day community forum on growth."

The Fairbanks forum, like the Upper Tanana forum, was initiated by interested local groups and individuals who then asked for organizational and financing assistance by the Fairbanks Town and Village Association.

Early front-end financing - critical to the success of the two forums - was in both cases made available by the Alaska Humanities Forum with funds from the National Endowment for the Humanities.

Structurally, these forums steer away from a rigorous format with formal presentations by a series of prominent speakers. Rather, a flexible and dynamic exchange of opinions and information between various public and private officials, citizens and taxpayers under several loosely defined but generally recognized topics seems the best way to achieve the goals of the sponsoring organizations: to help local people figure out how these massive projects affect them as individuals in their jobs, their family affairs and their neighborhoods.

Basically the individual forum participant should be encouraged and should have every opportunity to formulate and express their personal concerns directly to the visiting officials who must sooner or later make decisions on those concerns.

From this fundamental principle followed the organization of both forums into about 10 general topics each conducted in separate rooms under the rather minimal authority of a discussion chairman or chairwoman.

Selection of topics, lists of people to invite, and general interpretations of what kind of issues and questions were most current in the Upper Tanana Region were the responsibility of a local steering committee representing several interested groups in the Upper Tanana Region.

The members of the committee included the following people:

Norman "Wally" Wallis:

President, Chamber of Commerce; Owner Tok Spieler; Runs State Manpower Office

Ron Taylor:

Board of Directors; Chamber of Commerce; Manager, Alaska National Bank of the North

Charlie Biederman:

Director, Upper Tanana Regional Council on Alcoholism, Inc.; Alcoholism and Recreation

Doug Euers:

Board of Directors, Chamber of Commerce; Owner, Douglas Excavating; Board Member, Fairbanks Town and Village Association

Mellie Terwilliger:

Director, Tok Chamber of Commerce; Secretary of the Board of Directors, Fairbanks Town and Village Association; Retired Storekeeper

Bob Lohr:

Executive Director, Upper Tanana Development Corporation, (Rural CAP)

The Committee met frequently to discuss these matters and to decide on topics and to establish the agenda for the forum. The topics selected and the people selected to chair the discussions were:

Business and Tourism:

Paul Smith

Highways and Transportation:

Harold Johnson

Public Utilities and Telecommunications:

Mark Springer

Education:

Carl Peterson

Job Training and Placement:

Dave Maxwell

Women's Concerns:

Mellie Terwilliger

Social Services (Housing, Health, Alcoholism)

Louise Griffin

Rural and Native Concerns:

Bob Brean and Glen Marunde

Public Safety/Legal Services/Fire Protection:

Dottie Eshbaugh

Land and Agriculture:

Bill Arpino

To help the discussion chairman or chairwoman keep the discussions at least somewhat relevant to the general topic, information packets were prepared, and each group was charged with identifying its own issues within the topic, exploring them and preparing a series of recommendations for resolving them.

These reports of each committee were presented to the assembled forum participants and, once they were typed and duplicated, they became the basis for the formal report of the forum.

Coordination, communications, publicity, preparation of materials, housing and transportation of forum participants, recording discussions, preparing follow-up materials and reports for both forums required two dedicated people full time for at least six weeks prior to the forum, and at least three weeks after. These two people, Chuck Marunde and Su Emry, were, in turn, backed by the enthusiasm and voluntary efforts of literally hundreds of people in the community.

Therefore, the committee reports in this document are preserved without editing in the same form as they were originally approved by the respective committees on the day of the forum. Since it has been over one year since the forum we have tried to update information and respond to some of the issues raised in the committee in the section titled "After the Forum."

The "After the Forum" section was developed during interviews with discussion chairmen and women during the summer and fall of 1978 and were reviewed with people in Tok during a meeting held on December 1 of that year.

We hope this document will be used in formulation of public policy and programs necessary for the preparation, construction and operation of the Alcan Gas Pipeline. Those who use it for that purpose, however, whether they be residents of the Upper Tanana Region, officials of state or federal government or industry spokesmen, should recognize that decisions on this project in this phase are highly fluid and dynamic. Fundamental assumptions relevant today can be rendered irrelevant and invalid tomorrow by national and international events far beyond the control of the residents of the Upper Tanana.

At the community level this problem, seldom acknowledged by public officials with mitigating responsibilities, is one of the worst and most disruptive of the "impact" problems. The lead time in advance of construction mobilization is the most precious resource people living and working in a small community have available to them. It is in this period where the public costs of impact assistance are least expensive and the potential savings of tax dollars the greatest.

Failure by government agencies to supply information, statements of policy, and decisions of responsible officials to interested local groups will be the most expensive failure of all and the one which is easiest and cheapest to avoid in this phase of project development.







COMMITTEE SESSION REPORTS

a. BUSINESS AND TOURISM COMMITTEE

DISCUSSION GROUP CHAIRMAN: Paul Smith

COMMITTEE ASSISTANTS: Terry Kirkendall
Carol Donnelly

Approximately 30 people attended the sessions of the Business and Tourism Committee. Concern was voiced on several topics. The concerns that the committee would most like to draw to the attention of Northwest Alaskan Pipeline Company, the State of Alaska, and the Upper Tanana region include:

1. One of the most widely discussed topics regarded the highway during the actual construction of the gas pipeline. Tourism is Tok's main business, and the people of the community feel that the gas line equipment could hinder the flow of traffic in the summer. The immediate effect, and the long-range effect, on our tourist trade is of major concern to the community. We would like to hear from Northwest and the State of Alaska concerning how they plan to ensure that tourists will be able to travel the highway unhindered during gas line construction. It was suggested that the State of Alaska and Northwest work jointly on this.
2. The committee discussed with Northwest representatives and the state representative the importance of providing training to local people for any permanent jobs resulting from the gas pipeline. The committee expressed the hope that all the jobs could be filled by local personnel, as there is a shortage of year-round employment in our region. At this point in time, most of the jobs are seasonal and tourist-related.
3. Small businesses in the region have a very difficult time in securing small business loans at this time. There was some concern expressed regarding the increased purchase of stock during gas pipeline construction. In order to ensure that local residents, tourists, and pipeline employees will be able to purchase supplies, it will require larger stock purchases and more storage area. Availability of loan funds, state or federal, and associated agencies to handle this need were discussed. The committee would like to know how Northwest handles payments of contracts to local vendors. There was some concern regarding delayed payments holding up resupplying.
4. Several people expressed an interest in small investors investing in the gas pipeline. They wondered if it would be possible that Northwest would make shares of common stock available to area residents.

Several other areas of discussion included impact on postal service, the local banks, the dump, additional local traffic, and highway safety. It was mentioned that shuttle buses might possibly be available. A question was raised regarding whether or not there would be a possibility of a gas line takeoff point at Tok.

Some recommendations made to the committee were to appoint a group of people to represent the community in dealing with Northwest and the state. It was also suggested that it might be beneficial to meet with the Chamber of Commerce in Delta Junction to discuss the problems that they had during the impact of oil pipeline construction.

AFTER THE FORUM ...

Business and Tourism

The greatest single concern expressed by committee participants was the unknown effect of gasline construction on the region's tourist industry.

Although Tok is the primary tourist center, it was felt that an overloading of the existing transportation routes would negatively effect all of the road communities, and increase travel hazards.

Central to this was consideration of motorist safety in moving along any pipeline service route. (i.e., With heavy equipment and pipe hauling trucks traveling the highway, the incidence of motor vehicle accidents would increase.)

Generally, the communities felt that while pipeline construction would be of overall benefit to the area, it was of greater import to retain the tourist and visitor function as a primary economic base.

A substantive recommendation that the State of Alaska and Northwest work closely in dealing with this problem was advanced, and is further dealt with in the Highways and Transportation section.

According to Business and Tourism Committee Chairman Paul Smith, these questions have been brought before the State Tourism Advisory Board, with the recommendation that the State and Northwest jointly undertake an information program nationwide to inform motorists of the potential problems, while encouraging vehicular travel.

The Business and Tourism Committee also underscored the desire for permanent local employment with the pipeline company, noting that most jobs in the Upper Tanana Region are seasonal, and tourist related.

A third, and relatively complex area, concerning small business operations was addressed. Local merchants and firms want to be in a position to provide materials, supplies and warehousing on a local vendor basis. However, existing state and federal small business loan practices make loan availability difficult.

The overall desire by local business people seemed to be for a "liberalizing" of state and federal loan policies, to encourage investment in these vendor operations.

Incidental to the above was a request for general information on how Northwest would handle payments to local vendors. The general implication was that during the trans-Alaska pipeline system project, small contractors had to wait for extended periods of time for payment, and this affected their reorder capacity.

According to Committee Chairman Smith, Section 4.2.3 of the Right-of-Way Stipulations agrees to conditions of prompt payment and submissions of orders of appropriate vendor scale.

Other areas of business concern were impacts on postal services, local banks, and community facilities such as the local dump.

The Alaska Congressional delegation has been approached on the postal service question and it is being examined at the federal level.

The remaining question of overload of business services remains unanswered at this time, and will probably not be resolved until such time as the gas project enters a "start-up" phase.

Some interest was indicated for a "gas take-off point" to be located at some point within the area. Representative Leslie R. Swanson had introduced legislation to provide such connections, and area residents wanted to know if they might qualify as a "take-off" area.

The question remains unanswered at this time, largely because the submitted legislation did not pass during the preceding legislative session.

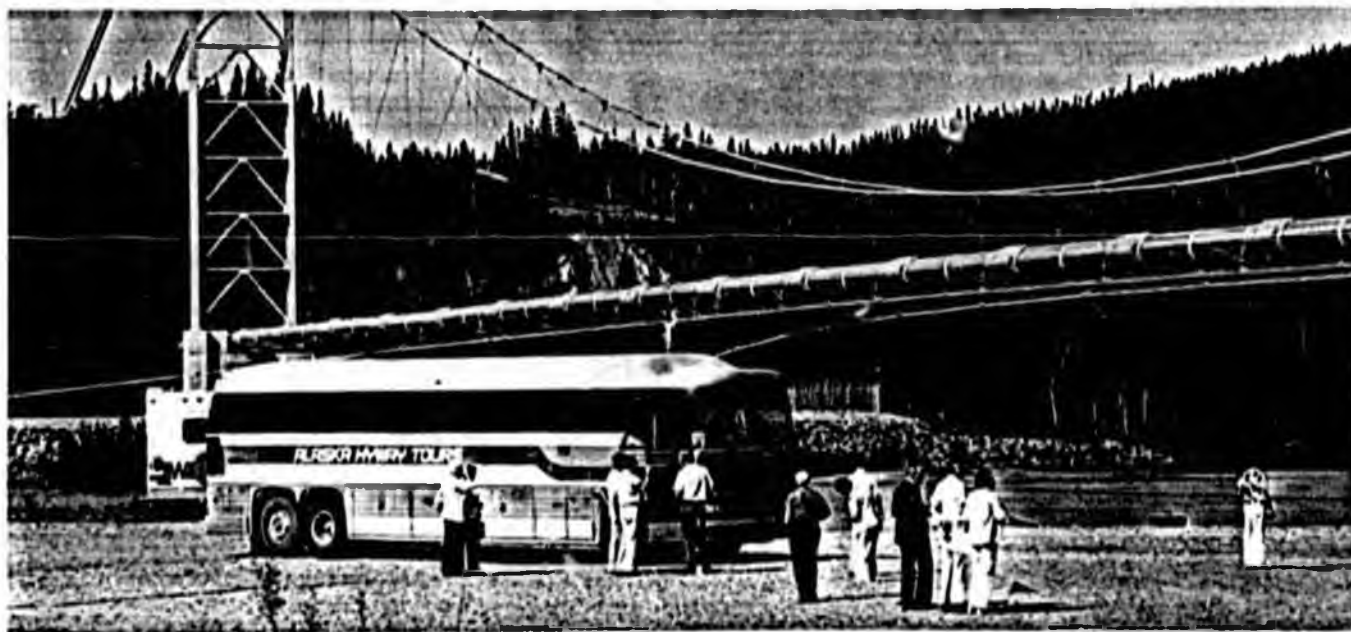
The largest unresolved issue which affects the region and subsequent impact planning is the matter of representation authority. Local residents feel a need for a pipeline impact and coordination office in the region, in order to improve communications with the State of Alaska and the pipeline company.

No uniform method of selecting the impact coordinator was set forth, but the desire for a "watch-dog" or ombudsman-like position is readily apparent.

The larger issue of representation and governance will be addressed elsewhere.

It should also be noted that the general concerns expressed by the Business and Tourism Committee were by and large Tok specific, and did not extend to most of the outlying towns and villages.

Despite this, there are clear indications that village native corporations in Dot Lake, Tanacross and Northway are making positive plans to enter the pipeline contract market, and compete openly with the Tok business community. Generally this may be viewed positively, but the long term effect of sub-regional competition remains unknown.



b. PUBLIC UTILITIES AND TELECOMMUNICATIONS

DISCUSSION GROUP CHAIRMAN: Mark Springer

COMMITTEE ASSISTANTS: Merritt Bartlett
Tom Donnelly

The Public Utilities and Telecommunications Committee had about 15-20 people, including Ben Agee, President of RCA Alascom, and Ralph Wilson and Merritt Bartlett of Alaska Power and Telephone Company. At the outset, let it be noted that despite the statement in the information packet that stated that APT is not an Alaska-based firm, their business is in Alaska, and it is actually a matter of economics (favorable to the consumer) that their office is in Port Townsend.

The major point brought out in discussions with the utilities is that they stand ready to provide a desired service. It should be noted that APT is looking toward permanent demand as its planning baseline, and they, for instance, do not want to be saddled with expanded generating capacity, when in fact it is needed for only a short time. The general tone of concern toward pipeline impact is modulated by the idea that pipeline construction and support-related impact on the public utilities will be short-term and that, whatever it is, it can be met.

RCA Alascom has potential facilities existing in the Tok station to provide any and all desired telecommunications services within weeks (if not days) of requests. Rate structures were discussed, and the general consensus was that public utilities are not the most profitable businesses in Alaska. In fact, times are tough.

The state representatives, Messrs. Rusnell, Miller, and Lowery, helped out during discussions of water and sewerage and contributed a few words about dumps. Once again, the impact was considered to be of a short-term nature. Tok is located atop a thick bed of gravel with underlying (40-60 feet) aquifers, which are the community's water supply. Sewerage disposal is primarily cesspools, septic tanks, or leach fields. The consideration postulated was one of housing density as the most impacting feature of population growth on the water table. The subject of sewerage water systems was considered as an option and, of course, should remain in the minds of everyone. Solid waste disposal remains a very real and current issue. Tok does not have a legal landfill dump because of a tremendous amount of bureaucratic lands-claim red tape. A compactor transfer system is considered to be a possible viable option; however, it would no doubt prove to be an expensive proposition.

On the subject of taking gas out of the pipeline, nobody knows too much about it. APT has the capability of powering their generator sets with natural gas. The entire matter of taking gas out revolves around the cost issue. And for serious planning to occur, firm cost figures and technical information are required.

RCA Alascom has 10 supergroups going east-west and west-east. They have two or three supergroups east-west and west-east potentially available. A supergroup is composed of 60 channels. DATA lines (voice grade) are presently in use in Tok. Telex service is available. RCA's main node in the Upper Tanana Valley is the TD-2 microwave path. A 4-ghz radio system is presently in use, and the option exists to add an entirely separate new microwave radio system.

There are eight (plus three and five to be hooked up) long-distance circuits in the APT switching office. It is a 1,000-line office. At the present time 200 lines are in use.

RCA says that a satellite TV broadcast earth station is available. They can also handle television channels on the microwave system. It would have to be a commercial venture.

APT is concerned with permanent facility planning. They could build a transmission line for \$2 million to hook up to the Golden Valley Electric Association from Delta Junction.

Both RCA and APT expressed a policy of being able to meet demand on any foreseeable scale. There is still uncertainty concerning the location of pipeline facilities.

AFTER THE FORUM ...

Public Utilities and Telecommunications

Generally reported consensus of Forum participants indicates that impact in the public utilities and existing communications areas will be relatively short-lived, and not beyond the present production capacity of locally owned utility providers.

Alaska Power and Telephone is presently operating a 1,000 line local telephone grid at approximately 20% of capacity, and does not anticipate any undue delay in providing direct service to customers. This is reinforced by RCA AlasCom's service facilities, which, according to AlasCom President Ben Agee, should meet community demands "within weeks, if not days". The RCA system possesses redundant

long-line channels, and voice grade data links are in use in the area. Further, Telex service is available, and an option exists to add an entirely separate new microwave radio system.

Current entertainment program capacity is available through a satellite TV earth station, and some entertainment programming is operating via microwave paths.

Power and electrical generation capacity, according to APT representatives Wilson and Bartlett, is capable of meeting any expected power demands. Further, the company does not wish to make any inordinate investments which will leave them with an excessive generation capacity after line completion.

The general attitude of the primary utility agencies is that the expected impact will not exceed existing capacity, and no major capitalization for facilities is required.

The issue of sewerage and water facilities is a continuing problem, but will not be readily resolved without a local agency to assume service responsibility. According to Alaska Department of Environmental Conservation representatives Rusnell, Miller and Lowery, the demand for service will be relatively short-lived, and the major considerations of consumption will be housing density in any given area.

Existing water and sewer systems are privately owned, with wells, cesspools and septic tanks predominating. Any large scale service system thus would exceed subsequent user capacity. No discussion of construction of public use laundromat/shower facilities was entered, but the idea would probably be met with resistance by local motel and campground operators.

There is a continuing problem in the Tok area and in the other villages with solid waste disposal. Tok does not have a "legal" landfill, ostensibly because of excessive governmental and administrative "red tape".

According to Utilities and Telecommunications Committee Chairman Mark Springer, the Bureau of Land Management has appointed an individual to supervise the existing land fill, but the facility is almost filled to capacity.

Subsequent resolution of this problem will hinge on solution of the Alaska lands issue, and possible development of a local governance structure.

The final area of discussion concerned the installation of a gas "take-off point" for local consumption. APT states that they have the capacity to utilize natural gas for energy production, but until a state position on gas use is established, the point cannot be directly addressed.

Again, it should be noted that the public utility and communications issues directly affect the Tok area, and do not generally reflect the concerns of the remaining road communities. This may be attributed to limited outlying participation, and a lack of clear understanding by conference participants of the legalities and ramifications of utility policies.



c. LAND AND AGRICULTURE

DISCUSSION GROUP CHAIRMAN: Bill Arpino

COMMITTEE ASSISTANTS: Doug Euers
Robin Brean

The Land and Agriculture Committee met on the afternoon of April. Approximately 50 people were in attendance, representing private citizens, landowners, contractors, the State of Alaska, federal agencies, Native corporations, environmental groups, and Canadian representatives.

The two general areas of concern were pipeline routing conflicts and area land use planning. In the Tok area there are definite problems with the proposed alignment:

1. It is too close to the community.
2. There are conflicts with present recreation trails and public roads.
3. There are conflicts with land usage by the local trap shooting club and by the Tok Dog Musers Association.
4. Historical sites may be impacted.
5. Private land and homes are located on the proposed alignment.
6. The gas line might be hazardous to residential and business concerns.

Northwest Alaskan Pipeline Company indicated that changes in the alignment are possible to accommodate local land usage. A willingness on Northwest's part to meet community needs in routing was indicated. Tok is not the only area of concern. There are possible conflicts along the highway at Delta Junction, Dot Lake, Riverside, Northway, and Lakeview.

The right-of-way over private land was discussed. Northwest would negotiate with landowners for easements, but they will have the right of eminent domain. Condemnation and just compensation would take place if negotiation was unsuccessful. This procedure would be used only for right-of-way acquisition and not for compressor station or construction camp sites.

Placing the gas line and the proposed railroad on the same right-of-way was discussed in general terms; this is a possibility that should be looked into to minimize disruptive activities.

A strong need was indicated for some type of central organization to represent Tok or the Tok area, which would be responsible for answering questions and inquiries relating to the gas line by any parties involved. At the present time there is no such organization that has the authority to speak for the area's population.

The consensus of the group was that there is a need for an area land-use plan. Some considerations to be included in the plan should be:

1. An inventory of existing trails should be compiled.
2. An inventory of present land usage should be understood.
3. How and in what direction, if any, should the town expand?
4. Should more state land be sold? If so, then where? What types and sizes of parcels should be considered?
5. Soil testing should be completed.
6. Agricultural land needs to be identified in order to become available.
7. The state timber disposal method should be changed.

The above-mentioned comments, concerns, and viewpoints were gathered in only two hours of good discussion. We have just scratched the surface, and more input is needed if the present and future needs of this area are to be met during gas pipeline impact.

AFTER THE FORUM...

Land and Agriculture

Participants in the Upper Tanana Regional Forum expressed substantial concerns over future land use and planning, on the part of Northwest and for agricultural development.

Generally, the areas residents felt that the proposed pipeline route was not satisfactory for the following reasons:

1. The proposed route is too close to the communities. (Especially important in Tok.)
2. The proposed route is in direct conflict with existing recreational trails and public roads.
3. There are conflicts by local sporting and dog mushing clubs over land to be used for the pipeline.
4. No adequate solutions to recovery or protection of historical and cultural sites has been advanced.
5. The proposed route will be over some private lands and homesites, and residents are concerned that right-of-way condemnations will not result in tendering of a fair value for selected lands.
6. The potential hazards to residences and businesses has not been dealt with adequately.

Northwest Pipeline indicated during the Forum that it would be willing to negotiate changes in the right-of-way alignment to accommodate local land use, to the extent possible. This action would apply uniformly to all communities along the corridor. In fact, modifications of the route, subsequent to the Forum have moved the route further north of town, and primarily onto State lands.

Further, it was Northwest's desire to build as far north of Tok, and away from the communities as possible, to further minimize hazards.

The issue of easements and condemnation authority was responded to by pipeline company officials who indicated that they would pursue individual negotiations where possible, but that condemnation authority would be sought, to resolve any unsuccessfully negotiated agreements. This authority will be further defined by the State of Alaska in subsequent right-of-way agreements with Northwest.

Pipeline officials stressed that the above procedure would not apply in the matter of setting up construction camps and compressor stations.

Panel discussions suggested that a future use of the pipeline corridor might include authorization for the Alaska Railroad in extending its operations to the Canadian border. The expected effect would be to minimize disruptions during future construction.

During the forum, area residents conceded a strong need for creation of a central organization which could assume a responsible information role with all groups in the region, and begin the process of land use planning. No organization presently exists, and models for such a structure are not uniformly accepted.

Group consensus for an area land use plan focussed on the following:

1. An inventory of existing trails should be compiled.
2. An inventory of existing land use patterns should be assembled and made understandable to all potential users.
3. How, and in what direction, if any, should Tok expand? (This question may be appropriate for any community located within the pipeline corridor.)
4. Should more state land be sold? If so, where? What types and sizes of land parcels should be considered?
5. Soil testing, throughout the region, should be completed.
6. Agricultural lands should be identified, in order to ensure their future availability.
7. State timber disposal methods should be modified or changed.

In a subsequent interview with Land and Agriculture Committee Chairman Bill Arpine, it was learned that some of the previously stated concerns may have been modified. Generally residents of the Tok area have settled into a "wait and see" attitude, and are less prone to see pipeline impact as a major event.

Land use planning and selection of a representative body are still under consideration, but no concrete action has been taken to date.

Further, Chairman Arpino indicated that the opening of an impact office, while desirable from a public relations standpoint, was not as essential as previously stated. He suggests that it would not be appropriate for Northwest to open such an office, but that a neutral third party could serve as a reliable information conduit, and be well-grounded in the affairs of the community by the time that actual line construction begins.



d. PUBLIC SAFETY

DISCUSSION GROUP CHAIRMAN: Dottie Eshbaugh

COMMITTEE ASSISTANTS: Bob Stuart
George Cole
Tony Conrad

The discussion groups in this committee varied from 10 to 30 throughout its sessions.

Alaska State Trooper staff and facilities were discussed. Tok Corporal Cole stated that there are presently four public safety officers stationed at Tok and two at Northway. An employee of the local alcoholism program stated that much of the area's present criminal activity is alcohol-related. Tok Trooper Stuart described the local trooper post as a holding facility with three bunks. He feels that the present facilities will be of adequate size (in most cases) if proper transportation can be arranged. Also needed to make this possible is good coordination with personnel working with alcoholics and juveniles.

Public Safety Deputy Director Sydnam stated that they know that there will be increased safety problems. He anticipates that at least one additional safety officer will be placed in Tok and that there are possibilities for getting constables in some of the villages.

Roy David of the Tetlin Village Council stated that cooperation between troopers and the village is needed. Having a constable in Tetlin would be good. They have seen that the constable in Northway did help that village. He anticipates serious problems during impact, since there are already serious ones involving both drugs and alcohol.

The alternate health aide and alcoholism counselor for Dot Lake stated that something should be done about the expected increase in alcoholism problems. Discussion followed.

A Northwest representative stated that the camps will not be dry but that beer halls will not be established in the camps.

It was felt that the Tok area recreation facility should be used to offer activities programs under good supervision.

The Tok Volunteer Fire Department stated that their greatest need is for another fire truck. Also, more training is needed.

Another concern previously discussed and acted on by members of the committee was the need to protect pedestrians. Specific recommendations have been made to build a bicycle path, or pedestrian overpass, and to lower and move the speed limit signs.

AFTER THE FORUM...

Public Safety

Considerations of public safety generally centered on the availability of enforcement officers, holding facilities and enforcement of speed and highway regulations for protection of pedestrians.

According to an employee of the Tok Alcoholism Center, most of the criminal activity in the region is alcohol related. This is a recurring problem in rural and Interior Alaska, and is not expected to change significantly.

Alaska State Trooper George Cole noted that the existing holding facility should prove adequate to local needs, providing adequate transportation can be arranged to move detainees to more secure locations (i.e. Fairbanks).

The Alaska Department of Public Safety is looking to increase staffing in the Tok region, and is re-examining the possibility of placing constables in the road villages.

Health aides and alcoholism counselors noted that an increase in consumption is to be expected, based on the Fairbanks experience, and some degree of pre-planning must be done to prepare for the accompanying criminal activity and welfare needs. This is coupled with statements by Northwest officials indicating the camps will not be dry, although beer halls will not be constructed or set up in the camp.

To some extent the social problems of construction impact may be modified through sound programs that could be established through the Tok Recreational Center.

Fire protection is generally deemed adequate in the Tok area, through the existing seven member volunteer fire department. Primary need by the VFD is another fire truck, and this problem is replicated in the remaining villages. Training is a continuing problem, but shared training between Northwest camps and the road communities may be an alternative to alleviate the potential costs of training.

Finally, pedestrian and bicycle traffic safety are major concerns of Tok residents, and increased emphasis on enforcement is desired.



e. EDUCATION

DISCUSSION GROUP CHAIRMAN: Carl Peterson

COMMITTEE ASSISTANT: Dave Maxwell

The following items were listed by the committee as concerns:

I. Education Training

A. Who?

1. Alaska Gateway School District
2. University of Alaska Extension Center

B. What?

1. Responsibility Training
2. Career Education and Counseling
3. Employment Information
4. Survival Skills (Personal and Employment)

II. Facilities

A. Existing Program

B. Anticipated Expansion

1. May not need additional facilities
2. Present facilities may well need upgrading
3. Obtaining needed expansion - state, local bonds
4. Facility maintenance

III. Recreation

- #### A. Swimming pool and maintenance and supervision
- #### B. Do we want to be in the recreation business?

IV. Types of jobs to prepare for:

- A. Security Occupations
- B. Building Maintenance Trades
- C. Office Occupations
- D. Hotel/motel Restaurant Management
- E. Communications
- F. Road Maintenance
- G. Laundry
- H. Transportation
- I. Vehicle Maintenance
- J. Health Care
- K. Child Care

The program of the University of Alaska, Tok Regional Center, was explained and its budget discussed. During this session, 103 students are being serviced in credit classes, 15 students in non-credit classes, and 17 students in public service classes. The committee was not optimistic about the budget's increasing. Grants are an unstable basis for funding. The Regional Center intends to offer as many vocational/technical programs as possible.

Ralph Rudzik, principal at Northway School, stated that there are no jobs in his area and feels that vocational skill education would be the best help. Rosemarie Maher of Northway noted that around 30 people have traveled to up to four training areas. They do not like city life. This is a difficult question. Some may be gone up to five years in order to gain necessary skills. Sharon Young, president of the regional school board, stressed the importance of survival skills needed for city life. The committee discussed the need for these skills, such as the need for a vocational counselor, education in filling out forms, guidance for people from smaller communities who have relocated to cities for training.

The committee mentioned the importance of training local people for permanent jobs. Training might not always result in the kinds of skills that unions need at a certain time. On-the-job training during construction of the oil pipeline resulted in almost 200 permanent jobs. We need to work to set up permanent positions. It was noted that many jobs will be in building maintenance trades. Are these the jobs that local people would like to have?

Don MacKinnon of the Alaska Department of Education mentioned that residents want to be assured of getting a job after they complete extensive training for a certain occupation. The committee discussed the problems of responsibilities that go with jobs and trying to eliminate high turnovers in personnel. It was wondered what part schools could play in responsibility training and encouraging people to stay in the area.

The committee noted that not many jobs that could result from pipeline construction are long-term jobs but that many benefits can come from lower-paying, longer-term jobs.

MacKinnon stated that the major responsibility is with the Department of Education. There is grant money available for hard-pressed areas. The Department is responsible for providing for long-term facilities. The department is connected with the Seward Skill Center. Development of curriculum is a local responsibility. Some kinds of vocational plans can receive extra funding. He predicted that this area could undergo a 10-15% increase in student population. (During pipeline construction, Valdez had a much higher increase in student population. Cordova experienced a 6% increase in student population.) It was noted that many workers and their families have stayed in Valdez.

The committee stressed that it is important to think about the post-construction period and who will remain here then. It was noted that many construction workers travel to larger communities to find work. A Canadian pointed out that it was difficult to control any kind of impact into a community.

A discussion of building needs and a swimming pool followed, and the cost of the support of a pool was questioned. The cost of maintaining the Cordova pool is \$120,000 per year. Fees bring in \$18,000 to \$20,000 per year. The remainder is funded by the school (\$50,000) and the city. Use of the recreational facilities at the schools was discussed. It was noted that the gas pipeline will be built by specialists who seldom take their families with them. During peak gas pipeline construction, the number of employees is expected to be one-half the number at the peak of oil pipeline construction. The overall effect of this on the educational system in the region is estimated to be 10% over present enrollment.

There are no final details yet concerning permanent positions to be generated by the compressor sites in the region. In the 200-mile stretch between Delta Junction and the Canadian border, fewer than 50 permanent operations and maintenance jobs may be available. Small contracts aside from the pipeline construction itself could include pipeyard, maintenance shop, and housing construction. Service contracts expected to become available before and during pipeline construction could include facilities maintenance, health service, and child care.

AFTER THE FORUM...

Education

The education Committee addressed the overall educational needs of the region, and spent a substantial part of its time discussing the overall employment and training opportunities available to area residents. Comments and concerns closely followed those addressed under Job Training and Placement.

Significant, however, was consideration in this committee of village needs and an understanding of their respective employment requirements.

Although some training and vocational education programs are established throughout the state, rural representatives have found them less than adequate for villagers. The major drawback, as expressed, is that the high concentration urban areas are not compatible with village life styles, and the combined effect of "culture shock" and high costs virtually insures failure by the rural area participant.

Don MacKinnon of the State Department of Education noted that there are grant programs available to hard-pressed, impacted communities to assist in local training programs, and that this area was of singular importance to the department.

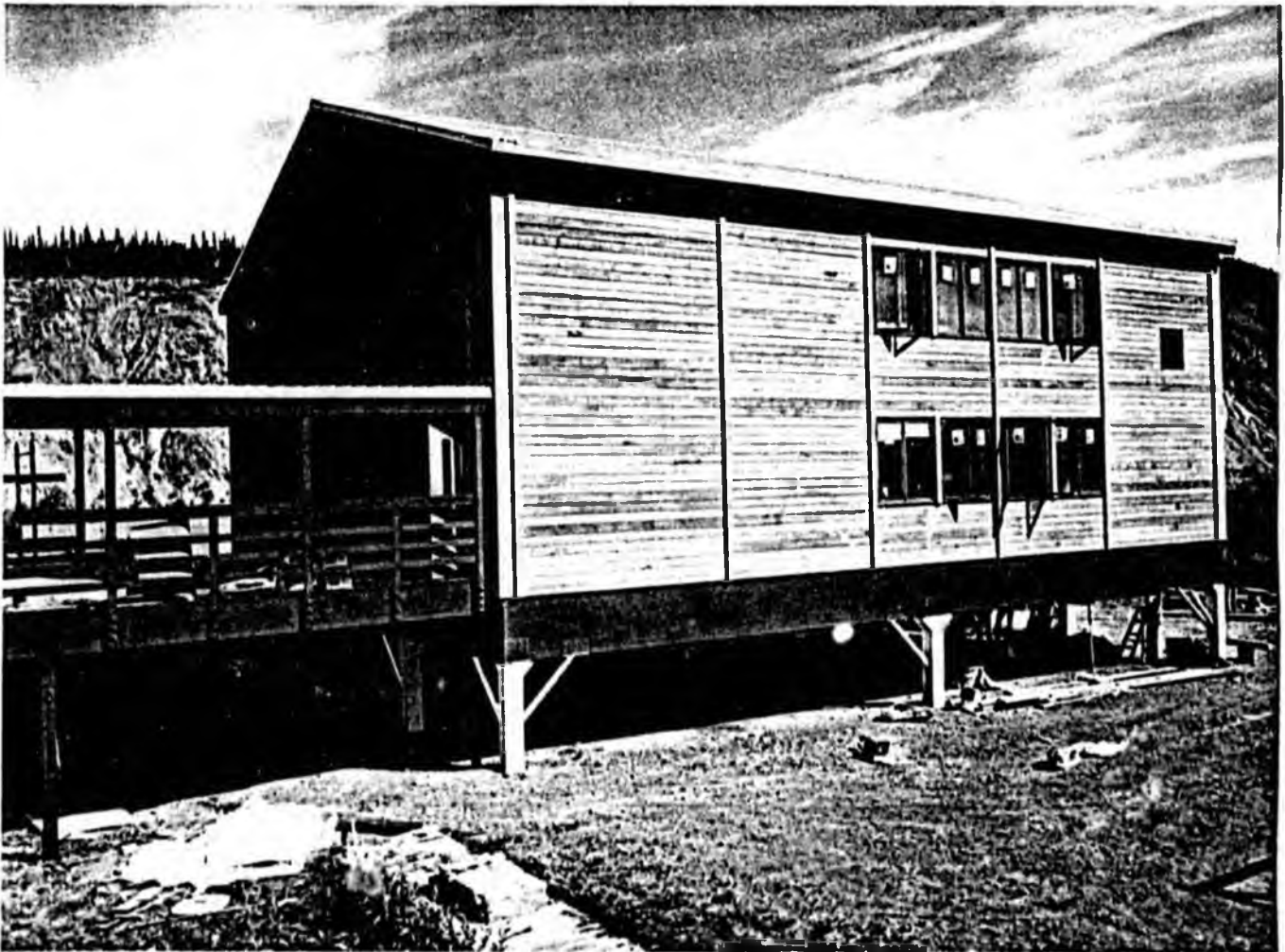
According to Gateway School District Superintendent Carl Peterson, no new school construction is anticipated, as existing facilities should handle any anticipated increase in enrollments. The construction of a school in Tanacross which is underway now is expected to relieve any pressure that might come to bear on the school in Tok.

Whether or not this remains the fact depends heavily on the population influx. MacKinnon noted during the proceedings that Valdez and Cordova saw a substantial student population increase during the oil pipeline construction, and predicted an approximate enrollment rise of 15% for the Tok area. On the other hand, school enrollments were the one impact pressure Fairbanks was prepared to handle, and enrollments never did increase to the level of predictions before construction. Without more hard data on the estimated numbers of jobs, the extent to which they will be filled by in-migrants, and whether those itinerant workers will bring their families, it is nearly impossible to predict what pressures construction will bring to bear on the Gateway School District.

Area building needs and desires were discussed, including construction of a double-duty swimming pool/water reservoir. Cited construction costs indicate that such a program for the Tok region would incur prohibitive maintenance and operating costs.

Superintendent Peterson stated that his major concern during the construction phase would be loss of skilled maintenance and clerical personnel to higher paying jobs. While some of the turnover could be handled from the existing labor pool, it would result in a destabilization of the administrative routine.

In summation, the overall educational and standard training needs can be handled through the existing structure, with a minimum need for new or special programs. However, local skill training for construction employment in all areas remains unresolved.



THE LOCAL DECISION MAKING PROCESS:

Comments by Forum Speakers

Comments submitted during the Upper Tanana Regional Forum by invited participants from the State of Alaska, Northwest Pipeline and related areas focused on the larger implications of pipeline development as it will affect the small communities of the Upper Tanana Region.

Tom di Zerega, Vice President for Northwest Pipeline Corporation, outlined the overall construction timetable for the project, and stressed the energy company's commitment to "...identify all cultural resources along the route so that we may take proper mitigating measures".

Di Zerega had outlined the construction timetables, noting that a 1983 completion deadline was expected, with various stages of construction start-up planned beginning in 1979.

Dr. Mim Dixon, keynote speaker and former Fairbanks Pipeline Impact Information Center Director, told conference participants that impact planning should begin at the earliest possible time. She urged the communities to "plan for what you want your community to be 10 years from now", and present these desires to the pipeline company.

She suggested the possibility that the construction companies might be willing to build facilities on a turn-key basis that would permit community acceptance of the buildings when the construction effort was completed.

No discussion of potential pipeline impact can be considered complete without a partial discussion of the net effect of local government structures on the impacted areas. Governor Jay Hammond addressed the issue by stating, "I'm not going to counsel you that local government is the way to go in this area, but..."

Hammond stated that he had previously voted against a local government structure for his home district, but subsequently modified his views when local residents discovered that borough power permitted residents to do things that "we wouldn't have been able to do without it".

The local government/representational issue is described by some residents as a "hot potato", which will not be easily resolved.

According to comments recorded in the All Alaska Weekly article on the forum, "In an attempt to fill the representational void, Bob Lohr, Executive Director of the Upper Tanana Development Corporation, warily tried to get the forum to discuss formation of a task force to follow through on the work so far accomplished.

"The subject was apparently too sensitive and ended with only one comment, terse and angry, from Rosemarie Maher, President of the Northway Native Association, who flatly opposed it.

"Maher feels that the natives from outlying villages were not adequately represented in the forum's work and therefore should not be put in a position to accept the task force only because they were absent."

Summary remarks by local residents in attendance indicated that the forum served a valuable role in initiating discussion on the future changes, but subsequent to the proceedings, according to local spokesman Glen Marunde, much of the enthusiasm had evaporated.

f. WOMEN'S CONCERNS

DISCUSSION GROUP CHAIRMAN: Mellie Terwilliger

This region is a classic example of rural Alaska. Immense areas of land, mountains, and water. Small clusters of people, 50 to 100 miles apart. Extremely long, extremely cold winters. We look forward to the gas pipeline for the jobs and business it will bring. We know that our Canadian friends down the line are in the same situation as we. And we know the end result will be good for the people of the Lower 48. We want to plan to make the best of things to come to our region.

We have some fears about the great influx of transient workers. We are already accustomed to a great influx of tourists every summer. Now, perhaps, we can have the means to plan to give comfort and strength to all the people of the region, to the tourists, and to the pipeline workers.

Women are a cohesive force in a wilderness. Women mean homes, children, schools, churches, clubs, stability.

It is difficult to deliver services to rural Alaska. To accomplish this we endorse the concept of sub-regional delivery of services of state and federal agencies, and industry with local hire.

We want to thank the Tok Chamber of Commerce, the Upper Tanana Development Corporation, and the Fairbanks Town and Village Association, especially its director, Jerry Smetzer, for the opportunity to air our concerns to those people able to help us women with them.

The committee also supports a regional pipeline impact office, day-care centers for working mothers, a regional labor union office, medical care and counseling for students, a swimming pool (which could be housed in a reservoir for fire protection), increased community services, a consumer protection agency office, support of an loans for marketable arts and crafts, expansion and strengthened financial support of the public health clinic, and the promotion of winter tourism (which could create more jobs).



8. RURAL AND NATIVE CONCERNS

DISCUSSION GROUP CO-CHAIRMEN: Bob Brean
Glen Marunde

COMMITTEE ASSISTANTS: Roy David
Rosemarie Maher

Participation in this committee exceeded that of any of the other committees. Although the largest room was selected for rural and Native concerns, there was little elbow space left. Several issues were covered. Some of them were: the protection of subsistence life style during construction of the gas pipeline; right-of-way, alignment, and access of pipeline; job training; minority hire and human rights; fish and game concerns; and individual access and input with regard to issues concerning the pipeline.

The subsistence life style issue consumed much conversation. It was decided that corridor restrictions would not be effective in protecting local life styles. There were not used in Glennallen's portion of the oil pipeline, and Tok is similar. There would be easy access to the corridor in the Delta-Border segment of alignment. One possibility to protect local subsistence hunting and fishing would be strict residency card requirements. The 30-day residency decision by the Supreme Court was discussed, and Governor Hammond stated that only through a constitutional amendment could that ruling be altered. Residence as a means to achieve solutions to several problem areas was discussed at length in regard to local hire, the taking of game, human rights, and so on. Another undesirable effect of subsistence protection through corridor restrictions is that villages like Dot Lake, Tanacross, and Northway, which lie on the pipeline, would find their freedom restricted. This was a major concern of Chief Andrew Isaac.

Right-of-way was covered by Northwest officials. Negotiation with private landowners on the right-of-way was brought up. Trapline rights will be negotiable, as stated by Morris Thompson. There was wide support for the Bureau of Land Management to get out of the picture as soon as possible on Native claims lands so that corporations and villages could be free to do their own negotiating without interference. Canadian representatives stated that many of the problems that we have with regard to residency requirements and land claims can be handled on a different basis in Canada, because our constitutions are not the same.

Job training specifically for pipeline-related jobs was well discussed. The possibility of the state's handling of a training school program was raised. A current Canadian project, Nortran, was discussed.

Minority hire and human rights seemed to go together and were discussed simultaneously. One of the human-rights resource persons stated that their office still has 300 human-rights violations relating to minority hire to process. The tools at their disposal are, at best, cumbersome. Spud Williams of the Tanana Chiefs Conference said that the Human Rights Office is basically a good vehicle to help to enforce minority hire but was very slow. Larry Means of the Department of the Interior explained that new regulations providing assistance to minority business related to pipeline activity were being drawn up. These plans were to be tailored specifically for the Northwest pipeline.

The fish and game session met in the afternoon. There was passive support for a bill being considered in the legislature that would decentralize the Department of Fish and Game by the creation of 12 regional fish and game boards to bring the decision process closer to the people. A requirement for all out-of-state hunters to use guides was discussed as a means to restrict hunting by pipeline workers. There may be questions of constitutionality in a previous Supreme Court ruling.

There is a strong concern about community, village, and/or individual input into the decision-making process used by state, federal, and Northwest officials in all matters pertaining to the gas pipeline. The use of the State Office of the Pipeline Coordinator as a clearinghouse between government, the prime contractor, and community and/or individual residents was discussed. Another suggestion was for the creation of an office for an ombudsman-type position for gas-pipeline-related problems only. Such a position may be incorporated into the pipeline coordinator's office. The need for safeguards to keep the expanded version of the pipeline coordinator's office from becoming too powerful was mentioned. Maximum use of local hearings was encouraged in access and input discussions.

AFTER THE FORUM . . .

The Political Issues

The Committee on Rural and Native Concerns was the most heavily attended, with the bulk of rural forum-goers concentrating in this area.

Central to all discussions was the absolute need to preserve indigenous subsistence rights during and after the construction effort. Incorporated also were issues of employment, training, the role of village corporations and tribal government, and the establishment of standards common for all impacted communities as opposed to the dominant population center.

The relative effects of residence preference were discussed, with an eye toward controlling non-Native and non-resident access to traditional use areas. Governor Hammond noted that such preferential resident use could only be addressed through a state constitutional amendment.

This restrictive use plan has been further complicated by the U.S. Supreme Court ruling striking down all provisions of the resident hire law. No subsequent formal resolution has been set forth.

There was a uniform desire to have the native lands issue resolved, to permit the affected villages to enter into private negotiations with the pipeline contractor and avoid the "meddling" of federal agencies. This is an issue whose solution again is postponed with the failure of Congress to pass any D-2 legislation this year.

Generally discussions joined on the Alaska Native issue recapitulated the continuing problem of the rights and prerogatives of the small communities in managing and ordering their own business affairs.

It is important to note that this committee provided the focus for many of the rural participants to express their sense of alienation and separation from the larger decision making process, and to vocalize their desire to have a more substantial say in subsequent planning and development schemes.

In post-forum interviews, Committee Co-Chairman Glen Marunde indicated that the issues addressed in the forum had been allowed to fall dormant by the committee participants. However, Chief Andrew Isaacs of Dot Lake indicated that the level of village involvement has not declined, but the major concern of the older native people is the right of full participation for their young people. In hearings on the lease stipulations for the pipeline, Isaacs commented that he really did not approve of the line going through traditional hunting and fishing areas, but that if the young people could no longer make a living at subsistence, they would have to earn money, and he hoped the pipeline was one way to do that.



h. HIGHWAYS AND TRANSPORTATION

DISCUSSION GROUP CHAIRMAN: Harold Johnson

COMMITTEE ASSISTANTS: Fred Pride
Arthur Warbelow

Discussion in this group covered many areas of interest with approximately 30 people in attendance.

It was brought to the attention of those present that the highway between Miles 75 and 83 of the Tok Cutoff is very narrow and needs repair before pipeline hauling begins. This is also true of the section between Miles 39 and 49 of the Tok Cutoff. Sections of the Alaska Highway that are narrow and in need of repair include Miles 1329 to 1362 (Dot Lake), 1362 to 1378, and 1235 to 1301 (Tetlin Junction). The possibility of emergency funds to be used on these sections was discussed. Without improvements on some sections of the highway, there would be a significant and generally unacceptable level of danger during pipeline activities.

The current location of the truck weight scale was discussed and a relocation was termed feasible in order to allow more room downtown at peak traffic periods. This also reduces the risk of automobile accidents and increases the safety factor for residents.

It was stated that the Northway road needs work and that bridges in that area will also need work with increased truck traffic.

There was discussion on the Tanacross airport and Rudy Hartsell's small airstrip. With increased air traffic in the area and likely increased use of these strips, would the users, such as Northwest, be willing to "foot the bill" for a portion of the maintenance expense? That question can easily be solved in the case of a private strip, but not so for Tanacross. There is no air traffic control to monitor air traffic.

The need for bicycle paths or walks in impacted areas such as Tok was considered.

AFTER THE FORUM ...

Highways and Transportation

Area residents generally felt the need for a broad range of improvements to the existing air and surface transport system.

Significant improvements to the road system are desired at the Johnson River, Dot Lake and Tetlin, with additional improvements sought at Northway. Discussion of bridge improvement and upgrading was also joined, and some concern was expressed over those stretches of road connecting with the Canadian leg of the construction project.

It should be noted that the State Department of Transportation and Public Facilities has added substantial requested monies for improvements on the Alaska Highway. Status of that funding is not presently known.

Tok residents also requested a relocation of the truck weight scales to a more remote location. The general argument is that such relocation will eliminate a fair amount of heavy vehicle congestion in the community, and thereby serve as a positive safety factor. No new location has as yet been agreed on.

The area of air transportation is largely unresolved. Questions were raised by Tok residents questioning whether Northwest could be induced to carry part of the costs of airport operation in Tanacross, despite the absence of any local airport operations authority. The issue is moot for use of private airstrips, but is not clear for the larger Tanacross facility.

1. JOB TRAINING AND PLACEMENT

DISCUSSION GROUP CHAIRMAN: Dave Maxwell

COMMITTEE ASSISTANT: Norman Wallis

State Commissioner of Labor Ed Orbeck discussed the state hire law with the committee. The National Labor Relations Board has accepted the Alaska local hire law. But even if the Alaska state statutes on local hire were determined to be unacceptable to the courts, the employer and the union could negotiate a local-hire agreement on their own.

Willie Lewis of Local 942 (Laborers) talked about minority hire. He also mentioned the possibility that his union may establish some sort of training facility in Tok with preference given to union members.

The suggestion was made that two people from a village might alternate in a job on the pipeline. This would not only help to assure local employment but would also allow more flexibility to employees from the villages.

It was brought up that several years from now (1980 or 1981) there would be many people who could claim that they were Tok residents for a year or two. It should be considered that what we need to realize is that if we are not careful, we could have many of the same problems that Delta Junction underwent in regard to local hire.

It is important to understand how many people, in Tok for instance, are interested in being foremen, powdermen, general laborers, cat operators, heavy truck drivers (to cite a few). This would be invaluable in realizing what kind of training programs to initiate in the area.

For the permanent compressor station jobs that will open up after construction, it was mentioned that there should be some sort of local-hire preference. There should be some preference for locals in the training programs or in the selection of personnel for these positions.

AFTER THE FORUM ...

Job Training and Placement

Closely related to the question of overall pipeline employment is the consideration of the nature and type of training that would be available to area residents, with positive guarantees of employment once training has been completed.

As previously noted, the Northwest Pipeline Company has expressed a desire to utilize as much of the local labor force as possible, but the ramifications of the U.S. Supreme Court decision in striking down "resident hire" may complicate that intent.

Nevertheless, the local awareness of the need for skill training and placement cannot be too forcefully stated.

Testimony by area residents during the Upper Tanana Regional Forum indicates that there is a high incidence of clerical and secretarial skills, but a shortage of trained workers in the construction and building trades. According to Job Training and Placement Committee Chairman Dave Maxwell, the Tok area has to import numbers of people to work on many local construction jobs and existing service jobs (hotel, motel and restaurant).

As a result, most of the local interest and desire is focused on jobs such as heavy equipment operation, heavy truck driving, vehicle maintenance or explosives handling to name a few. In most cases, the University extension center is not an appropriate setting for teaching of these skills.

Laborers Local 942 representative Willie Lewis stated during the forum that there is a possibility that his union would establish an "entry level and recertification" training center in Tok, but according to Maxwell, they have not made any followup moves.

No other craft or trade unions appear to have taken area training into consideration, and it is probable that any such programs would continue to be operated out of the Fairbanks center.

Area residents indicated a desire for vocational/ technical training either through the Gateway School District (REAA) or the University of Alaska Cooperative Extension Service or the community colleges. However, the consensus was that it was probably too late to organize such a program and that the UA/union liaison might be politically impossible to start up.

An additional note, according to Maxwell, is that the UA extension center in Tok has done some test marketing to schedule vocational/ technical training, but has been unable to get people to sign up

for classes. He cited as an example a course in commercial baking - a skill that could be marketed in a pipeline camp as well as on a permanent basis in the community. No one signed up.

The communities generally expressed a desire for on-going, postpipeline jobs, working in such areas as the Northwest compressor stations. This employment area will not generally provide much, as the expected number of permanent jobs will be around fifty. Further, there will be technical jobs for which local training efforts may not be adequate.

Job placement during the pipeline building effort may be a problem not only because of the court decisions on resident hire, but because of the concentration of hiring hall, contractors and support services in the Fairbanks area. Some discussions of consolidating labor halls in the Tok area has been advanced, and the Tanana Chiefs Conference has been exploring avenues to underwrite minority hire, but to date no substantial policies have been generated.

During the forum, some innovative recommendations were set forth to permit or encourage greater use of the labor force. One notable suggestion was to consider using two persons from a given village in one work position, thus giving the employee a greater personal flexibility to meet his/her needs, and extend the number of employable positions.

Another such suggestion was to eliminate the single 12-hour shift, with its attendant seven-day work week, and substitute two eight-hour shifts, again on a seven-day cycle. Such recommendations are of course speculative at this point, and will be the management prerogative of Northwest.

In summary, the training and placement questions continue to dominate, and are unlikely to be resolved until such time as the State of Alaska can re-examine its role in setting preferential hiring practices, and set up a coordinated, functioning program to support the Alaska Highway communities.

Further delays in resolution may be expected due to shifting community needs and perceptions especially if the local desire remains fixed only on direct construction employment.

Central to the entire discussion is the area's expressed wish for more substantive information than has been provided to date. The need for "more meat" (information) is a recurring theme throughout this report, and will be so addressed.

In a post-forum interview with Training and Placement Committee Chairman Maxwell, he noted that there had been an increase in demand for Emergency Medical Technicians through the Alaska State Troopers. He felt this was generated by the Upper Tanana Regional Forum, and that as discussions and impact planning continued, more such employment and training options might be generated.



J. SOCIAL SERVICES

DISCUSSION GROUP CHAIRMAN: Louise Griffin

COMMITTEE ASSISTANTS: Cathie Ipalook
Bob Lohr
John Klaus

Myra Jones of the Tanana Valley Community Clinic in Tok gave an overall report of the health services that are presently available in Tok and the surrounding area. A description was given of the clinic, health personnel on staff, and the ambulance service. The need for an expanded clinic was stressed. The clinic is not equipped to handle emergencies involving two or more people at one time. There is a space deficiency - no holding beds, no emergency room. It was stated that the Tok area needs a usable facility not only during the pipeline construction era but present and in the future.

Barbara Wihlborg - public health nurse, Tok itinerant - gave the boundaries that she covers and a summary of the services from her clinic with the emphasis being on prevention/education. She also gave an overall summary of the health aide program in the surrounding villages. It was very evident that additional personnel are needed in the Public Health Clinic.

The need for mental health services was discussed. It was stated that a proposal has been submitted to the state, asking for funding for a full-time clinical psychologist to be stationed in Tok, providing services to the surrounding area.

Jerry Taylor, ambulance coordinator, spoke on the ambulance service. One ambulance based in Tok covers the entire area (Border, Duffy's, Taylor Highway, Dot Lake, Johnson River). We have only three active emergency medical technicians and four or five drivers. There will definitely be an increase in auto accidents. Therefore, there is a need for another emergency vehicle, which should be based in Northway. Education and training for additional personnel should be available.

We have had very little contact with the state Emergency Medical Service program. More bush area representation is needed for this program. Ms. Wihlborg expressed a strong desire to serve on the state EMS program. Fred McGinnis, Deputy Commissioner of the Department of Health and Social Services, stated that he will request Mr. Scott, director of EMS, to visit Tok soon.

Governor Hammond stated that they are definitely concerned with health care budgets but that appropriate revenue is needed. Morris Thompson of Northwest stated that he was not prepared to say whether Northwest is planning on using our health-care facilities, equipment, and personnel, because the company is at present in the construction design phase. The company would negotiate with Tok. The company would have its medical experts and associates look at the local situation, facilities, and so on with the possibility of arranging contractual agreement.

Thompson was asked about the highway villages in regard to using facilities and health aides. He stated that this would all be taken into consideration. If Northwest used the local and village facilities, then there is the possibility of helping to provide equipment and helping Tok with the proposed clinic addition.

Dottie Eshbaugh of the local alcoholism program reviewed present program services and stated that they are barely keeping up with the problems now. Since there will definitely be added stress during pipeline activities, the alcohol program hopes to avoid some of the problems by being able to plan ahead. A suggestion was made to give local people addresses and contact names so that the Tok area can start its planning.

Discussion was held on the housing situation. A suggestion was made to meet with Glennal on the impact problems that they experienced. The local housing situation here at present was discussed. It was brought out that we really do not have excess or "any" housing available. Interest was expressed for what, if any, plans that the old RCA housing might have.

Also, it was suggested that people who have private wells here should make application to the Department of Natural Resources for a permit for water rights and have it recorded, because anyone can come along and use that water source (such as for industrial use).

It was suggested that a rent review board be established in Tok. Also, it was brought out that the peak demand for housing will cover quite a short period of time.

The Assistance to the Elderly Program was reviewed. It is felt that the elderly will get a lot of the costs of the pipeline and very few of the benefits. The program will be doing an on-going assessment of needs, planning for the cost of living rise, and so on.

It was suggested that the Alyeska camp facilities be looked into for uses such as clinic, housing, fire protection facility - whatever.

A suggestion was made that we should define whom our people are for contacts for possible future contractual agreements or referrals to the various existing businesses, agencies, and organizations, since at present there is no local government.

Discussion was held concerning the closure of the Office of the Division of Family and Children in Tok in 1976. The services now include only fee agents with the exception of Eagle; this is not sufficient. It was suggested that the State of Alaska reopen the local office with a full-time eligibility worker who can also issue food stamps. The time frame involving food stamp application through complete procedure involves at least six weeks. Elderly people especially need immediate help rather than delay. A medical eligibility worker who could issue coupons should also be included. It was mentioned that the Salvation Army (Anchorage) is talking about the possibility of setting up a place in Tok.

The possibility of a permanent impact information center was discussed.

The Social Service Committee also endorsed the idea of a permanent task force to follow up on the forum and to become a point of contact for gas pipeline related issues and problems.

The task force could include representatives of the communities in the Upper Tanana, village corporations and other interested local groups, as well as state, federal and Northwest representatives for communication purposes.

The Committee also recommended that an impact information center be established in Tok during the coming summer which would be operated in a manner similar to that of the Fairbanks Impact Information Center during the oil line construction and further suggested that a task force could act as an advisory board to the center.

AFTER THE FORUM ...

Population Growth

Central to all discussions of potential gas pipeline impact is an assessment of expected population changes, in whole numbers, as well as locale.

Because Tok is central to the proposed effort, it is logical to assume that any significant population increase will center there. This will probably include transient and non-pipeline people, plus families and others involved in secondary aspects of pipeline work.

No adequate numbers can be forecast, but it may also be expected that because the overall life of the construction project is significantly less than the trans-Alaska pipeline system, and because the total number of workers is less, that the route communities should see less of a population influx in real numbers.

Some aspect of community out-migration should also be anticipated, with the accompanying change in community cultural factors.

Although not specifically addressed, the potential populations of communities such as Eagle or Chicken may increase with the incidence of out-migration by older residents of some of the road communities.

It should also be noted that population growth estimates for Fairbanks, in its pipeline impact planning, did not take into account the fact that in-migrants seeking pipeline jobs did not bring families with them. While housing, utilities and traffic reflected pressure of population growth, services, particularly the schools, did not reflect the same pressures, because the worker population was mainly transient.

Health and Social Services

Primary concerns expressed during the Forum centered on provision of adequate emergency medical care, on a scale equal to impact; expansion of mental health programs; balancing social service delivery with accountability by Northwest, the effected communities and the State of Alaska.

The overwhelming consensus of community participants was that existing levels of medical care are far below present needs, in both facility and personnel provisions. With the advent of pipeline construction the number of motor vehicle accidents is expected to increase, in addition to attendant types of medical emergencies. It was pointed out the present clinic facility is capable of handling only two persons at one time, and any major traffic or industrial accident would be impossible to deal with.

Existing ambulance service is provided by a single vehicle and three emergency medical technicians over a route extending from the Johnson River Crossing to the Canadian border, and up the Taylor Highway. The need for an additional vehicle is self-evident, as is an increase in available staff. (Nine additional EMTs are available now after a training course offered through the University of Alaska extension service in Tok, and the Alaska State Troopers indicated in a post-forum interview that an additional ambulance would soon be forthcoming.)

Area residents stated that they have had little continuing contact with the State Division of Emergency Medical Services, and that this lack of contact has hampered development in the Upper Tanana Region. It is expected that the communications gap will be reconciled in the near future, particularly since a resident of the region recently has been appointed to the Emergency Medical Services Advisory Board.

Health care in the surrounding villages was deemed adequate with the exception that only one public health nurse is expected to serve the entire region. Additionally, residents pointed out the high costs of evacuation transportation and the relative lack of authority given to village health aides in determining what constitutes a medical emergency. This latter issue is being dealt with through the Tanana Chiefs Health Authority and will probably not measurably affect subsequent pipeline impact.

Health and Social Services Committee Chairwoman Dottie Eshbaugh stressed the need for improved and expanded mental health programs, based in part on the trans-Alaska pipeline experience in Fairbanks; the expected increase in alcohol-related problems; and the creation of unrealistic expectations of wealth and employment by local people seeking to benefit from pipeline construction. (In effect, many residents will be subjected to forms of "culture shock" which can only be addressed through a rounded mental health counseling program.)

A proposal to locate a trained clinical psychologist in the Tok area is being developed, but nothing has matured to date. It was pointed out that the psychologist for the Division of Mental Health located in Fairbanks and technically designated to serve Tok rarely visits the community. A request was sent requesting a resident psychologist for Tok.

It should be noted that Governor Jay Hammond expressed during the committee's deliberations the state's continuing concern over delivery of medical and mental health services, but said that appropriate revenue is needed to justify further capital outlays.

The community recently received an \$85,000 grant to expand the existing clinic, but this may not be enough to provide for facilities and equipment. Further, no programs presently provide for funding of additional physicians assistants, mental health counselors or public health nurses.

During the forum, Northwest Pipeline officials were unable to state whether they expected to interface with the existing health care delivery systems, or would generate their own, largely because pre-planning had not yet begun in this area. The company was only in the primary construction design phase.

Northwest Pipeline Vice President Morris Thompson stated that highway village use of camp medical facilities would be taken into consideration, and a reciprocal use agreement could be considered if Northwest utilized any of the area's medical services.

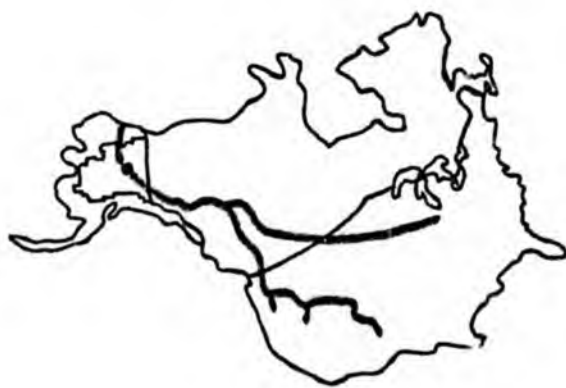
Additional discussion was entered on the availability of housing, with the observation that there is no "excess" housing in any of the areas along the proposed pipeline route. Some local construction is anticipated - in fact one apartment complex already is under construction in Tok - but consensus appears that supply will lag behind demand for housing.

Further areas of social concern are programs to assist elderly residents to offset the negative effects of construction induced inflation. On a larger scale, the committee suggested that it was appropriate to begin the pre-planning approach to monitor cost of living increases, needs assessments, etc.

Closure of the office of the Division of Family and Children's Services, food stamp eligibility programs and related welfare and assistance programs were also discussed, with emphasis placed on establishing a "fast response" process to deal with the more pressing human needs. Since the forum, the Division of Family and Children's Services has re-funded a position for a child protection worker in Tok. This person also provides family counseling and referrals.

Although the primary discussions in this committee centered on problems in the Tok area, concerns and programs suggested affect all communities within the construction corridor and their committee hoped their discussions will improve services throughout the Upper Tanana.





ANALYSIS & SUMMARY

THE PLANNING PROCESS AND ACCESS TO DECISION AGENCIES

Underscoring all aspects of the Upper Tanana Regional Forum were the unspoken fears of forced governmental organization and the concerns of small communities remote from the decision making channels.

It would appear that the communities are fundamentally divided on their approaches to the governmental function, in part because they have existed in relative comfort, free from the incursions of regulatory bodies. This attitude expresses itself in emotive terms of self-sufficiency; disregard for non-regional ideas of development and/or growth; and the characteristic provincialism of "We don't give a damn how they do it (outside/up the road/over there)".

In the reality of trying to make desires known to the state, the pipeline company or other decision making agencies, the attitude is carried out through factions and interest groups vying to make their voice heard as the representative voice of the community. In post-forum interviews, members of the community who had access to government through some group or agency found they had little or no trouble reaching decision makers. Individuals who had no such channel, such as a village corporation, felt powerless in the decision making process. They felt they had no access to state or federal agencies, and the best that could be hoped for was to avoid being affected too much.

In contrast to the groups and individuals who expressed a sentiment of anti-government "meddling", there are those in the region who, while they agree with their neighbors on the value of frontier self-sufficiency, turn to grant agencies, government funding and other government avenues to provide services and some capital improvements.

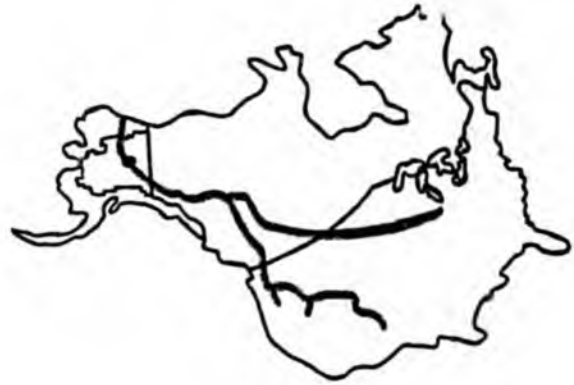
In questioning residents on the options for some representative voice that would transcend the factions and speak for the region as a whole (rural, urban, white, native, business, labor) there were many possible solutions, but no consensus. Alternatives varied from incorporation to town meetings; from a non-profit corporate structure to a third party ombudsman-like position established through the pipeline company.

There seemed to be agreement that there needed to be some means of communication with the state and the pipeline company, but little or no agreement on where it should come from. Perhaps this confusion on who or what should serve as spokesman for the region can be traced back to the fact that there are no clearly defined regional goals. Hence, interest groups or factions express their individual interests, which may or may not be the interests of their neighbors vis a vis the future growth and development of the region.

No clear picture of the potential future of the Upper Tanana Region can emerge from this initial forum, as the range of considerations has only just been addressed.

Clearly participants have expressed a need to initiate a planning process to anticipate the nature and type of change which is forthcoming, however, lack of consensus is forming this planning function seems to be traceable to the area's political differences.





MAJOR POLICY QUESTIONS
and
DRAFT RECOMMENDATIONS

Prepared by:
The Fairbanks Town and Village
Association, with Wordsmith's.

TWO MAJOR POLICY QUESTIONS

ONE:

Northwest Energy President John McMillan has asked the State of Alaska to consider investing one billion dollars of tax exempt bonding and one-half billion dollars in direct cash participation in the project.

The authors of these recommendations do not feel sufficiently qualified to make a recommendation on this fundamental policy question. Rather the individual residents of the Upper Tanana Region have much to gain or lose by the decision of the State of Alaska on McMillan's request. The issue is complex and any attempt to synthesize and summarize the current status of the project risks considerable misunderstanding in this kind of document. Therefore we will only list some recent events which should be of interest to residents of the Upper Tanana.

Recent Events:

Spring, 1978:

- Governor Hammond states that the Office of Pipeline Coordinator will be located in Fairbanks.

March, 1979:

- Governor Hammond names Avrum Gross, Bob LeResche, Charles Webber and Thomas K. Williams to study state investment in pipeline

March, 1979:

- Hammond orders State Pipeline Coordinator's Office opened in Fairbanks. "early summer '79". Mo Matthews resigns. Charles Behlke named to replace Matthews.

March 1, 1979:

- Northwest opens state headquarters in Fairbanks

March 3, 1979:

- Canada's new Prime Minister reaffirms Canadian commitment to the project.

April 2, 1979:

- President Carter asks Congress to consider a limited reorganization plan which will establish the Office of the Federal Pipeline Inspector. Congressional approval expected in late June.

May 1979:

- Financing for continued operation of the state Pipeline Coordinator's Office, dropped earlier in the Legislative session, is restored.

May 1979:

- FERC requires that Northwest prepare and disseminate an "informational handbook" describing the project and, among other conditions, a toll free telephone line for use by affected landowners along the route.

May 15, 1979:

- Alaska Legislature creates and finances joint special gas pipeline interim committee with Rep. Charles Parr, Rep. Joe Hayes, Rep. C.V. Chatterton, Sen. Bill Sumner, Sen. Frank Ferguson, Rep. Bill Miles, Sen. Mike Colletta and Rep. Terry Gardiner as members.

June 1979:

- White House nominates John Rhett as federal inspector and creates, by executive order, an executive policy board to provide federal policy for the gasline.

June 1979:

- Department of Interior grants provisional approval of gasline route.

June 14, 1979:

- Northwest request federal approval for gasline route generally 00-80 feet from trans-Alaska pipeline pad.

July 1979:

- President Carter, speaking nationwide on energy crisis, pledges full support for an expedited federal approval of the gasline.

August 1979:

- The Alaska Economic Report states:

State investment in the Northwest gas pipeline may not be possible due to a stepped up federal momentum and the failure of the Alaska Legislature to act in the recent special session.

Non-participation on the state's part may represent:

(1) Freedom from a questionable investment burden;

(2) A lost opportunity for the state for a significant investment and to be an internal participant in the gas transportation policy.

(3) Lastly, non-participation may mean a lost opportunity by the state to stake-out and command significant key position in what may be North America's "energy corridor" -- the Alaska Highway.

September 1979:

- Fairbanks municipal and business leaders propose that FERC change the location of the gas conditioning plant from Prudhoe Bay to Interior Alaska. FERC member Matthew Holden states that because of President Carter's instructions that all regulatory processing affecting the gas pipeline be expedited there is little possibility that the decision can be changed.

Legislation to provide the financing sought by John McMillan has been introduced in the Legislature and will be considered during the interim.

Residents of the Upper Tanana Region should communicate their feelings on the legislation directly to their elected representatives in the legislature.

Those are:

Senator John Sackett, Galena
Pouch V
Juneau, Alaska 99811
465-4928 in Juneau
279-3343 in Anchorage
789-8001 in Ruby

Representative Pappy Moss, Big Delta
Pouch V
Juneau, Alaska 99811
465-4928 in Juneau
895-4385 in Big Delta

TWO:

The second major policy question has to do with current efforts by the federal government to establish a program to assist small communities facing massive national interest energy developments such as the Alcan gas pipeline. Legislation has been developed by Congress with the support of the White House to establish this assistance program. However, the legislation (S-1493 "The Inland Energy Development Impact Assistance" Bill) is going through extensive hearings and amendments in Congress, and its fate is uncertain. Because of the Association's earlier work relevant to the impact of the trans-Alaska oil pipeline construction we have been active in trying to develop a bill which would provide assistance based on local interpretations by local people of impact problems at the local level rather than through the state-federal task force approach contemplated in the original bill.

S.1493 would have placed federal impact assistance authority in the Economic Development Administration of the U.S. Department of Commerce. However the crush of legislative business created uncertainty in the progress of the bill. In order to assure consideration in this session of Congress, Senator Gary Hart of Colorado, an original sponsor and a prime mover of the impact assistance legislation, offered an amendment to Section 601 of the proposed energy act currently awaiting final action in the Senate Energy Committee, chaired by Senator "Scoop" Jackson of Washington.

The amendment, if adopted by Congress would amend 601 to broaden the interpretation of energy impact in order to create and finance an impact assistance program similar in concept to that embodied in S.1493, but administered by the Farmers Home Administration of the U.S. Department of Agriculture.

FTVAD has reviewed the Hart proposal and will recommend that the Alaska Congressional delegation co-sponsor and support the Hart bill with some suggested minor amendments based on the following considerations:

FTVAD has offered formal testimony on the original inland energy impact assistance bill. The testimony was inserted into the hearing record on the bill on May 10, 1978 - one month after the Tok Forum - by Senator Gravel. Essentially our testimony supported a federal impact assistance program which provided "front end" impact planning funds directly to established local organizations at the earliest possible moment. FTVAD opposed the imposition of a predesigned federal impact assistance program on local people and opposed assigning federal authority and thus total control of the timing, pacing and amount of impact assistance funds and programs solely to the Office of the Governor.

Our position is unchanged. In order to assure a bill which fully reflects that position FTVAD will suggest amendments which authorize the governor allow federal impact assistance to flow directly from the federal government to competent local organizations in the "impacted" areas.

Though the policies and actions of the governor will be critical to the success of any federal impact assistance program, the State of Alaska does not have such policies established with which to guide the Governor's actions. Worse the state does not have any clear authority and responsibility established which would lead to the creation of such policies and to the development of programs, legislation and financing necessary to implement them in the Interior of Alaska in anticipation of the gasline.

At the staff level the State of Alaska has demonstrated little initiative in dealing with the complex human problems which result from the social, economic and political impact of massive energy development projects.

Even with a priority commitment at the highest level of state government such deficiencies cannot be overcome in less than a year ... a year in which regulatory processing of the gasline is being expedited by order of the President, and precious irreplaceable time for local and regional anticipatory planning is rapidly disappearing.

Given these facts, which become more urgent with each passing day, FTVAD believes an amendment to the Hart proposal which allows the governor - perhaps by executive order - to authorize federal impact assistance to flow directly to the areas affected is timely and necessary.



DRAFT RECOMMENDATIONS

1. HEALTH AND SOCIAL SERVICES

Establish a formal health services delivery program, in conjunction with the Tanana Chiefs Conference, to address medical emergencies; availability of disaster equipment and training; and initiate disaster preparedness training through the State Division of Emergency Medical Services.

Concurrently initiate discussions with Northwest Pipeline to address total package costs for joint use medical facilities.

Seek immediate funding to set up staff clinicians and social workers to deal with social and psychological problems. (Include those problems unique to the area, and those brought on by pipeline impact.)

2. LAND USE PLANNING AND AGRICULTURAL DEVELOPMENT

Land use planning should be accomplished by a locally based planning authority, and should incorporate a full inventory of available recreational and sport lands plus an evaluation of agricultural development plans for the entire region.

Concurrently this effort must incorporate local concerns for continuing subsistence land use, and provision for local control of non-resident hunters and sport fishermen.

3. EMPLOYMENT AND TRAINING PROGRAMS

Regional, local and private sector corporations should initiate discussions to assure some measure of resident hire during all phases of the pipeline construction effort. This may entail direct contact to statewide labor unions to discuss creation of a joint hiring hall in the Tok area; creation of uniform contracting, payment and dispatch procedures with the prime contractor; and generation of formal agreements with the Alaska Department of Labor and the University of Alaska to establish multiple level training and recertification centers for employees selected out of the Tok area. (See also recommendations of the final report of the Rural Impact Information Program.)

4. HOUSING DEVELOPMENT

The area will need to conduct a vacancy survey of existing housing, plus an areawide evaluation of anticipated new housing construction to include trailer parks, lodges and possible multiple-family dwellings.

5. TRANSPORTATION

In addition to the surface transportation needs addressed in the body of this report, all communities will need to examine their air transport needs to define existing and anticipated costs, regularity of service, and means of expanding existing services.

6. COMMUNITY FACILITIES

The Fairbanks Town and Village Association, through work conducted in its Rural Capital Improvements Program during 1978, found that communities in the Upper Tanana Region have expressed needs for a variety of basic public facilities. Many of these facilities were discussed at the Forum.

Because the project will begin as a massive construction project it is essential that, in the earliest stages of design, needed community facilities are recognized and understood by the pipeline builders. It will be essential that all major parties in the project, both public and private, be alert to opportunities to construct support facilities for the project which can be utilized by communities after construction.

A very significant missed opportunity on the trans-Alaska pipeline was the failure by Alyeska to design and construct its pump stations for the purpose of capture and utilization of waste heat. Waste heat from the pump stations is on the order of a million btu's a minute ... probably enough to heat 50 homes year round or a 20-30 acre greenhouse plus 20-30 acres of garden.

This kind of oversight in design should never be repeated.

7. STATE AND LOCAL GOVERNMENT

The communities in question will need to conduct an internal evaluation of expectation and desires for future governmental services. Existing state programs may prove inadequate to meet local needs, and in the absence of an accepted local or sub-regional governing structure the area may be at a con-

siderable disadvantage in dealing with state and federal agencies and the project sponsors. Such internal evaluation should be conducted by residents of the region with staff assistance and financing by appropriate agencies of state and federal government, and should investigate mechanisms for local administration of state and federal programs through quasi-public grant agencies and should be thoroughly explored as should service district concepts, shared responsibility structures (i.e., service districts, etc.).

Central to the question of future demands on governmental bodies should be straightforward public debates on the potential for organizing as a third class or home rule borough.

8. STATE OF ALASKA RESPONSIBILITY

The State of Alaska should open an impact office and finance an impact information and coordination office in or near Tok. The responsibilities of this office would be to:

- a. Advocate for the Upper Tanana Region in dealings with the state, federal pipeline officials, pipeline company management.
- b. Provide direct liaison from the Upper Tanana Region to the Office of the Governor, the federal pipeline coordinator, and Northwest Energy.
- c. Provide information to residents and seek resolution of issues and problems discussed at the Forum, outlined in these report recommendations and/or arising during the period of pipeline construction impact.
- d. Provide a central contact for residents of the region for all communications with state agencies regarding pipeline construction.

It is recommended further that this office operate under the direction of a local advisory committee made up of representatives from the communities in the Upper Tanana Region; that this advisory committee meet monthly, and that the meetings be provided for in a budget for the office.

A suggested first year budget for the committee and the office is \$150,000.

9. U.S. FEDERAL RESPONSIBILITY

The U.S. federal government should move quickly to pass legislation and provide financing for an impact assistance program geared toward the specific requirements of small communities which will be affected by pipeline construction.

10. THE RELATIONSHIP BETWEEN THE SMALL COMMUNITIES OF ALASKA AND THE UPPER TANANA REGION AND COMMUNITIES IN CANADA WHICH WILL BE AFFECTED BY THE GAS PIPELINE

The similarities in the problems of impact which will affect the residents of these small communities will far outweigh the differences which can be attributed to their national origins. In the experience of the Fairbanks Town and Village Association the Canadians have, in some important respects, progressed much further in the resolution of local impact problems than either Alaska or the U.S. federal government.

As a follow-up to the extensive participation in the Tok Forum by Canadians, both the state and the U.S. federal government should begin providing continuing opportunities and financial assistance for travel and discussions between residents of the small Canadian and small Alaskan communities which will be affected by the Alcan gas pipeline project.

RECOMMENDATIONS TO THE STATE FOR PREPARING FOR FUTURE "IMPACT" SITUATIONS IN RURAL AREAS

From the "Final Report of the Rural Impact Information Program", published June 1977 by the Fairbanks Town and Village Association For Development, Incorporated

Recommendation 1:

Data on conditions in rural communities should be gathered and published on a regular basis, not just during impact periods. Adequate planning for impact situations is not possible without an understanding of existing conditions. A meaningful analysis of impact is impossible without baseline data with which to make comparisons.

Recommendation 2:

State record-keeping should allow retrieval of information relating specifically to rural areas. Most state departments currently divide the state into regions containing at least one urban area, and regional reports make it impossible to differentiate between statistics for rural and urban areas.

Recommendation 3:

State departments should monitor the demands made upon their services as a result of impact and should evaluate the adequacy of their response to those demands. The monitoring effort should continue throughout the impact period and should not be limited to providing justification for increased budgets.

Recommendation 4:

Impact assistance in the form of grants or loans should be provided to communities early enough to allow for adequate planning and preparation. Funding should be continued throughout the impact period so that an evaluation process can be maintained and the accuracy of projected impacts can be confirmed or denied.

Recommendation 5:

Increase in population should not be the only criterion for determining a community's need for impact assistance. Some communities that do not experience population growth nonetheless experience indirect impacts such as loss of valuable manpower. Assistance to these communities might take the form of training of additional members of the community in vital skills so that the loss of one resident does not endanger the delivery of a community service.

Recommendation 6:

Planning for vocational training programs should be based upon a manpower skill survey of the resident population and an accurate assessment of manpower needs on the project. Training should begin early enough to allow completion of a course before actual work on the project begins, and the skills taught should be transferable to other jobs.

Recommendation 7:

A special effort should be made to provide rural communities with information on jobs and business opportunities resulting from the new development. Of particular importance are procedural manuals for joining unions and obtaining training and employment assistance.

Recommendation 8:

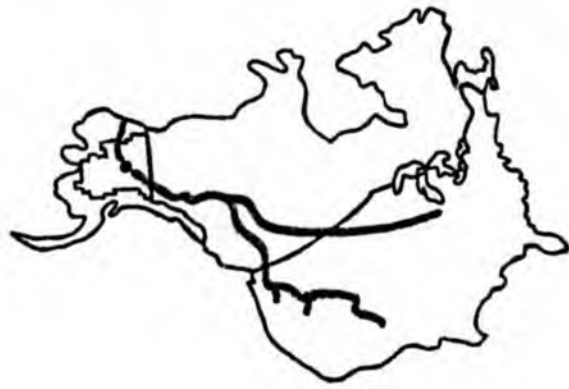
Employment and training assistance programs should be coordinated to avoid duplication of effort and to make maximum use of existing services and facilities.

Recommendation 9:

State regulated services such as transportation and communications should be monitored to ensure that services to rural areas are not curtailed because of new commitments to large industrial development projects.







PARTICIPATION: RESPONSE
AND EVALUATION

PARTICIPATION

DELTA JUNCTION

John Cheever
George Harris
Val Harris

Liz Leng
David Underhill
Jay Underhill

DOT LA.

Carl Charles
Darlene Charles
Ted Charles

Andrew Isaac
Maggie Isaac
Ron Liewer
Abraham Luke

EAGLE

Bessie Biederman
Archie Juneby
Jim Juneby

Florida Malcolm
Fred Stevens
Louise Waller

GAKONA

Nan Dooley
Jim Frey
Mary Frey

Debbie Olson
Al Reyerse
Donald L. Whiting

HEALY LAKE

Fred Kirsteatter
Dave Williams

NORTHWAY

Nettie David
Lorraine Felix

Rosemarie Maher
Della May Northway

Quana Northway
Ralph Rudzik

Avis Sam
Gary Thomas

TANACROSS

Bob Brean
Robin Brean
Jerry Isaac

Oscar Isaac
Amy Lohr
Bob Lohr

Mike Matthews
Bee Paul
Gnither Paul

Betty Thomas

TETLIN

Roy David
Bella Demit
Fred Demit

Smitty Jean
Lee Joe
Bentley Mark

Kathy Mark

TOK

Bus Afton
Bill Arpino
Nancy Arpino
Phil Bailey
Merritt Bartlett
Linda Beauvais
John Bridgers
Terry Brigner
Lee Broker
Angeline Brown
Rebecca Brown
Michael Buck
Frank DULlock
Nellie Bullock
Delores Burnham
John W. Burnham
George Cole
Dave Cramer
Cathy Crepin
Sam Crocker
Neil Curtis
Carol Donnelly
Tom Donnelly
Su Emry
Sue Entsminger
Dottie Eshbaugh
Doug Euers
Rita Euers
George Farren
Pat Farren

Patti Farren
Joe Gilliam
Bob Glidden
Frede Glidden
Vic Grillo
Nancy Higgins
Caroline Hoffman
Wayne Hoffman
Cathy Ipalook
Beth Jacobs
George Jacobs
Cal Jaeger
Diane James
Buddy Johnson
Harold Johnson
Myra Jones
Terry & Mike Kirdendall
Diane Kalwunder
Alice Lathrop
Ken Lathrop
Wes Lathrop
J. Leon Lawrence
Duke Marshall
John Martiniuk
Chuck Marunde
David Marunde
Dorothy Marunde
Glen Marunde
Glenie Marunde
Mac Matilla

David Maxwell
Fay Maxwell
John Mikesell
Paul Milanowski
Cathy Moline
Frank Moline
Sharon Moore
Bill Moreland
Herb Morgan
Kathy Morgan
Louis Morgan
Daisy Northway
Harley G. Olberg
Mike Olmsted
Monica Padgett
Robert Padgett
Tom Padgett
Elmer Parkison
Carl Peterson
Wendy Peterson
George Pine
Freddy Pride
Gary Ray
Sheryl Ray
Jo Roach
Deborah Roberts
Mary Roberts
Mike Roscovius
Kin Sanford
Laura Sanford

Mildred Sanford
Ralph Sanford
Jean Simmons
Jim Skaggs
Judy Skaggs
Luv Smith
Paul Smith
Mark E. Springer
Bob Steward
Gracia Stiefel
Roberta Stout
John Summar
Martha Lynn Summar
Jerry Taylor
Patsy Taylor
John Terwilliger
Mellie Terwilliger
Art Warbelow
Roger Whitaker
Barbara Wihlborg
Niki Wilson
Rene Wilson
Linda Wood
Nancy Wood
Ruth Woods
Dale Young
Lou Young
Sharon Young
Betty Zabielski
John Zabielski

This is a list of some of the government and industry officials who attended the forum. Entries under committee headings, unless noted, are residents of Tok. A few of the guests follow:

U.S. Federal Representatives:

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Washington, D.C. 20426

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Larry Means
U.S. Dept. of Interior
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Jeri Burke
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Bettye Fahrenkamp*
Office of Sen. Gravel
Fairbanks, Alaska 99707

Lana Shea
Fish and Wildlife Service
U.S. Dept. of Interior

*Now Senator Betty Fahrenkamp
Alaska Legislature; Representing
District 20 Fairbanks

State of Alaska Representatives

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Patrick L. Hunt
Div. of Personnel & Labor
Dept. of Administration
Juneau, Alaska 99811

Bob Thomas
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2301 Peger Road
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Dale Rusnell
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Diane LeResche,
Marcia Freer
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Pouch AD
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"Red" Swanson
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Sue Lowell
Office of Senator Sackett
Juneau, Alaska 99811

Ray Morgan
Cooperative Extension Service
University of Alaska
Fairbanks, Alaska 99701

Ernst Mueller,
Douglas Lowery
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Conservation
Pouch O
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Chris Guinn,
Bill Copeland,
John Dunker
Division of Lands
Fairbanks, Alaska 99701

Joe Ferguson,
James Wiedeman
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and Economic Development
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Carl Gonder
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Dept. of Community and
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H.J. Sydnam
Dept. of Public Safety
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U.S. Industry Representatives

Communications

Ben Agee, President*
RCA Alascom
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Anchorage, Alaska 99501

Ralph Wilson, President
Alaska Power & Telephone
Port Townsend, Washington

Paul F. Reitmeier*
Marketing and Sales
RCA Alascom
36th and Seward Highway
Anchorage, Alaska 99501

Lee Wareham, RCA Alascom*
200 Gaffney Road
Fairbanks, Alaska 99701

*With the purchase May 31, 1979 from RCA of the Alascom long distance system the new corporation, Alascom, is now owned by Pacific Power and Light of Oregon. All addresses are the same.

Northwest Energy

Walfred Hensala
Environmental Affairs
Northwest Alaskan
Pipeline Co.
Salt Lake City, Utah

Kathleen Kelly*
Northwest Alaskan
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305 K. Street
Anchorage, Alaska 99501

J.D. Bachman*
Vice President/General
Counsel
Northwest Alaskan Pipeline Co.
Salt Lake City, Utah

Tom diZerega
Vice President/Law and
Corporate Secretary
Northwest Alaskan
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Salt Lake City, Utah

Jo Vallely
Director, Public Relations
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Morris Thompson**
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* With the relocation of Northwest corporate offices to Fairbanks, the firm's new address is:

10th Avenue & Noble Streets
P.O. Box 60089
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** Resigned. Currently President of the Alaska Federation of Natives. Their address is:

670 West Fireweed Lane
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Executive Vice Pres.;
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Arlene Laboucane
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Detente Alaska, Inc.
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Victor Mitander
Government of the Yukon
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Mark Baumgartner
Fairbanks Environmental Center
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Willie Joe
Yukon Native Brotherhood
Whitehorse, Yukon

David Porter
Yukon Futures Planning
22 Nisutlin Drive
Whitehorse, Yukon

Al Kapy
Trans-North Turbo Air, Ltd.
Whitehorse, Yukon

Dave Williams, Tim Wallis
Doyon, Ltd.
209 First Avenue
Fairbanks, Alaska 99701

Unions

Willie Lewis
Laborers International
Local 942
912 Third Avenue
Fairbanks, Alaska 99701

H. L. Brown
Teamsters Local
Teamster Building
Old Richardson Highway
Fairbanks, Alaska 99701

The Press

Fred Pratt
Fairbanks Daily News-Miner
Fairbanks, Alaska 99701

Moses Wassilie
KUAC, University of Alaska
Fairbanks, Alaska 99701

John Hilliard
KTVF-TV
Fairbanks, Alaska 99701

Dan Oldfield
Canadian Broadcasting Co.
Whitehorse, Yukon

Ray Unger
Yukon Indian News
Whitehorse, Yukon

Chuck Malley
Tundra Times, All-Alaska Weekly
Fairbanks, Alaska 99701



Following is a summary of 58 questionnaires returned after the Upper Tanana Regional Forum.

EVALUATION

What discussion groups did you attend?

No tally was taken of this portion of the survey.

THE DISCUSSION GROUPS

1. Did you have a chance to talk and express your opinion?

<u>YES</u> 56	<u>NO</u> 2	<u>NO</u> <u>RESPONSE</u>	<u>YES/</u> <u>NO</u>
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2. Did you learn anything new in the discussion group?

<u>YES</u> 53	<u>NO</u> 3	<u>NO</u> <u>RESPONSE</u> 2	<u>YES/</u> <u>NO</u>
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3. Was your discussion group leader fair to all points of view?

<u>YES</u> 52	<u>NO</u> 2	<u>NO</u> <u>RESPONSE</u> 3	<u>YES/</u> <u>NO</u> 1
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4. Do you agree with the final report of your discussion group?

<u>YES</u> 34	<u>NO</u> 5	<u>NO</u> <u>RESPONSE</u> 18	<u>YES/</u> <u>NO</u> 1
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5. Were the State, Federal, Canadian, and Northwest Alaskan Pipeline officials helpful? Did they have answers for questions raised by people in the discussion groups?

<u>YES</u> 41	<u>NO</u> 5	<u>NO</u> <u>RESPONSE</u> 6	<u>YES/</u> <u>NO</u> 6
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THE GENERAL ASSEMBLY

1. Did you meet and talk to new people at the forum?

<u>YES</u> 53	<u>NO</u>	<u>NO</u> <u>RESPONSE</u> 5	<u>YES/</u> <u>NO</u>
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2. What was good about the forum?

Exchange of views - future contacts established

A good start - what's the followup?

Everyone very helpful.

A beautiful opportunity to meet and talk with various people on areas of concern to them.

Meet new people and learn more experience and meet lots of people there.

All of it.

Good about the forum:

1. Good physical organization.
2. Excellent situations for meeting wide range of people in many fields of expertise, including locals.
3. Tok community residents put a good deal of energy and thought into questions on impact prior to meetings.

I thought the forum provided for an excellent exchange of information between the local people and state/federal/Northwest Alaska Pipeline Company representatives.

The opportunity to discuss problems with the people who will be involved with and responsible for the impact.

The fact that it was done and something positive started.

It seemed to me the ordinary townspeople both appreciated the opportunity to express their opinions and views to their government leaders and the pipeline officials. I also sensed they took pride in themselves that they could bring off a public discussion of this kind. Also the involvement of the Native people was heartening.

Chance to exchange ideas!

Diversity of topics and people. Good training for people to do another forum.

It got Tok and highway people talking and thinking seriously about what is going to happen to them. Healthy situation when a community has a planning period.

Good exchange.

Discussion information interchange. Excellent facility for forum (school). Atmosphere for discussion excellent. Everybody was in the right spirits (psychological not liquid). Resulting information interchange excellent.

Everything of vital interest was pretty well covered.

Presented true needs of community that might not otherwise ever be presented. Brought issues before Northwest that were vital for them to know - especially that pipeline was placed in a poor position.

Personally, it allowed me to meet new people and learn more about how Alaskans are reacting to the gas pipeline. Generally, it was a positive forum for communicating ideas and examining the future. Much, however, depends on the final report and what is done with it.

New communications with local and statewide people (getting to know people!).

It was a great opportunity to swap ideas concerning the pipeline, and to meet new people.

Very good. Very informative and enlightening. Interesting, giving a person an understanding of what's involved.

The effort by a community to plan for future.

Should have heightened awareness of potential impact.

1. The packets and the information they contained:

- a. They were thorough and helpful - good to have info on the meeting, on Tok, on the area - maps etc. Good to explain the issues and questions relating to the issues and the factual data. This was obviously lots of work - a job well done.
- b. Room reservations - care and feeding of attendees was well done. Thank you.

2. Having the Governor and so many commissioners so that people could be heard directly - also there were a great many sensitive, thoughtful, knowledgeable state agency people present - who really did want to listen to Upper Tanana residents! Creating an atmosphere to draw these people was what made the forum a success.

3. Leaving plenty of "free" time to attendees to talk amongst themselves and got a feeling for Tok.

This forum was organized in such a way that individuals could express their thoughts and needs; however, within the group sessions there was also another opinion, often, that permitted greater understanding of the situation. The leaders of the small groups possibly could have had a brief training session in structure of such a session; however, the two groups that I attended either had all variables present in the room or tended to bring in the necessary individuals.

Liked the fact both government and NW gas pipeline representatives were present.

I feel the forum raised many important issues, but the actual accomplishment of the committee session was very vague, or nothing actually was talked about on Sunday.

Chance for people to meet and discuss many issues - not just pipeline.

Gave some crucial answers.

Meeting people who had information we wanted - or knew people who had.

Local participation.

I meet with people and talking about concerns, lots of things.

Got the people thinking.

The concept of formalizing a forum of this nature is in itself highly commendable, and hopefully will set a precedent of public input and private/interagency interface that will be maintained throughout this gasoline endeavor. It certainly deepened my insights into certain local concerns by adding local perspectives I had not previously considered.

Met a lot of people and had opportunity to sit and discuss things informally. It was a good opportunity for many state agencies and interested citizens to come together and talk to each other.

Well organized, thorough, good representation from Canada, good representation by agencies, important to have had politicians present and held accountable. Presence of Mim Dixon was good, but useful only if experience is used to get impact projections as fast as possible from Northwest's earliest possible labor projections.

I feel that a lot of good came out of the forum. It gave all interested people a chance to ask questions to the various guests that will be involved in the gasoline. The forum was a good chance for many people (local) to make contact with people of state, federal, N.W., etc.

The local people did let the guests know what their concerns were. And how they thought they would be affected, service-wise as well as community-wise.

3. What was wrong with the forum?

No real solutions to expressed concerns were found.

Not enough meat.

I sense too much expectancy on local part to have gasoline solve some local economic problems.

Need more active in town. UTRCA, State Trooper, Public Safety and Fire Protection and good leadership.

Speaker system of low quality.

Wrong with the forum:

1. Poor deployment of resource people. Especially pipeline officials.
2. Objectives of workshops and forum not clear to participants.
3. Not clear what happens next.
4. Much of the forum was oriented too much to Tok and very little devoted to the regional towns and villages needs.

The lack of final answers to some problems and questions. Hopefully more information will become available to us as a result of this forum.

Acoustics in auditorium were quite poor. It was impossible to understand many of the speakers.

Nothing.

I thought the committee chairpersons could have been more dynamic and forceful in their presentations especially in the summaries.

Unevenness of authority levels among agency representatives. Two-day format might have been unnecessary if organization and preparedness had been a little tighter. Land and Agriculture committee had no feedback opportunity to assure representativeness of final report. This committee was most congenially and democratically run, but was (perhaps unavoidably) vulnerable to insertion of non-central matters. It is hard to see why "Land" and "Agriculture" were considered as of parallel importance, as the group's title suggests, especially in the absence of an agrarian social segment, and in the possible absence of an appropriate resource base.

Perhaps more local people could have participated considering the numbers and quality of guests and forum participants (state, federal, Canadian, etc.)

Not enough hard facts from NWAP available at this early date.

Lack of clear objectives for each committee.

Poor deployment of resource people.

Second day was not necessary under original agenda, as it turned out.

Bad acoustics except for last day.

Forum groups tended to be too large. Perhaps could have been more of an emphasis on making specific recommendations. Specific commitments to local concerns should have been sought from the pipeline company, i.e., re-routing of pipeline, compensation for trappers.

Generally, it was too loose.

Nothing.

Saturday session a bit long. Discussion groups and other events somewhat loosely organized. Acoustics in the gym poor - almost impossible to hear summarizations.

No direction to questions asked. Although categorized it sounded too general.

1. Though it was no one's fault and I have no ideas on how to improve it - there were not enough local residents speaking out - the public servants came to listen but not enough was said to them. Perhaps it got said in other ways than in the forum.
2. Some of the sessions could have been slightly more structured - but this is hard to do - there were lots of legal/technical questions that agency people did not answer thoroughly.
3. Some of the rooms did not lend themselves to discussions - the chemistry room was a terrible place to discuss anything.

Very little wrong - probably best meeting of this type I've attended; could have had more assembly structure.

Not enough local (esp. Native) vocal input.

Bad mike, P.A. system in main room difficult to hear.

Nothing wrong with it.

Needed more participation from areas outside of Tok.

Not enough input from local people.

Acoustics' accommodations were very bad. Much of the general assembly presentations were inaudible, strongly contributing to the paucity of general participation. There are some public misconceptions concerning feasible objectives of this forum at this point. There was some bitching about lack of concrete answers available to public comment by the relevant agencies. Concrete decisions are not available at this time, and attempts to provide them would be premature. Decisions have not been made or finalized and the goal of this forum was to allow opportunity for front-end public participation in the decision making, not to dictate what the decision/policies are.

The group workshops lacked direction and were not led to any goal or objective. Also the people who should have been here to answer questions did not attend. I think the workshop should have been structured better.

Discussion groups needed more direction and guidance as to level of detail to be discussed so recommendations for action could be made stronger. Need follow-up. Need more Native voice. Need better P.A. system. Need more emphasis on actual impacts (from out of region).

4. What issues were not discussed that should have been, in your opinion?

Where do we go from here? - was not addressed in any detail.

Potential ice fog problems from trucks, etc.

Tok need good leadership council; pride and cooperate together, that's my opinion.

What is to be done next (followup).

In the Rural and Native Concerns group it appeared to me there was an excessive amount of time spent on fish and game regulations and subsistence hunting. But on second thought this also indicated what is upper-most and important in the mind of the Native.

There was little opportunity to discuss what kind of land use planning was wanted by local people, and several people appeared to want planning in order to facilitate pre-conceived land-use developments, suggesting that the community as a whole either does not really want land-use planning, or wants it for the wrong reasons. Further discussion would help allow people to press for the planning approach which suits them, and allow them to discern between self-serving and people-serving approaches.

I think we heard them all.

I cannot identify any additional issue subjects.

What should be done in Tok to get a coherent viewpoint.

Environmental impact - fish and wildlife.

We should have had some input on what we could have done to answer some of these questions.

More about what could have been learned from Alyeska mistakes - maybe I just didn't get to enough workshops.

Telephone - RCA

More discussion on local government - pros and cons.

Not enough concern directed to long-term, post-construction impact.

Immediate tasks ahead for local people and groups. What form should information be submitted in to be most effective? Need an action mechanism for proposing specific government action and industry commitment.

OTHER COMMENTS:

Our group felt we had just scratched the surface and were pleased to be talking about things we never had a chance to.

I DON'T want an impact committee as suggested by Bob Lohr.

I believe there was by far more good than wrong with the forum. In fact the only wrongs I can think of were trifle and caused from or because this is the first time something of this sort has been done, at least in our area.

Many straight answers were asked for and answers received from those involved. Suggestions were given and received. The community was well represented. Too often a "very select few" are contacted or aware of issues. And "too" often these self selected have acted or not acted, usually in their own interest or strong opinion. Much work and effort was put forth by all. As a local I'll bet those people went away with bent and bruised ears. And from the looks of local bar business probably hang-overs.

Extremely well organized and represented. Many factors - outline of questions for committees was very good and well followed. Pertinent subjects were covered. Northwest officials very cooperative - Tok people very hospitable. Meetings on Sunday unnecessary - could have been accomplished in one day.

The forum raised many points to be covered and questions to be answered by Northwest.

Most areas were covered.

The only negative part of the forum was the impossibility to attend all committee meetings.

Problems:

1. Some workshops too large.
2. Topics too fragmented.
3. Too much focus on pipeline. Too little on more general planning that would have looked at p.l. as one of several things that will go on around here during next decade.
4. Native concerns, which seem very large and important, not given enough attention - e.g., lumped in with "Rural."
5. Perhaps not enough background on what happened to communities as a result of Alyeska.

But a good and useful forum and well worth attending.

I enjoyed attending and I've the forum was very informative in many ways. I would like to see a task force organized to carry on and keep ahead or informed on all our concerns.

The forum was a delightful rewarding experience. The people and organizations responsible deserve a lot of credit.

It was a revelation to see people of opposing factions sit down together and express opinions and concerns. Maybe there's hope for us yet.

Basically very good thing for the community, I think.

The situation of Native Alaskan participation will have to be dealt with in a more equitable manner in the future. With a due respect for Tok and its citizens, the area has more to it than the one community.

The rural peoples not only must be allowed, but must be positively encouraged, to speak up in defense of their own interests. It is no longer sufficient for the Indian people to sit silent, only to go away with the same frustrations.

Everything was fine.

Not enough local emphasis on the real situation involving controls, legal entities where state monies be distributed. Or in other words, although many good ideas and concepts were discussed, many people still believe that they can exert meaningful power and authority without troubling themselves in becoming an organized municipality or another form of government such as a borough. I think that the people here be enlightened or educated to the fact of its obligations should they become legal recipients of monies on a continuing basis from the state and federal governments. Realizing that the majority of people in the area do not desire organized government in the usual forms it should have been clearly brought out in all of the committees that in many categories, this may be an absolute necessity.

I believe relying on distribution of monies and general powers through organized Native associations is not enough.

If there is to a pipeline impact, then the area will almost practically be required to be organized to deal with it.

I heard Governor Hammond speak but he didn't say anything about Native concerns or didn't say anything about Native people in our region.

I think that more turnout from the Tok area should have been in order.

Where the pipeline is going to lay outside of Tok.

I think that the Northwest Alaska Pipeline Co. officials were not ready to answer a lot of the questions that were asked of them. I strongly feel that Tok needs a pipeline impact office.

I understand from talking to other people that some of the committees were not well organized and left many people unsatisfied.

I did learn a lot, met a lot of nice people and was thankful for the experience.

I would like to see some kind of follow-up and completion of ideas, suggestions and opinions, I don't feel an impact office in Tok is a good idea at this time. I think people need to think about it and later decide the best route to pursue.

The following is an analysis of data gathered from 71 questionnaires returned in response to a survey sponsored by the Tok Business and Professional Womens' Club.

UPPER TANANA REGIONAL WOMEN'S QUESTIONNAIRE

Tok, Tanacross, Dot Lake, Healy Lake, Mentasta, Northway, Tetlin, Chicken, Boundary, Eagle, and Highways

1. Your age is:

<u>AGE</u>	<u>RESPONSE</u>
15-25	12
26-35	20
36-45	19
46-55	14
55---	6

2. Number of years you have lived in Alaska:

1.5 to 70 years

3. Number of children in your family:

<u># OF CHILDREN</u>	<u>RESPONSE</u>
0	18
1	10
2	12
3	13
4	8
5	4
6	2
7	1
8	2
11	1

4. Number of children in school:

<u># IN SCHOOL</u>	<u>RESPONSE</u>
0	28
1	17
2	6
3	8
4	4
5	2

5. Do you feel a day care center is needed in your community?

<u>YES</u>	<u>NO</u>
48	22

6. Would you be willing to donate some time to the center?

<u>YES</u>	<u>NO</u>
25	39

7. Do you have any job training experience?

<u>YES</u>	<u>NO</u>
57	14

8. What skills can you offer:

Child Care	6	Waitress	6
Office	7	Cook	7
Nursing	5	Secretary	4
Teacher	3	Sewing	3
Clerk/Typist	-	Food Service	2
Pre-school	2	Social Work	2
Crafts	2	Music	1
Cleaning	1	Cashier	1
Baker	1	Manage Athletics	1
Native Crafts	1	Clerk	1
Fine Arts	1	Lab Technician	1
Library	1	Dental Assistant	1
Checker	1	Health Aide	1
Maid	1	Bookkeeper	1
Restaurant	1	Storekeeper	1
Lodge Work	1	Many	2
Health Education	1	None	2
Newspaper Editor/ Reporter	1		

9. If trained, which of the following occupations would you choose:

Sewing	15	Engine Repair	1
Teaching	14	Mechanics	2
Counseling	15	Office	
Child Care	12	Machines	9
Legal Services	5	Accounting	10
Cottage Work	7	Carpentry	1
Nurse	9	Athletics	1
Cook	7	Secretary	17
Waitress	4	Lumberjack	1

Others

Commercial Art
Ceramics
Art
Music Teacher

10. Would you like to see a job training program in your community:

<u>YES</u>	<u>NO</u>
63	8

11. Would you work in a craftshop or workshop?

<u>YES</u>	<u>NO</u>
46	21

12. Would you consider working out of you home in Cottage Industries?

<u>YES</u>	<u>NO</u>
35	29

13. How many hours a week would you prefer to work?

40 hours	20
30 hours	6
20 hours	5
4-80 hours	16

14. Income:

\$ - \$ 5,000	10
5,001 - 10,000	6
10,001 - 15,000	6
15,001 - 20,000	5
20,001 - 25,000	4
25,001 - 30,000	4
30,001 - 35,000	0
35,001 & above	4

15. Do you need more legal services?

<u>YES</u>	<u>NO</u>
35	29

16. Would you like to see more financial services?

<u>YES</u>	<u>NO</u>
41	25

17. Would you like to see more health services?

<u>YES</u>	<u>NO</u>
58	14

18. Should there be an SBA (Small Business Administration) office in your area?

<u>YES</u>	<u>NO</u>
44	23

19. You would like to see which of the following fulltime professionals in your area:

Doctor	50	Optometrist	20
Midwife	10	Pediatrician	30
Counselor	30	None of the	
Dentist	39	Above	5
		<u>Others:</u>	
Lawyer	3	Psychologist	3
Insurance	1	Veterinarian	3
Beautician	1	Hospital	1
Legal Service	1		

20. How many months in a year do you work?

0 months	5
1 to 3 months	7
4 to 6 months	3
7 to 9 months	5
10 to 12 months	36

21. Do you belong to any labor unions?

<u>YES</u>	<u>NO</u>
2	67

22. Would you like to see expanded road and air services?

<u>YES</u>	<u>NO</u>
51	36

23. You would like your community's economic and social growth in the next ten years to be:

Rapid	4
Average	36
Slow	20
Zero	10

24. Do you work and live in the same community?

<u>YES</u>	<u>NO</u>
60	8

25. What community is nearest your home?

Tok	39
Dot Lake	6
Tanacross	5
Eagle	4
Boundary	2
Chistochina	1
Mentasta	1

26. What is the highest grade you completed?

High School:		College:	
6th	3	13	6
8th	4	14	5
9th	2	15	3
10th	1	16	5
11th	2	16+	4
12th	34	Vocational Education	2

27. Would you like to see some womens' athletic programs?

<u>YES</u>	<u>NO</u>
54	14

28. What would you like to do in your spare time?

Sew	10	Read	5
Crafts	4	Sleep	3
Paint	3	Club Work	2
Ski	2	Art	3
Outdoors	2	Cook	2
Swim	2	Trap	2
Rest	2	Run Horseback Field Trips	1
Drama	1	Weave	1
Spin	1	Curl	1
Bowl	1	My own thing	1
Collect Artifacts	1	Beadwork	1
Hunt	1	Visit	1
Show Dogs	1	Picnic	1
Garden	1	Play with	
Embroider	1	children	1
Fly	1	Dance	1
Draw	1	4-H Club	
Knit	1	Work	1
Travel	1	Music	1
Everything	1	What spare	
		time?	1

29. With gasoline impact and the great influx of people into your area, would you like to see more law enforcement?

<u>YES</u>	<u>NO</u>
52	15

30. Does the idea of a local union office appeal to you?

<u>YES</u>	<u>NO</u>
35	31

31. Does your community need more insurance services?

<u>YES</u>	<u>NO</u>
45	21

32. Do you see a need for any of the following legal services:

Child and Spouse Abuse	20
Child support and alimony	14
Counseling	24
Consumer Protection (Agency)	29

33. Would you like a womens' credit union office?

<u>YES</u>	<u>NO</u>
32	34

34. Do you want more involvement in the arts (music, painting, tresteries, etc.)?

<u>YES</u>	<u>NO</u>
54	16

35. Do you think that more women should serve in public office?

<u>YES</u>	<u>NO</u>
47	18

36. If there is a question in your mind that we have not addressed in this questionnaire, please write it down and answer it to your heart's desire.

In rural Alaska there are many housewives who could use a few dollars extra - spare some time in doing piecework, hand work - either at home or a few hours a day in a little warehouse, shop, manufactory, etc. Done on a region-wide basis supplies could be purchased in quantity and finished product sold by a regional marketing office. This plan would help households financially and greatly brighten the lives of women at home, especially during long winter months.

I would like to see some way to organize service agencies and manpower. Perhaps a local government is the best way to do this.

Question 34 answers No. 28 for me thank you for your consideration for having asked the community.

We need a CPA (Consumer Protection Agency) because we are tired of the big Tok rip-off in all goods and services. If not number one, they are a close second as being the highest in cost of food throughout the whole state (Dec. issue Alaska Magazine).

I don't look forward to more growth in the area. Population has already tripled since I moved here three years ago. What I would like to see - and I realize it is at cross purposes with no growth - is to have land made available so that people could live without worrying about hassles with bureaucracy - not this 40-160 acre deal, but something better than mining claims for those of us who don't wish to mine.

Will the Town and Village Assoc. sponsor or continue cooperation with local people throughout impact. Will same local leadership continue giving direction or guidance? Its been great! Congratulations and thanks!

BPW should advocate better local roads, we are not getting it from Juneau. We need better housing for the lowly taxpayer, who at present is certainly the minority.

If people desire all these extras, they should live in Fairbanks or Anchorage where they are already offered

Natives from the villages should get jobs on the pipeline also women.

Loose dog control. Protective signs for children and dogs crossing highway. Setting aside an area for a park for the town. Roadside stands allowed somewhere in Tok in summer to sell own handmade articles or produce.

A planning committee to guide the beautifying of our city. Preserving of trees, allowing for parks, fountains and memorial statuary. Also we should beautify our cemetery, family plots, etc. Business district and residential areas. Loose do, control. Allowing proper signs for businesses. Pervseve our individuality.

I think the local clubs function very well and with an addition of people will flourish. I don't think Tok needs any more give-away programs which benefit only a few. If people wish to be more involved, the opportunity is already here. Government sponsored programs in Tok have gone overboard and we don't need any more.

People who fill this out should mean what they say. Especially if there is job open.

I feel Tok needs many services, but I don't believe these services should be funded by the government. We need to get away from government subsidizing.

As we grow I'm sure other matters will appear to our needs.

Would like to see credit union office for everyone (not just women).

We don't need more regulations and government. If women would worry more about their children and families we won't need more social services.

The projects which you have in mind: are they to the benefit of all, to employ unqualified people, personal friends and so on.

I would only like to see law enforcement expanded if needed during pipeline impact. Our law enforcement agency is more than adequate. I am not in favor of any more government agencies in Tok. I am not in favor of a local government of any kind!!!

This questionnaire does not appear to be designed for persons from larger cities and therefore makes it difficult to answer your questions since we already have many of these services.





Foster

FROM WASHINGTON

NO. 1244

for week ended
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FERC Conditionally Approves Construction of Portion of Western Leg of ANGTS

On 1/11/80 the FERC approved construction of the first 160 miles of the Western Leg segment of the Alaska Natural Gas Transportation System between Kingsgate, British Columbia and Stanfield, Oregon, just below the Washington-Oregon border. At the same time, the Commission decided that it would issue separate decisions with respect to the remainder of the Western Leg and the Eastern Leg segments now consolidated in the Northwest Alaskan Pipeline Co. proceeding (CP78-123 et al.). The Commission decided to approve early construction of the initial 160 miles of the Western Leg in order to, among other things, facilitate financing for the remainder of the project and spread the demand for labor and capital over a longer period of time, thus lessening their costs.

Background

On 6/7/78 the FERC conditionally authorized Northwest Alaskan to import a total of 1.04 Bcf of Canadian gas from Pan-Alberta Gas Ltd. over an initial contract term of six years, subject to extension for up to six additional years (subsequently extended to a primary term of 12 years) at the border price established under Canadian law. The import total includes 800,000 Mcf/d to be received at Monchy, Saskatchewan (for the Eastern Leg) and 240,000 Mcf/d to be received at Kingsgate (for the Western Leg). Subsequently, two sets of applications relating to the Western and Eastern Leg segments were filed in regard to the "prebuilding" of the project. Specifically, Northwest Alaskan (CP79-59) applied to sell up to 240,000 Mcf/d of Alberta gas to Pacific Interstate Transmission Co. for ultimate delivery (less fuel and line loss) to markets in Southern California. Related applications were filed by Pacific Gas Transmission Co. (CP79-60), Northwest Pipeline Corp. (CP79-56), El Paso Natural Gas Co. (CP79-57) and Pacific Interstate (CP79-58) to accomplish delivery of this gas from the international boundary near Kingsgate to the Arizona-California border. Subsequently, applications were filed for the Eastern Leg from Monchy to Dwight, Illinois.

Thereafter, the Commission consolidated all of the applications and divided the proceeding into three phases. Phase I was designed to examine the relationship between the prebuild project and implementation of the ANGTS; Phase II to examine generally the merits of the prebuild project; and Phase III to evaluate proposals to import Canadian gas which may be competitive with the prebuild proposal. Phase II was subsequently divided again for separate consideration of the Western and Eastern Legs. The initial decision procedure was then waived for each of the phases.

Initial briefs were filed with respect to the Western Leg by various parties. The FERC Staff and the California Public Utilities Commission opposed prebuilding only a portion of the Western Leg to Stanfield, Oregon so as to transport primarily the Pan-Alberta volumes. Instead, they preferred constructing the entire Western Leg to Antioch, California as contemplated in the President's Decision approving the Alcan-Foothills ANGTS (which suggested that prebuilding of certain ANGTS facilities might be appropriate). The entire Western Leg project, as approved by the President, would involve construction of 341 miles of 36-inch pipeline looping in the PGT system from Kingsgate to Malin, Oregon and some 143 miles of 36-inch pipeline looping on the PG&E system between Malin and Antioch. South of Antioch up to 104 miles of 36-inch pipeline looping on the PG&E system will be required. However, the only ANGTS facilities involved in the sponsors' proposal, on the other hand, would be the initial 160 miles of 36-inch looping along the PGT system from Kingsgate to Stanfield, Oregon. After that, the sponsors' proposal deviates from the Western Leg route designated in the President's Decision. Specifically,

the system of Northwest Pipeline Corp. would be augmented by installation of 350 miles of pipeline looping from Stanfield to Burley, Idaho, and certain segments of El Paso's San Juan Triangle facilities would be augmented.

The Staff emphasized that only 16% of the Western Leg of the ANGTS would be pre-build under the sponsors' proposal. The majority of the facilities proposed and costs therefor would involve substantial augmentation of non-ANGTS facilities of Northwest and El Paso and would not be used to transport the anticipated volumes of Alaskan gas. The remaining 84% of the Western Leg ANGTS would be required to be built to transport Alaskan gas. Staff and the California PUC urged that the sponsors' proposal be rejected and that construction be exclusively along the Western Leg ANGTS designated in the President's Decision. This, Staff argued, would be more economical; provide greater additional capacity at a lesser cost to the California consumer; and would provide additional benefits of more gas from other Canadian sources, while minimizing environmental effects. The California PUC stressed that the project's proposal "could saddle the ratepayers with a depreciation life as short as six years with no possibility of revision after Alaskan gas begins to flow." Moreover, California PUC added, it involves unnecessary facilities and could actually cause displacement from California of less expensive gas. 1/

The Staff and California PUC also argued that any export permit issued by the NEB for less than the volume proposed to be imported would bring the project "into question." The Staff stressed that the Western Leg proposal is "critically dependent" on the NEB granting a license to export 240,000 Mcf/d for a firm 12 years. "Any reduction in either the daily volumes or the term of the license vitally affects the economics of the sponsors' proposals and would require reopening the record should the sponsors continue to seek Commission approval of their proposed facilities." The California PUC urged the Commission to determine that the Canadian export permits would be sufficient before any prebuilding can commence.

Subsequently, the NEB authorized new exports of gas to the U.S. totalling 3.75 Tcf through 12/31/87. The NEB approved the full amount of exports applied for by 10 companies in the first five years (1980-1984), but approved lesser amounts through 1987. As a result, the NEB approved exports of 1.8 Bcf by Pan-Alberta instead of the total of 4.9 Bcf as sought. (See REPORT NOS. 1209, pp19-21; 1233, pp3-4; 1238, pp1-2; 1239, pp8-11; 1242, p10.)

FERC Order.

With respect to routing of the Western Leg, the FERC could not choose between the sponsors' proposal and the alternative favored by the Staff and California PUC. First, the Commission noted, the sponsors stated in their brief that their proposal is unworkable without changes in the recent export decision of the NEB and suggested approval subject to a change in the NEB decision. The Commission concluded that such a condition, as well as outright rejection, would be inappropriate, and it will hold most of the applications for the sponsors' proposal in abeyance pending further advice on any modification of the NEB decision or the sponsors' proposal.

1/ In Report No. 1239, p10, it was stated that the CPUC urged that the Western Leg be rejected. Inadvertently omitted, however, was the CPUC's further suggestion that the prebuild application be refiled to include construction along the Western Leg ANGTS as designated in the President's Decision.

However, the Commission observed that partial looping of the Kingsgate to Stanfield segment is common to both alternative routing proposals, and is also the "pacing item" for beginning deliveries in the fall of 1980. "The Commission believes that acceptance of some risks are in order given the urgent national priority of the ANGTS in both the U.S. and Canada. Thus, the Commission believes that it must find an acceptable basis for certificating a portion of the ANGTS project now." Accordingly, the Commission concluded that the public convenience and necessity requires approving the partial looping proposed for the Kingsgate to Stanfield segment of the PGT system based on the NEB's export license, and the expectation that Alaskan volumes will be flowing through those facilities before expiration of that license. With about 10% of the country's proven domestic gas reserves located at Prudhoe Bay, and national expediting legislation in place in both countries, "the Commission believes that certification of these facilities now is not an unreasonable exposure for PGT's customers. On the contrary, this country will obtain a timely addition to its natural gas supplies from the new export license just granted."

The Commission also approved provision of the transportation service through existing facilities of Northwest and El Paso to Pacific Interstate Transmission Co. for the 1980-1981 heating season under FERC-approved tariffs in existence at that time. "The Commission is confident that any additional transportation and facilities proposals growing out of any further consideration by the NEB will have been developed and submitted for timely consideration and approval prior to the end of that period."

While approving portion of the Western Leg facilities, the FERC found the record in Phase I concerning the benefits of prebuilding "disappointingly vague." For example, the Commission explained, there is no conclusive evidence indicating that prebuilding will expedite completion of the entire ANGTS or assure financing for the remainder of the system. "With or without prebuilding, the evidence indicates that Alaskan gas will not begin to flow through the ANGTS until at least 1984." The Commission noted that addition of Albertan gas into the system will reduce the unit cost of service for the Alaskan gas, prebuilding will get the ANGTS project started sooner, and it will spread the demand for labor and capital over a longer period of time, thus lessening the likelihood of increased labor and material costs and construction delay costs due to increased demand. Also, the Commission added, prebuilding will facilitate, although not assure, financing of the remainder of the project. Based on these factors, the Commission concluded that prebuilding will produce "some tangible benefits to the remainder of the ANGTS."

The Commission rejected a recommendation by the Staff that satisfactory commitments for debt and equity financing for the entire ANGTS be in place before commencement of construction of the prebuild facilities so as to protect consumers of Canadian gas from paying excessive charges if prebuilding is not economically justified on a stand-alone basis (Alberta volumes only) and the ANGTS is not completed. In support, the Commission said, the Staff conducted an economic study which concluded that the Western Leg would not be viable on a stand-alone basis and that if the entire ANGTS were not completed, SoCal's customers would pay excessive charges for Alberta gas. While taking issue with the Staff's study, the sponsors conceded that their proposal would not be viable on a stand-alone basis if the NEB decision is not modified.

The Commission concluded that while noncompletion is always a possibility, it is convinced that the entire ANGTS will be completed. First, the Commission explained, about 10% of the country's known domestic reserves are located at Prudhoe Bay, expediting legislation is in place in both countries, and a signed agreement

committing them to implementation exists. Moreover, the price for the gas is reasonable when compared to alternative fuels and there are sufficient economic benefits so as to justify approval. Hence, there is no need for the specific condition recommended by the Staff since adoption would delay the flow of Canadian gas from Alberta for one to two years and could also eliminate or reduce the benefits associated with prebuilding. This conclusion, the Commission added, is premised upon the price for the prebuild volumes being determined in a manner consistent with other Canadian gas exports.

On the question of gas supply, the Commission noted the sponsors' contention that Pan-Alberta has sufficient gas reserves under contract to provide Northwest Alaskan with 1.04 Bcf/d over a 12-year period. The Staff, on the other hand, contended that because Pan-Alberta might be the source of supply for another project designed to extend Canada's gas system eastward from Montreal to the Maritime Provinces, Pan-Alberta cannot demonstrate sufficient supplies under contract for both projects. Accordingly, Staff urged that any certificate be conditioned upon a showing by Pan-Alberta that there are sufficient deliverable volumes to satisfy both projects for the life of the prebuild facilities. The Commission concluded that Pan-Alberta's gas supply is adequate to support its contracts with Northwest Alaskan, and approval of the prebuild project will stimulate exploration and make more reserves available to Pan-Alberta. However, the Commission observed, it is reasonable to assume that Canada will not authorize any export for Pan-Alberta unless all domestic requirements can be met. Hence, there is no need for the condition suggested by the Staff.

Turning to rate and tariff matters, the Commission first rejected PGT's proposal that the costs associated with the additional partial looping and compression on its system be recovered from Pacific Interstate over the term of the latter's export authorization for Canadian gas, and that Pacific Interstate bear an allocated portion of the costs of the facilities which are considered to be used to serve all PGT's customers. PGT also proposed to carry this tariff treatment forward to Alaskan gas once it begins to flow. In all authorizations to date, the Commission said, costs and volumes associated with additional services proposed by PGT to PG&E were rolled in with other costs and volumes for the purposes of determining the rates for service to PG&E and Northwest Pipeline under PGT's cost of service tariff. All facilities, whether compression or pipeline looping, were deemed to be totally integrated and used for all services rendered by PGT.

In determining the proper tariff treatment here, the Commission decided to focus on the characteristics of the service to be performed by PGT. First, the Commission said, the transportation by PGT for Pacific Interstate is similar to services it now performs for Northwest Pipeline and PG&E. None of the characteristics of the proposed service for Pacific Interstate are different from those of the existing services. All services are firm and none are seasonal or peaking in nature. The transportation of all gas through PGT's system is and will continue to be a conventional transportation arrangement. Furthermore, the Commission continued, the additional facilities will be operationally integrated with PGT's existing facilities. Both the existing, partially looped facilities and the additional looping and compression facilities will be used for all services. Furthermore, the Commission found it significant that the additional facilities are a prebuild portion of facilities necessary to transport Alaskan gas whose beneficiaries will also be Northwest and PG&E. Hence, it would make little sense to separate the costs and volumes associated with the transportation of gas from Alaska and for Pacific Interstate on the one hand from costs and volumes associated with transportation of gas for PG&E and Northwest on the other hand, as PGT proposes.

The FERC conceded that facilities required for this project and completion of the Western Leg are more costly than existing facilities which have been substantially depreciated, and the effect of rolled-in tariff treatment will be to increase the rates for PGT's services to Northwest and PG&E. However, in the past, both have received cost benefits under the cost of service tariff from the depreciated existing facilities and will continue to receive them in the future along with all PGT's customers. Moreover, PG&E and Northwest have derived significant benefits from the cheap expansibility of the existing pipeline in the form of reduced rates with each increment of additional throughput added to its system. Nevertheless, limits of this cheap expansibility of the existing line have now been reached. "The Commission sees no reason why the existing customers should now have what amounts to a priority for rate and tariff purposes on the existing pipeline, a priority which results from PGT's departure from the rolled-in treatment accorded additional compression and pipeline looping facilities in the past, coupled with complete insulation from the costs associated with the additional facilities." While a goal of regulation is to match costs incurred with benefits received to specific consumers, the Commission added, there are times when this is "not worth the administrative costs and inconvenience, and this is one of those occasions. The rolled-in tariff and financing approach will make PG&E customers pay more now in order to pay less later, but it has the advantage of making the PGT looping proposed as part of this proceeding supportable based on currently authorized exports of Canadian gas. We hope that the project sponsors are successful in obtaining additional volumes of gas exports; however, more than two years after approval of the ANGTS by the President and the Congress, the time has come to take the first step toward implementation of this massive project."

However, the Commission added, if after further NEB action on the gas exports, the three principally affected parties -- PGT, Pacific Interstate and the California PUC -- are able to agree on tariff and financing proposals superior to the rolled-in approach, the Commission will be prepared to reconsider its decision on that issue.

On other matters, the Commission (1) concluded that no changes to the depreciation provisions of PGT's cost of service tariff need be made -- because the Canadian export authorizations issued to PGT's supplier, all of which expire before 1992, continue to be a valid measure of the useful life of the PGT system; (2) declined to modify PGT's existing rate of return -- because that is not properly a subject of concern in this certificate proceeding; and (3) reaffirmed an earlier conclusion that a resale restriction in the Northwest Alaskan/Pan-Alberta contracts authorizing the latter to terminal sales if the former resells exported Alberta gas in the U.S. to any purchaser not a partner in ANGTS does not violate a provision of the ANGTA which requires, among other things, that nonowner shippers be afforded equal access to the pipeline -- because such provision seeks to protect shippers of gas -- in particular, nonowner suppliers -- and does not protect the purchasers of gas who are the only ones subject to the contract restriction.

D.C. Circuit Holds that Regulatory Agency Member Not Disqualified from Rulemaking Proceeding Without Showing of "Unalterably Closed Mind" on Critical Issues

On 12/27/79 the U.S. Court of Appeals for the D.C. Circuit reversed a decision of U.S. District Court of the District of Columbia which upheld a petition by the Association of National Advertisers, Inc. et al. prohibiting Michael Pertschuk, Chairman of the Federal Trade Commission, from participating in a pending rulemaking concerning children's advertising on TV on the ground he had prejudged issues involved therein. The D.C. Circuit concluded that "an agency member may be disqualified from such a proceeding only when there is a clear and convincing showing that he has an unalterably closed mind on matters critical to the disposition of the rulemaking." In so holding, the Court agreed with arguments of the FTC and seven other federal regulatory agencies, including the FERC, that the lower court's decision would have "a potentially chilling effect on otherwise legitimate public discussion of important regulatory policy questions and hamper the policymaking process." ^{1/}

In the lower court case, the National Advertisers charged that Mr. Pertschuk made public statements concerning regulation of children's advertising that demonstrated prejudgment of specific factual issues sufficient to preclude his ability to serve as an impartial arbiter. The Chairman had made several public comments about children's susceptibility to advertising and about how the FTC might reach the conclusion that such advertising is "deceptive." Later, the FTC began a rulemaking proceeding to consider certain restrictions on advertising directed to children. The lower court first noted that the FTC rulemaking is governed by the Magnuson-Moss Act, which imposed additional procedures -- including trial-type hearings in some cases -- on conventional notice and comment rulemaking. For that reason, the lower court applied the strict disqualification test applicable to adjudication -- as specified in the D.C. Circuit's decision in Cinderella Career and Finishing Schools, Inc. v. FTC, 425 F.2d 583 -- i.e., whether "a disinterested observer may conclude that [the agency member] has in some measure adjudged the facts as well as the law of a particular case in advance of hearing it."

In seeking rehearing before the D.C. Circuit, the FTC argued that the standard for disqualification of an administrative decisionmaker in an adjudication -- relied on by the lower court -- differs from the standard in rulemakings, and that, under any disqualification standard, Chairman Pertschuk could not be found to have prejudged issues in contravention of due process. In an amici curiae brief filed by the FERC and six other regulatory agencies, the "critical distinctions" between rulemaking and adjudication were also stressed. Rulemaking, they declared, is "different in concept, and different in procedures." By definition, they explained, rulemaking is the process for developing an agency statement of a general or particular applicability and future effect designed to implement, interpret or prescribe law or policy. This process is typically concerned with broad policy considerations rather than review of individual conduct. And this conceptual distinction, which is clearest in cases of informal rulemaking where there are no hearing requirements, remains valid no matter what the particular procedural format. "The mere presence of hearings, for example, ought not to convert what is really a rulemaking into adjudication."

^{1/} On 1/7/80 Chairman Pertschuk withdrew from the case because his involvement may strengthen supporters of legislation to bar the FTC from issuing a rule to restrict TV commercials aimed at children.

The regulatory agencies called attention to the D.C. Circuit's holding in another case that rulemaking "is not to be shackled, in the absence of clear and specific Congressional requirement, by importation of formalities developed for the adjudicatory process and basically unsuited for policy rulemaking." They urged that the adjudicatory concept of disqualification employed by the lower court is one of those "formalities developed for the adjudicatory process and basically unsuited for policy rulemaking. . . . The Cinderella concept -- that a member must be disqualified if he or she 'has in some measure' prejudged the facts or law -- simply does not blend with the rulemaking process."

The regulatory agencies further observed that a rulemaking proceeding begins with a notice of proposed rulemaking, a document which "inevitably shows that the agency 'has in some measure' prejudged issues." As a practical matter, they continued, such notice normally reflects a substantial step along the way from an idea to a final rule. In important rulemakings, moreover, the idea will have been closely examined by Staff experts and agency members themselves. Drafts of the notice and accompanying statements may well have been rewritten after direct consultation with and upon instructions from agency members. The more important the rulemaking, the closer the personal involvement of the agency member is likely to be. "Devoting that kind of attention to major policymaking questions is, after all, just what the agency member is suppose to be doing."

However, the regulatory agencies continued, if the Cinderella test is to go beyond adjudication into rulemaking, "there is an obvious anomaly." On the one hand, the agency is not suppose to give the appearance that it has in some measure adjudged the facts as well as the law of the proceeding. But at the same time, it is also suppose to issue a notice which inherently reflects at least a preliminary judgment -- often formed after considerable thought -- about the very subject matter of the controversy. "We think it apparent that a literal application of the Cinderella test is wholly unsuited for the rulemaking process."

Furthermore, the regulatory agencies stressed, the extension of the Cinderella approach to rulemaking would have a "chilling effect on the public expression of views about important subjects. From a policy standpoint, we believe that the law ought to recognize and accommodate this important informational aspect of an agency's work. The rules should encourage -- not deter -- agency members from speaking out openly on the very kinds of broad policy questions likely to lie at heart of the most significant rulemakings."

The regulatory agencies also emphasized the affirmative duty that they have to report and inform the public on issues involving the industries they regulate. The FERC, for example, is authorized to publish and make available to state commissions and municipalities information about matters investigated under the Natural Gas Act and the Federal Power Act. "These responsibilities reflect the public's legitimate interest in knowing how agency members think about important policy questions. We think it vital that these considerations not be subordinated to a notion drawn from adjudication (where this informational role is far less important) that there is something wrong with an agency member telling the public his or her preliminary views about a pending issue. Just as legislators may approach their tasks with preliminary views -- the typical Congressional hearing opens with a statement reflecting substantial prejudgment about the problem -- so may agency members."

While arguing for the inapplicability of strict adjudicatory standard of the Cinderella case to rulemaking, the agencies recognized that the need for some kind of a standard to deal with extraordinary situations. Accordingly, they suggested a standard which would allow disqualification in any kind of rulemaking only when there has been "a clear and convincing showing that the agency member has an unalterably closed mind on matters critical to the disposition of the proceeding. This formulation would ensure that any agency member who cannot meaningfully fulfill his or her responsibility under the [Administrative Procedure Act] would be disqualified."

The D.C. Circuit first held that the FTC proceeding was rulemaking notwithstanding the additional procedures required by the Magnuson-Moss Act. The Court stressed that it never intended the Cinderella rule to apply to a rulemaking procedure such as the one under review here. "Legislative facts adduced in rulemaking partake of agency expertise, prediction and risk assessment." In the Cinderella case, the Court noted, it was able to "cleave fact from law" in deciding whether particular factual issues had been prejudged. "In the rulemaking context, however, the factual component of the policy decision is not easily assessed in terms of an empirically verifiable condition. Rulemaking involves the kind of issues 'where a month of experience will be worth a year of hearings' Application of Cinderella's strict law-fact dichotomy would necessarily limit the ability of administrators to discuss policy questions. The legitimate function of a policymaker, unlike an adjudicator, demands interchange and discussion about important issues. We must not impose judicial rules upon administrators when they perform functions very different from those of judges."

Furthermore, the D.C. Circuit continued, the Cinderella view of a neutral and detached adjudicator "is simply an inapposite role model for an administrator who must translate broad statutory commands into concrete social policies. If an agency official is to be effective, he must engage in debate and discussion about the policy matters before him. As this Court has recognized before, 'informal contacts between agencies and the public are the 'bread and butter' of the process of administration.'" The Court concluded that a Commissioner should be disqualified "only when there has been a clear and convincing showing that the agency member has an unalterably closed mind on matters critical to the disposition of the proceeding." In this case, the Court said, Chairman Pertschuk's remarks, considered as a whole, represent discussion "and perhaps advocacy, of the legal theory that might support exercise of the Commission's jurisdiction over children's advertising. The mere discussion of policy or advocacy on a legal question, however, is not sufficient to disqualify an administrator."

The Court's decision was signed by Circuit Judge Tamm. Circuit Judge Leventhal (prior to his recent death) concurred in a separate statement. Circuit Judge MacKinnon dissented on the ground, among others, that the "unalterably closed mind" standard is improper here because of the adjudicatory overtones of the Magnuson-Moss Act. Moreover, he stated that the "closed mind" test is so overly strict as to make it practically impossible to prove.

Fourth Circuit Refers Certain Issues in Case Involving Gas Shortage on Transco's System to FERC

On 1/8/80 the U.S. Court of Appeals for the Fourth Circuit granted a motion by Transcontinental Gas Pipe Line Corp. that it hold in abeyance review of an award of \$23.8 million in damages by a North Carolina federal district court as a result of curtailments to certain customers, and refer to the FERC certain underlying issues involving, among others, the reasons for shortages on Transco's system. The Court, however, refused to vacate the lower court's judgment. CF Industries, Inc. and Farmers Chemical Association, Inc. v. Transcontinental Gas Pipe Line Corp., Nos. 79-1359 and 79-1366.

This case arose out of civil damage suit filed against Transco by CF Industries and Farmers in connection with the curtailment on Transco's system beginning in 1971. On 2/16/79 a jury in the North Carolina court awarded \$23.8 million in damages to CF and to Farmers based on Transco's liability in contract, negligence and promissory estoppel. Earlier, the lower court twice refused Transco's appeal that certain issues raised in the case falling within the expertise of the FERC and which have an impact upon its regulatory responsibility be referred to the Commission.

On 2/28/79 Transco filed a petition (TC79-8) requesting the Commission to (1) institute a proceeding into circumstances which resulted in the gas shortage on its pipeline system, the effects of its gas tariff curtailment provisions and service agreements and Commission orders, rules and regulations, and the effect on the Commission's ability to carry out its responsibilities by the damage award; and (2) issue a declaratory order holding, among other things, that the shortage on Transco's system was caused by factors beyond its control, Transco reacted thereto in good faith and in a prudent manner, its curtailment tariff provisions and service agreements are in compliance with Commission rules and regulations (and therefore represent a defense to any claims for damages), and that any such award would constitute an undue preference and discrimination under the Natural Gas Act and adversely affect the Commission's ability to fairly allocate supplies available to Transco.

On 8/17/79, the Commission (1) agreed that a proceeding should be instituted on the effects of Transco's gas curtailment provisions and service agreements and Commission orders, rules and regulations, including whether any undue preference or advantage is involved with the award of damages; and (2) granted that portion of the request for a declaratory order holding that Transco's curtailment tariff provisions and service agreements are in compliance with Commission rules and regulations. The Commission denied Transco's request for a proceeding and declaratory order in all other respects.

In subsequent applications for rehearing by Transco, INGAA and others, it was argued that the Commission must inquire into the facts and circumstances of the shortage on Transco's system in order to determine whether it properly carried out its gas acquisition, transportation, inventory or sales activities. This same issue, it was noted, is also involved in other cases where pipelines are being sued.

Transco also filed a petition in the Fourth Circuit for review of the damage award, in which it requested the Court to refer the underlying issues involving the shortage on its system to the Commission. In an amicus curiae brief, the FERC asserted that the Court should vacate the lower court's judgment and remand with instructions to refer issues subject to the Commission's primary jurisdiction --

i.e., concerning the interpretation and effect of the certificate, tariffs and service agreements, and orders, rules and regulations as they affect the litigation. However, the Court should not direct the referral of the question of ultimate liability in the damage action, including whether compliance with Transco's tariff provisions is a complete defense to any claims for damages for breach of contract -- because "that responsibility belongs to the courts." (See REPORT NOS. 1224, ppl6-18; 1231, pp22-25.)

In its decision, the Fourth Circuit agreed with a conclusion reached by the Fifth Circuit in a 1976 case involving a similar controversy that deference to the primary jurisdiction of the Commission is particularly appropriate in the complex area of natural gas curtailment. The Fourth Circuit quoted the Fifth Circuit's decision that "referral is particularly appropriate. While the Federal Power Commission's jurisdiction is somewhat limited, the Natural Gas Act, as interpreted by the courts, has provided the Commission with the statutory basis for pervasive regulation of the curtailment question The Commission is presently involved in resolving issues which have a direct impact on similar litigation involving curtailment plans. The advisability of invoking primary jurisdiction is greatest when the issue is already before the agency The Commission, moreover, is reviewing in some detail the facts and circumstances that resulted in the present shortage in order to determine what is a fair, equitable, permanent curtailment plan. Indeed, this court has already stated in a similar action that referral to the FPC is preferred."

The Fourth Circuit also noted that in one of its own prior cases it "recognized the unique expertise of the Commission" In that case, the Court said, it found the Commission to be "a far more appropriate body than a district court" to make a determination requiring a balancing of conflicting needs and interests of all consumers of the gas supplier involved.

However, the Fourth Circuit agreed with the FERC's position that the Commission does not have authority to adjudicate ultimate liability in the pending damage action since this responsibility rests solely on the Court, and that any inquiry by the Commission into the effect of a damage award against Transco on the Commission's ability to carry out its responsibilities, including allocation of Transco's gas supplies, would be premature and speculative at this point.

The Fourth Circuit concluded that the Commission has the authority under the Natural Gas Act to investigate the causes of a gas shortage on any particular pipeline system, and such an investigation and determination "would be appropriate and helpful in the pending litigation." But the Court decided not to approve the suggestion of the Commission and Transco that the lower court's judgment be vacated and the case remanded with instructions to refer the specified issues to the Commission for the exercise of its primary jurisdiction, with the lower court proceeding stayed pending final Commission action. Instead, the Fourth Circuit decided that the appeals pending with respect to the lower district court action should be held in abeyance and that certain facts and issues be referred to the Commission for its determination and decision, after which the Court would consider the appeals and determine the proper procedure.

Specifically, the Court directed the Commission to consider (1) the facts and circumstances resulting in the shortage on Transco's system that allegedly resulted in the loss claim by CF Industries and Farmers; (2) the meaning and interpretation of Transco's gas tariff curtailment provisions and service agreements and of Commission orders, rules and regulations relating to curtailments in the event of shortage, and the effect of such provisions on Transco's

responsibility to its customers; (3) whether undue preference or advantage is created by the damage award and what administrative action, if any, should be taken; (4) the meaning and effect of Transco's contracts and related certificates authorizing service to distributor customers; and (5) any other findings the Commission deems appropriate and relevant.

* * * * *

On 1/17/80 FERC Administrative Law Judge Steven M. Charno granted a motion by Transco that the procedural schedule in the investigation (TC79-8) ordered by the Commission's 8/17/79 order on the effects of Transco's gas curtailments and service agreements and Commission orders, rules and regulations be suspended pending Commission action in response to the Fourth Circuit's decision described above. In support, Transco noted that the issues referred to the Commission by the Court are broader than, and in conflict with, issues which the Commission set for hearing in its 8/17/79 order. Hence, the procedural schedule should be suspended to prevent potentially wasteful effort by the parties until the Commission has acted with respect to the Court's referral order.

Supreme Court Asked to Review Conflicting Decisions of D.C. Circuit and Fifth Circuit Ruling on Commission's Power to Impose a 30-Day Timing Requirement on Advance Payments Covered by Order No. 465

During the past month, petitions for writ of certiorari were filed in the U.S. Supreme Court by Tennessee Gas Pipeline Co. and the FERC to review conflicting decisions by the D.C. Circuit and the Fifth Circuit in regard to the Commission's power to impose a 30-day timing requirement on producer expenditure on advance payments received under Order No. 465 in determining whether such advances are "reasonable and appropriate" for rate base treatment. The FERC requested review of the Fifth Circuit's decision only if the Supreme Court grants Tennessee's petition for certiorari to review the D.C. Circuit's decision. Tennessee Gas Pipeline Co. v. FERC (No. 79-962) and FERC v. United Gas Pipe Line Co. (No. 79-1055).

First, on 12/19/79, Tennessee Gas Pipeline Co. asked the Supreme Court to review a D.C. Circuit decision issued 6/20/79 (Tennessee Gas Pipeline Co. v. FERC, No. 77-1496) which, among other things, remanded FPC Opinion Nos. 769 and 769-A denying inclusion of some \$100 million of front-end advance payments made by Tennessee (RP73-113) to producers under agreements executed in 1973. In that year, the Commission's advance payment program was governed by Order No. 465 which required merely that advances be "reasonable and appropriate" in order to qualify for rate base treatment. Subsequently, in Order No. 499 governing the advance payment program during the years 1974 and 1975, the Commission clarified that advances must be expended by producers within a "reasonable time" after inclusion thereof in the pipeline's rate base. In Opinion No. 769 (issued 7/9/76), the Commission ruled for the first time that advance payments not expended by producers within 30 days are "presumptively extravagant" and hence not "reasonable and appropriate" for inclusion in the advancing pipeline's rate base. While conceding that Order No. 465 did not contain any timing requirement, the Commission declared that the "reasonable and appropriate" standard was consistent with well-established principles of regulatory law that "extravagant or unnecessary costs cannot be passed along to customers through rates." Further, the Commission stated, "it has not been suggested by Tennessee that a producer in the conduct of its own business would borrow money and pay interest thereon far in excess of the time it is needed. Nor do we think Tennessee could make such a showing. We find, therefore, that front-end advance payments are presumptively extravagant." In Opinion No. 769-A (issued 5/11/77), the Commission denied that application of a timing standard to advances under Order No. 465 constituted retroactive ratemaking since the

"reasonable and appropriate" standard, which pervaded all of the advance payment rulemaking orders, "necessarily covered such unnecessary and extravagant costs as those resulting from front-end advances."

On appeal, the D.C. Circuit partly affirmed and partly remanded Opinion Nos. 769 and 769-A, as well as FPC orders in two other cases which similarly applied a 30-day standard in disallowing rate base inclusion of advance payments by Transcontinental Gas Pipe Line Corp. and Michigan Wisconsin Pipe Line Co. pursuant to both Order Nos. 465 and 499. The Court concluded that the Commission correctly rejected the pipelines' position that the front-end advances were dictated by "good faith business judgments" given the competitive conditions at the time and hence were "reasonable and appropriate" for purposes of inclusion in the rate base. The Court said the pipelines had the burden of demonstrating affirmative evidence in favor of "extended" front-end advances, especially in view of the traditional "used and useful" public utility concept on which the Commission has consistently relied. At the same time, the Court held that the Commission's 30-day rule focused too narrowly on a line-of-credit approach and, as a result, the Commission "failed to evaluate fully and fairly the reasonableness of the protective mechanisms adopted by particular pipelines to fulfill their obligation of vigilance in the consumers' interest." The Fifth Circuit accordingly remanded the cases for a more extensive and flexible inquiry into the reasonableness of attempts to protect ratepayers from excessive costs. On 10/31/79 the Court denied rehearing and suggestions for rehearing en banc. (See REPORT NO. 1214, pp18-21.)

The D.C. Circuit's decision was issued two days prior to a Fifth Circuit decision (United Gas Pipe Line Co. v. FERC, No. 78-1091) which overturned Opinion Nos. 815 and 815-A denying rate base inclusion of some \$24 million of advance payments by United Gas Pipe Line (RP74-20, RP74-83) under Order Nos. 465 and 499 because the advance payments had not been expended by the recipient producers within 30 days. The Fifth Circuit reversed the Commission's denial of rate base treatment for advance payments governed by Order No. 465. As applied to these payments, the Court said the 30-day standard "arbitrarily imposes a new dimension and a new restraint The law will not tolerate this sort of after-the-fact, in fact retroactive, imposition of standards." In regard to the advances covered by Order No. 499, the Fifth Circuit reversed and remanded the Commission's application of the 30-day rule as "unreasonably harsh." The "relatively vague" timing guideline imposed in Order No. 499, the Court said, did not constitute sufficient notice to pipelines that all advances should be made on a 30-day installment basis. On 8/8/79 the Court denied FERC's petition for rehearing. (See REPORT NO. 1217, pp16-17.)

In still another case, the Seventh Circuit on 1/5/79 reversed and remanded an FPC order of 6/3/77 which applied the 30-day rule in denying rate base treatment for front-end advance payments by Natural Gas Pipeline Co. of America (RP73-110). Natural's advances were all made pursuant to Order No. 499. The Seventh Circuit held that imposition of the 30-day standard represented a retroactive modification of Order No. 499, which merely required that advances must be expended within a "reasonable time" after their inclusion in a pipeline's rate base.

In seeking Supreme Court review of the D.C. Circuit's decision of 6/20/79, Tennessee contended that the Court's holding regarding Order No. 465 advances conflicted directly with the Fifth Circuit's decision in the United case described above. Further, the D.C. Circuit's rationale that imposition of an implicit timing requirement is not impermissible retroactive rulemaking conflicts with the Seventh Circuit's decision in the Natural Gas Pipeline case dealing with Order No. 499 advances. Proper resolution of this conflict is of "critical importance" to the

natural gas industry, Tennessee declared, since it involves the ultimate disposition of substantial Order No. 465 advance payments made by interstate pipelines generally. In this regard, Tennessee noted that nearly 99% of the \$. 5 billion total committed by interstate pipelines under the advance payments program represented front-end advances of the type involved in this case. Moreover, Tennessee added, even though the advance payment program has now been terminated prospectively as to new agreements, the problem is of continuing importance to the administration of jurisdictional rate increases filed under advance payment contracts which remain in effect.

The second petition for certiorari was filed on 1/5/80 by the Solicitor General, on behalf of the FERC, to review the Fifth Circuit's decision in the United case with respect to advances under Order No. 465. (The petition does not request review of the Fifth Circuit's remand of the Commission's disallowance of front-end advances under Order No. 499.) The FERC asked that its petition for certiorari be granted only if the Supreme Court grants review of the D.C. Circuit's decision in the Tennessee case. The Commission noted the direct conflict between the Fifth Circuit and D.C. Circuit decisions respecting the Commission's power to impose a timing requirement on Order No. 465 advances. However, while the FERC agrees with the D.C. Circuit's holding on this issue, it does not advocate Supreme Court review of the interpretation of Order No. 465, which "governs only contracts executed in 1973 under a terminated experimental program." Consequently, the FERC intends to oppose the petition for writ of certiorari in the Tennessee case (No. 79-962). However, if the Supreme Court grants Tennessee's petition for review in that case, it should also grant review in the United case "so that the interpretation of Order No. 465 will be uniform for pipelines and consumers throughout the country."

Tenneco, FERC, INGAA File Complaints and Requests for Injunctive Relief Enjoining Enforcement of Louisiana Statute on Intrastate Purchasers' Right of First Refusal

During the past several weeks, Tenneco, Inc., the FERC and the Interstate Natural Gas Association of America (INGAA) have filed complaints for declaratory judgment and injunctive relief with the U.S. District Court for the Middle District of Louisiana (Civil Action Nos. 80-17 et al.) in regard to a recently enacted Louisiana statute, effective 9/7/79, which provided Louisiana intrastate purchasers of natural gas with a right of first refusal for all natural gas not committed or dedicated to interstate commerce prior to 9/7/79 effective date of that statute. 1/

The Louisiana Act (No. 732) amended the state's Natural Resources and Energy Act of 1973 to require that "producer-sellers" of natural gas not committed or dedicated to interstate commerce prior to 9/7/79 obtain a state certificate of public convenience and necessity before allowing the introduction of such gas into any interstate pipeline system. The Act further requires producer-sellers to make a bona fide offer to sell such gas to intrastate natural gas transporters before committing the supply to interstate commerce. Noncompliance with the Act is not excused by contractual obligations, and criminal penalties are set forth for violations. Interim regulations implementing the Act were promulgated on 10/28/79 by the Louisiana State Conservation Commission.

1/ The District Court originally set a 1/18/79 date for a hearing on the preliminary injunction request, but this date was extended indefinitely by request of the State of Louisiana.

In its complaint and request for a preliminary injunction, Tenneco asserted, among other things, that the Act "has had a chilling effect on the willingness of sellers to contract for sale in interstate commerce." Tenneco cited eight contracts which it has entered into with producers since the enactment date of the legislation but for which no deliveries have commenced owing to the requirements of the Louisiana statute. Moreover, Tenneco stated that the requirements of the Act have hampered its efforts to negotiate further contracts and thereby limited its ability to fulfill the natural gas requirements of its customers.

As further support for its complaint and request for a preliminary injunction, Tenneco contended that the Act (1) unconstitutionally discriminates against interstate commerce by creating an undue preference for intrastate purchasers; (2) constitutes a prohibited burden on interstate commerce in violation of the Commerce Clause of the U.S. Constitution; (3) conflicts with federal statutes and is hence void under the Supremacy Clause of the U.S. Constitution; and (4) contradicts the responsibilities of the FERC in the exercise of its jurisdiction under the Natural Gas Act and the NGPA.

The FERC, in its complaint in intervention, also asserted that the Louisiana statute violates the Commerce and Supremacy Clauses of the U.S. Constitution and conflicts with the FERC's exclusive jurisdiction over interstate pipeline transactions. Additionally, FERC cited the deleterious effect the Act will have on future additional gas supplies for the interstate market. "At a minimum," FERC's complaint stated, "this provision will delay the attachment of new gas supplies . . . at the worst, it will reduce the new gas supplies available to the interstate pipelines to the extent that intrastate purchasers exercise their right to purchase such gas."

INGAA also cited the above arguments of Tennessee and FERC in support of its complaint and request for declaratory judgment and injunctive relief. Additionally, the complaint stated that the Louisiana Act, in depriving member companies of INGAA of their freedom to contract with whomever they choose, violates those companies' rights under the provisions of the 14th Amendment of the U.S. Constitution.

FERC Law Judge Finds Violations of Natural Gas Act by National Fuel Companies

On 1/11/80 FERC Law Judge George P. Lewnes issued an initial decision finding that National Fuel Gas Supply Corp. and National Gas Storage Corp. violated the Natural Gas Act and the U.S. Criminal Code in connection with certain construction activities related to development of storage fields in western New York. Judge Lewnes recommended that the violations be referred to the Department of Justice for criminal prosecution.

This proceeding was initiated by the FERC on 12/19/77 in response to a complaint by Fair Environmental Deals for United People (CP77-590) directed to activities of the National Fuel Companies (or their predecessors-in-interest) around Allegany County, New York from January 1975 through July 1977. These activities related, in part, to a long-term storage project whereby National Fuel Supply (CP77-492 et al.) proposes to abandon, and National Gas Storage proposes to acquire, three separate storage fields -- West Independence, East Independence and Beech Hill -- located in Allegany County. After further development, the three fields would be connected via 17.7 miles of new pipeline to National Fuel Supply's interstate transmission system in Potter County, Pennsylvania. The proposed project, estimated to cost nearly \$50 million over a three-year period, would enable long-term storage service by National Gas Storage to six nonaffiliated utility customers in aggregate amounts increasing to 22 Bcf by 1980. By order dated 2/1/77, the FPC scheduled hearings on the proposed project to consider various unresolved questions, including environmental impact, rate level and rate form, conditions (if any) to be attached to construction of the proposed facilities, financing, and the impact on existing customers of the National Fuel Companies of developing storage facilities to serve six offsystem distributors. The Commission subsequently consolidated applications by Transcontinental Gas Pipe Line Corp., Columbia Gas Transmission Co. and Tennessee Gas Pipeline Co. to transport storage injection and withdrawal volumes for the six distributor customers. In June 1979, the Commission approved construction of a portion of the facilities.

Specifically, FEDUP -- which described itself as a "nonprofit, unincorporated public benefit association" representing residents in the immediate vicinity of the challenged activities -- asserted that the National Fuel Companies had unlawfully constructed facilities in the Beech Hill, West Independence and East Independence areas for transportation and storage of interstate gas in violation of the Natural Gas Act; had provided false information to the Commission for the purpose of unlawfully evading jurisdiction over reworking of 13 wells at the West Independence Field (CP76-364); and had provided false information in various maps submitted to the Commission. (See REPORT NOS. 1127, pp29-31; 1136, pp30-31.)

In his initial decision, Judge Lewnes stated that the National Fuel Companies violated the Natural Gas Act by substantially installing compressor units at the West Independence Field two months before Commission approval; reworking 21 wells at the Beech Hill Field without authorization; and commencing installation of compressor facilities at the Beech Hill Field. He also found that the companies violated the U.S. Criminal Code by providing false information in a map of the West Independence storage pool.

Most of these violations, he said, involved the installation of facilities and reworking of wells for the storage facilities before the necessary Commission authorization had been given. He stated that the companies' self-imposed time schedule for completing the storage facilities was the principal motivating force for the violations. "The substantial evidence . . . forces the conclusion that these illegal actions were not merely apparent willful and knowing violations, but rather were deliberate and result-oriented."

In support of his conclusion, Judge Lewnes observed, among other things, that the Commission had set the storage proposal for hearing and, on a number of occasions, specifically denied requests by the companies for temporary authorization for portions of the construction. Nevertheless, the companies illegally commenced portions of the project without authorization.

With respect to the violations of the Natural Gas Act, Judge Lewnes noted the Commission's policy that if any illegal action appears to have been taken willfully and knowingly, it would refer the case to the Department of Justice. "The character of every act depends upon the circumstances in which it was done. Here, there is nothing in the factual circumstances as would militate against a referral."

As noted, the Law Judge found a violation of the U.S. Criminal Code by the National Fuel Companies by virtue of their providing false information to the Commission in a map of the West Independence storage pool. He said that the motive for this falsification was the companies' need for a storage permit from the New York State Department of Environmental Conservation prior to development of the storage facility. The New York agency requires that an applicant hold 75% of the storage rights under the land inside the pool boundary before a permit will be issued. The record shows, he said, that the company engaged in a "knowing and willful falsification" in drawing a false boundary of the storage pool on the map submitted to the Commission.

In urging that this violation also be referred to the Justice Department, Judge Lewnes noted that there is no discretionary authority vested in an agency to determine whether to transmit evidence of an apparent violation of a federal statute of general applicability (the U.S. Criminal Code). Hence, "it is obligatory on the part of the Commission to transmit the evidence adduced and the related findings and conclusions to the Attorney General"

Finally, the Law Judge stated that the violations (except with respect to the map) "were undertaken with the prior willful and knowing authorization of Mr. John A. Comet," former President of the National Fuel Companies. In this connection, Judge Lewnes stated that the inquiry here should not be limited to whether there has been a corporate violation. "Obviously, merely pursuing a corporate entity as opposed to individual corporate officers for a statutory violation is of little consequence. Monetary fines paid by a corporate body for illegal undertakings of its officers in the corporate name does not provide a deterring desideratum. The courts have recognized this and where appropriate, have permitted the prosecution of an officer or employee of a corporation for illegal acts done on behalf of a corporate employer."

FERC Approves Settlement Filed by Reversionary Mineral Interest Owners to Resolve Pricing Issues Raised by Southland Royalty-Type Sales

On 1/17/80 the FERC approved a settlement offer submitted by four reversionary mineral interest owners -- Dore Corp. (CI76-315 and CS76-639), Sullivan-Wells Co. (CI76-316 and CS76-460), Briercrest Oil Co. (CI76-396 and CS76-762) and Fort Worth National Bank et al. (CI76-587) -- to resolve a number of Southland Royalty-type cases currently pending before the Fifth Circuit on judicial review. ^{1/}

The above producers were lessors under various 50-year oil and gas leases which expired during the first half of 1976. At that time, mineral interest rights in nine wells reverted to the lessors. The reversionary interest owners were ordered by the FPC on 3/12/76 and 7/6/76 to continue -- pending the outcome of litigation in the Southland Royalty case involving the question of continued dedication of gas to interstate commerce following expiration of 50-year leases -- the jurisdictional sales made by large producer lessees to interstate pipeline purchasers prior to expiration of the leases in question. These sales were made by the previous lessees at rates of 18.0¢ or 23.5¢. The Commission included protective provisions specifying that continued deliveries by the reversionary mineral interest owners during the interim period until resolution of the Southland Royalty case would be without prejudice to their position regarding the dedication status of the gas involved. Subsequently, the FPC denied applications filed by three of the mineral interest owners for small producer certificates to sell the subject gas at 130% of the national new gas rate set in Opinion No. 699-H. The Commission held, among other things, that the reversionary owners were bound to the rates charged by their respective large producer predecessors.

A total of six petitions were filed by the several mineral interest owners in the Fifth Circuit (Dore Corp. and Sullivan-Wells Co. et al. v. FERC, Nos. 76-2428 et al.) for review of the above described orders requiring continued interstate deliveries and prescribing rates for these deliveries. The Court ordered these proceedings held in abeyance until the final outcome of the Southland Royalty litigation (which was decided by the Supreme Court on 5/31/78). More recently, proceedings before the Fifth Circuit have been further deferred pending settlement discussions between the mineral interest owners, certain other producers, purchasers of the gas involved, and the FERC Staff. (See REPORT NO. 1240, App. p12.)

The settlement offer -- filed 12/7/79 by the four reversionary mineral interest owners -- provides for (1) continuation of sales to the interstate buyers currently receiving the gas under interim protective orders; (2) collection in the future of the maximum lawful price applicable to small producer replacement contracts under Section 104 of the NGPA (or the maximum lawful price under Sections 102, 103, 107 and 108 for any gas qualifying for these prices); (3) retention of all sums collected in the past pursuant to interim protective orders up to the applicable small producer replacement contract rates for the time periods involved (67.6¢/Mcf from 7/27/76 until 1/1/77, 68.9¢/Mcf until 1/1/78, 70.2¢/Mcf until 12/1/78, 77.1¢/Mcf until 1/1/79, and thereafter as adjusted for inflation in accordance with regulations under the NGPA), subject to adjustment for Btu, taxes, and gathering allowance where applicable; and (4) withdrawal of petitions for review presently pending in the Fifth Circuit. (See REPORT NO. 1239, pp13-15.)

^{1/} Since the records in these proceedings have not been filed with the Court, the Commission retains jurisdiction to consider the settlement offer.

The Commission cited the Tenth Circuit's decision issued 4/23/79 in Getty Oil Co. v. FERC (No. 77-1993) as relevant to the situation here. In that decision, the Court reversed the Commission denial's of rate increases to new gas ceilings sought by Getty under the "rollover" contract policy on the ground that the underlying 1967 contract had not run its full primary term -- which, the Commission ruled, was a necessary condition to qualify sales under a new contract for "rollover" treatment -- but rather had terminated prematurely upon triggering of a pressure clause. The Tenth Circuit held that rejection of Getty's rate increases was based on a new interpretation of the Commission's contract replacement policy which should not have been applied retroactively to Getty whose contract expired prior to issuance of Opinion No. 770-A due to circumstances beyond the parties' control. (See REPORT NO. 1208, pp22-23.)

Specifically, the Commission declare^d "The normal expiration of the lease agreements in the instant case prior to the issuance of Opinion No. 770-A fits into the general category of cases covered by the Getty court decision. The expiration of the leases was beyond the control of either the seller or the buyer to the gas sales contract, and thus the seller upon executing a new contract was entitled to 'rollover' treatment."

Industrial Gas Users Protest Transco's Interruption of Transportation Under Order No. 533 Program

On 1/3/80 the FERC issued notice of separate complaints filed 12/20/79 by two groups of high priority industrial gas users -- Cerro Wire & Cable Co. et al. (CP80-153) and American Bakeries Co. et al. (CP80-184) -- with respect to Transcontinental Gas Pipe Line Corp.'s interruption of transportation of direct purchase gas under the Order No. 533 program. 1/

According to the complaints, Transco advised in early December that it would terminate Order No. 533 transportation service on 12/17/79 for a period of 30 to 90 days because of insufficient mainline capacity to render this and other higher priority services. As a result, the complaints charged, the industrial users here involved have been compelled to incur additional expense to replace their "self-help" direct purchase gas, while Transco is "forcing" additional gas on its customers that will be used in large part as low priority boiler fuel. Further, the

1/ Cerro Wire & Cable (CP79-309), together with six other industrial buyers, previously petitioned the FERC on 5/2/79 to issue an expedited declaratory order respecting their eligibility to a two-year extension of certain Order No. 533 transportation service provided by Transco (CP77-240). The petition stated that Transco had refused to seek authorization to extend this service both because the supply in question appeared to be available for purchase by the pipeline itself absent the Order No. 533 arrangements, and because the seven industrial buyers would not suffer any curtailment of natural gas deliveries from their distributor supplier until at least the end of the 1979 summer season. Cerro Wire & Cable et al. cited a sworn affidavit by producers of the subject supply indicating unwillingness to make sales to an interstate pipeline. Hence, since the gas will not be available to Transco, the industrial buyers contended they are eligible to receive a two-year extension of transportation service under the Order No. 533 direct purchase program. Subsequently, Cerro Wire & Cable et al. withdrew their petition for a declaratory order following Transco's agreement to request a two-year extension of transportation service (CP77-240). This extension was granted by order dated 10/31/79. (See REPORT NO. 1210, pp28-29.)

complaints continued, wells dedicated to the industrial buyers are in danger of being shut in, with resultant damage to the reservoirs, loss of production and, in the case of wells facing water encroachment, a permanent loss of reserves. Transco's actions were also said to constitute a severe, perhaps "crippling" blow to the entire Order No. 533 direct purchase program.

Cerro Wire & Cable et al. contended that Transco's interruption of transportation constitutes (or will soon constitute) an unauthorized abandonment of certificated service. American Bakeries et al. noted that Order No. 533 transportation certificates contemplate interruptions "of an absolutely necessary, short-term nature." Here, however, "Transco -- in a period of relatively warm weather -- is cutting off high priority load to empty storage and in effect force the use of natural gas for low priority boiler fuel." Such interruption may constitute an "unlawful abandonment." Both complaints cited a D.C. Circuit decision in 1976 (Reynolds Metals Co. v. FPC, 534 F.2d 179) holding that a 62% reduction in volumes transported to an industrial customer represented a partial abandonment requiring authorization under Section 7(b) of the Natural Gas Act.

Cerro Wire & Cable et al. and American Bakeries et al. requested the FERC to call an immediate conference for the purpose of requiring Transco to explain in detail the reasons for its interruption of transportation service, to determine whether this interruption comports with the public convenience and necessity, and to reinstate the presently interrupted service pending such determination.

On 1/10/80 Transco moved for summary dismissal of the complaints. Transco stressed that Order No. 533 transportation service is subject to interruption pursuant to contractual arrangements among Transco, end users and end users' distributor-suppliers. Consequently, Transco is not violating any contractual or certificate obligations by interrupting these interruptible services. Moreover, Transco noted, Order No. 533 transportation makes use of temporarily unused pipeline capacity built for -- and dedicated to -- serving Transco's commitments to long-term firm service customers. Transco is now required to interrupt these services because its mainline capacity is fully used to render other service obligations of a higher priority. ^{1/} Under these circumstances, it is "utterly absurd" to suggest that such interruption constitutes an "unlawful abandonment."

Transco also disputed that the D.C. Circuit's decision in Reynolds Metals supports the complainants' position. That decision, Transco stated, involved a permanent reduction in firm service. By contrast, the situation here involves a reduction in interruptible transportation service which will continue only as long as Transco's mainline capacity is fully utilized by other services.

^{1/} An attachment to Transco's filing indicated that the pipeline's mainline capacity is expected to remain fully utilized until mid-March to meet firm service requests of its resale, direct industrial and firm transportation customers, as well as requests for storage withdrawals under Rate Schedule WSS. In addition, Transco expects utilization of its mainline capacity on most days to render interruptible delivery obligations from the Washington Storage Field, or to eliminate an existing temporary imbalance between nominations and withdrawals of storage gas.

Even assuming that the above interruptions in Order No. 533 transportation service were found to violate contractual or certificate obligations, Transco said the requested emergency relief would still be unwarranted because the distributors serving the complainant end users have advised that adequate supplies are available for these customers. Hence, there is no threat that any of the industrial users' plants will be forced to shut down for lack of gas supply. Further, Transco noted, in early September it advised all end users, distributors and producers involved in Order No. 533 transactions that mainline capacity limitations were anticipated "on a significant number of days during the 1979-1980 winter season," and that interruption of Order No. 533 interruptible transportation services would be required. This early notification, on its face, "undercuts . . . any claim of dire emergency" except "that brought on by complainants' own failure to give proper attention to Transco's notice."

* * * * *

More recently, on 1/15/80, the Commission granted Transco's request (CP80-55) to amend 19 certificates for transportation of Order No. 533 direct purchase gas so as to eliminate end-use restrictions. This action was consistent with Order No. 52 (RM80-1), issued 10/5/79, which adopted an interim rule removing conditions on transportation of Order No. 533 gas prohibiting the buyer from using any interstate supplies for other than high priority feedstock or process requirements. The Commission concluded that this end-use limitation placed Order No. 533 customers at a disadvantage in light of the drop in curtailment levels and was contrary to the national need to promote displacement of fuel oil. Accordingly, the interim rule provided that industrial customers may receive natural gas for low priority uses without jeopardizing their right to purchase direct sale gas under Order No. 533. (See REPORT NOS. 1230, pp10-11; 1237, pp16-18.)

Transco requested amendment of the 19 transportation certificates only through the period ending 5/31/80. In support of this limitation, Transco stated that interstate pipelines now have parity of access to onshore supplies and that improvement in the interstate supply situation has substantially mitigated or eliminated the threat of curtailment to high priority industrial uses.

Two of the 19 certificates covered by Transco's application to amend involve transportation for certain of the industrial customers joining in the American Bakeries et al. complaint described above.

FERC Determines Equity Rate of Return of 12.5 Percent for Consolidated Gas Supply and Arkansas Louisiana

On 1/11/80 the FERC issued Opinion Nos. 70 and 71 deciding rate of return and certain other issues in rate proceedings of Consolidated Gas Supply Corp. (RP78-52 and RP79-22) and Arkansas Louisiana Gas Co. (RP77-54 et al.).

In Opinion No. 70, the Commission approved a common equity rate of return of 12.5% for Consolidated Supply in two separate cases covering the period 7/1/78 to the present. Based on the capital structure of Consolidated Supply's parent -- Consolidated Natural Gas Co. -- in the two cases (reflecting a common equity ratio of 53.8% in RP78-52 and 56.1% in RP79-22), this determination resulted in overall rates of return of 10.19% and 10.34%.

The FERC Opinion affirmed the results reached by Administrative Law Judge Stephen L. Grossman in an initial decision issued 7/3/79, although modified some of the details of that decision. (See REPORT NO. 1216, pp19-20.) Among other things, the Commission agreed with the Law Judge in rejecting the company's equity return recommendations in the range of 14.5% to 15.5% because of reliance on studies which examined only the cost of equity of Consolidated Natural and failed to adjust for the lower business risk of Consolidated Supply. Consolidated Natural (through subsidiaries other than Consolidated Supply), the Commission noted, is actively engaged in gas exploration and other production activities involving large capital expenditures and higher risk than traditional utility activities. Consolidated Supply engages in natural gas transmission and distribution, as well as some exploration and development. However, since Consolidated Supply recovers most of its exploration and development expenses on a cost of service basis through tariffs charged to customers for transmission and distribution services, it faces "significantly less risk" with respect to production activities than nonpipeline producers unable to automatically passthrough their production costs in this manner. Further, the Commission added, there is no basis for the contention that Consolidated Supply's customers have benefitted substantially from Consolidated Natural's production activities and hence should bear the risk of these activities through the subsidiary's allowed rate of return. Consolidated Natural is fully compensated for the risks of its production activities through rates charged to Consolidated Supply for gas, the Commission declared. Hence, Consolidated Supply is "properly viewed" as similar in risk to a natural gas pipeline engaged in gas transmission and sale.

The Commission also agreed with the Law Judge that the zone of reasonableness is in the range of 12% to 14% for determining a return on equity for Consolidated Supply. This range, the Commission said, is indicated by final Commission orders fixing equity returns for pipelines since 1977, and is confirmed by other evidence in the record respecting long-term public utility bond yields and composite equity earnings by U.S. industry.

In arriving at a specific equity allowance for Consolidated Supply, the FERC made a separate determination in each case, thereby rejecting the Law Judge's single determination for the two consecutive periods. In both cases, however, the Commission reached the same result. In RP78-52 (applicable to rates which were in effect from 7/1/78 through 6/30/79), the Commission concluded that Consolidated Supply should be allowed 12.5% on common equity -- toward the lower end of the zone of reasonableness -- because of a thicker than average equity ratio and reduced business risks brought about by improvement in the company's gas supply and total gas sales. As a further consideration, the Commission noted that Consolidated Supply plans a reduced construction budget, so that there is no need

for a higher rate of return due to capital requirements which might strain the company's financial resources. In RP79-22 (applicable to rates which went into effect on 7/1/79), the Commission held that the impact of increasing interest rates and bond yields was offset by the continued increase in Consolidated Natural's equity ratio. Consequently, the Commission adopted the same 12.5% return on equity found reasonable in the prior docket.

In Opinion No. 71, the FERC similarly approved a common equity rate of return of 12.5% for Arkansas Louisiana Gas Co. This was somewhat lower than the common equity allowance of 12.75% determined by Administrative Law Judge Isaac Benkin in an initial decision issued 4/26/79. The Commission concluded that the Law Judge gave insufficient consideration to Arkla's relatively high equity ratio of 54%, which served to reduce the company's financial risk. In addition, the Commission disagreed with Judge Benkin's reference to Arkla's need for additional capital to support ongoing exploration and development of gas reserves in the Deep Anadarko Basin. The Commission said Arkla's gas exploration and production operations apparently will be carried out by its affiliate, Arkla Exploration Co. However, even if this were not the case, any gas reserves produced in the future presumably will be sold to Arkla's customers at NGPA prices. Since the new gas prices established by the NGPA are "adequate to compensate producers for the costs and risks associated with producer operations, including the cost of acquiring capital," the Commission did not consider "an increment to Arkla's otherwise reasonable rate of return for pipeline operations to compensate for the cost of capital employed in its production operations . . . to be reasonable or necessary." Accordingly, the Commission declined to allow a higher rate of return in this proceeding as a result of Arkla's possible need for additional capital to undertake gas exploration activities in the Deep Anadarko Basin.

At the same time, the Commission agreed with Judge Benkin's conclusions regarding the inadequacies of the evidence presented by both the company and Staff. Arkla submitted a DCF market-oriented analysis and comparable earnings evidence to support its requested equity rate of return of 15.32%. The Staff recommended an equity allowance of 11.5% on the basis of a comparable earnings study. The Commission said the company's DCF presentation must be rejected because it related to Arkla's overall consolidated activities, with no attempt to separate the risks associated with the company's utility and nonutility operations. However, the Commission declared, the rate of return to be determined in this proceeding should reflect only the risks of Arkla's natural gas pipeline operations. The Commission found Arkla's comparable earnings presentation to be similarly defective in focusing on a group of integrated gas companies which, like Arkla, engage in retail gas distribution and gas exploration and production operations in addition to natural gas transmission. "The result, again, is a potential distortion in the assessment of risk associated with Arkla's natural gas pipeline operations." The Commission also faulted Staff's comparable earnings study of major Class A and B pipelines for failure to demonstrate that risks of this group are representative of those attributable to Arkla's pipeline operations.

A further issue decided by the Commission in both Opinion Nos. 70 and 71 involves the treatment of gains realized by the two pipelines on long-term debt reacquired before maturity at a purchase price below face value. In each case, the Commission adhered to the policy established in 1970 in Opinion No. 583 (re Manufacturers Light & Heat Co.) which held that all gains realized from the reacquisition of debt securities, irrespective of the date reacquired, must be amortized over the remaining life of the reacquired securities, and that the total amortized amount attributable to the test year must be applied to reduce the utility's cost of long-term debt. Arkla contended that any gain on reacquired debt should be

considered for ratemaking purposes, while Consolidated argued that any adjustment to debt cost should reflect only the gain on debt reacquired after 1/1/74 (the effective date of amended Commission regulations prescribing accounting and reporting treatment for gain on reacquired debt) and that application of the policy in Manufacturers would constitute retroactive ratemaking.

The FERC denied any retroactivity involved in application of the Manufacturers policy since there is no alteration of Commission approved rates for past periods. Rather, "debt reacquisitions prior to the test year are examined only for the purpose of determining the amount of gain allocable to the test year. Gain from reacquisitions which is allocable to periods prior to the test year is not recaptured as a credit against the test year cost of debt. Although past financial transactions of the company prior to the test year are examined (just as past financings are used whenever the embedded cost of debt is calculated), it is solely for the purpose of calculating cost of debt for the test year."

* * * * *

A few days previously, on 1/9/80, the FERC denied rehearing of Opinion No. 68, issued 11/19/79, which affirmed an initial decision determining a common equity rate of return of 12.73% for Kansas-Nebraska Natural Gas Co. (RP78-10). The initial decision concluded that neither the company nor the Staff had presented evidence which supported their specific equity return recommendations of 14.5% and 12.25%, respectively. Consequently, while noting continuing inflationary pressures on the cost of capital and the probability of a continuing long-term downward trend in the company's gas reserves, the Law Judge found no reason to change the common equity rate of return of 12.73% approved in Kansas-Nebraska's most recent rate case (RP77-5). 1/

Application of the 12.73% equity allowance to the settlement capitalization in the RP78-10 proceeding -- 40.5% long-term debt, 7.3% preferred stock and 50.8% common equity -- resulted in an overall rate of return of 10.51%.

In denying rehearing of Opinion No. 68, the Commission rejected Kansas-Nebraska's contention that it had ignored changes in interest rates and inflation since 1976, and had ignored prior Commission precedent. "The Commission is aware of inflation and interest rates, but Kansas-Nebraska has not met its burden to show with specificity how these general market conditions support either a rate of return in the very high range for which it argues, or a complete overhaul of rate of return analysis for the gas industry as a whole." In short, the Commission was unconvinced by Kansas-Nebraska's arguments absent a "nexus between generalized proof and the company's own situation," or a substantial showing that precedent should not be followed.

1/ This equity allowance was part of a rate settlement in the RP77-5 proceeding, which was approved by order dated 7/20/77.

ERA Grants Northern Project to Import Canadian SNG by Displacement at Base Import Price of \$3.45 per MMBtu

On 1/15/80 the ERA issued Opinion No. 13 granting an application by Northern Natural Gas Co. (78-002-NG) to import about 10 Bcf annually of Canadian SNG by displacement from Union Gas Co. Ltd. over a five-year period beginning in the 1979-1980 heating season at a base price of \$3.45/MMBtu, equal to the current authorized Canadian border price, plus storage charges. Opinion No. 13 was issued on rehearing of Opinion No. 5 (issued 3/8/79) which denied Northern's application to import the Canadian SNG at a cost during the first year (1978-1979) of \$3.86/MMBtu escalating to \$5.33/MMBtu by the fifth year. In Opinion No. 5, the ERA concluded that the import price was too high and Northern failed to demonstrate significant regional or national need for the SNG supply. In Opinion No. 13, the ERA found that the projected composite import price of \$4.01/MMBtu for the 1979-1980 heating season (based upon the current border price of \$3.45/MMBtu) compares favorably with the cost of primary alternate fuels in Northern's service area, and the SNG is needed in part to displace fuel oil and thereby reduce U.S. dependence on imported oil.

In December 1977, Northern contracted with Union Gas to purchase volumes equivalent to the aggregate Btu content of SNG which Union had previously contracted to purchase from Petrosar Ltd. The SNG is produced at Petrosar's petrochemical-refinery complex near Sarnia, Ontario using Canadian crude oil as feedstock. Deliveries to Northern -- up to 75,000 Mcf -- were to be made only in winter months (November through March), and Union would store SNG volumes received from Petrosar for Northern's account during the remaining months of each year. It was proposed that deliveries be accomplished through displacement of natural gas volumes to TransCanada PipeLines Ltd. at the Michigan-Ontario border near St. Clair, Michigan for further delivery and sale to Union. On days when Northern requested SNG from Union, TransCanada would reduce its deliveries to Union, and Great Lakes would deliver equivalent volumes by displacement to Northern at existing points of interconnection.

In its application, Northern estimated the average cost of the above supply at \$3.86/Mcf (U.S.) during the first year, increasing to \$5.33/Mcf in 1982-1983. This rate included both the SNG purchase cost and the cost of the storage service to be rendered by Union. The SNG purchase rate would be determined by formula geared in part to Petrosar's feedstock cost. The storage rates would include a monthly demand charge of \$2.25/Mcf multiplied by the difference between the daily contract demand (75,000 Mcf) and the average daily level of deliveries under the Petrosar contract to Union during each month, plus commodity charges of 4.5¢/Mcf for all volumes injected into storage and 4.0¢/Mcf for all volumes withdrawn from storage. No charge was proposed by either Great Lakes or TransCanada for delivery of gas by displacement to Northern.

In Opinion No. 5, the ERA stated that the \$3.86/Mcf first year cost projected by Northern is sharply higher than the price applicable to domestic new natural gas under Section 102 of the Natural Gas Policy Act (\$2.06 as of November 1978). ERA further noted that (1) the proposed import price exceeded the then current authorized border rate of \$2.16/MMBtu, and (2) Union offered the SNG to Canadian distributors at a price lower than the price offered to Northern but received no firm offers. As a further reason for denial, ERA held that Northern did not adequately demonstrate a regional need for the subject gas. ERA made clear that denial of Northern's import application was without prejudice in that Northern was free to restructure its project in a manner likely to satisfy criteria set forth in this and prior ERA import decisions.

In its subsequent application for rehearing, Northern stated that as a result of ERA's decision that the cost of the SNG import was too high, it agreed with Union to "a substantially lower price . . . which is demonstrably equitable to U.S. consumers." Specifically, the price to be paid to Union will be the Canadian border export price (\$2.30/MMBtu effective 5/1/79), plus 56¢/MMBtu as a storage charge which will remain constant throughout the four-year life of the contract. The 56¢ component is a negotiated charge for storage services to be performed by Union for Northern.

On 5/2/79 the ERA granted rehearing of Opinion No. 5 on the ground that the restructured project may meet the criteria set forth in that Opinion. 1/ (See REPORT NOS. 1149, pp31-32; 1194, pp23-24; 1200, pp18-20; 1204, pp21-23; 1208, pp21-22.)

In Opinion No. 13, the ERA first noted that the base price of \$3.45/MMBtu is equal to the current border price established by the Canadian National Energy Board for gas exported to the U.S. designed to equal the substitution value of Canadian imports of foreign crude oil. Previously, the ERA said the DOE has recognized that imported natural gas can have a certain commodity value in excess of normal costs of production, delivery and markup; this has been the case with natural gas imported from Canada since 1974. Moreover, both the U.S. and Canada have recognized that the commodity price established for export sales of gas will not only reflect substitution cost for foreign crude oils imported into Canada, but should be generally competitive with the alternate fuels with which it is competing in the respective service areas.

In order to test this latter point, the ERA contacted energy officials in the 10 states served by Northern to obtain the most current information on wholesale price and type of fuel which competes predominantly with natural gas. That survey, the ERA said, showed that No. 2 fuel oil and propane are the primary alternate fuels in six states, with virtually no No. 6 fuel oil being used therein. No. 2 fuel is a primary alternate fuel in three of the remaining states, with residual fuel oil used in substantial (although secondary) volumes. The State of Michigan reported Nos. 4, 5 and 6 residual fuel oil as being the primary alternate energy source. The ERA noted that average wholesale prices for No. 2 fuel oil ranged from \$4.96 to \$7.75/MMBtu; propane varied between \$4.20 and \$5.08/MMBtu; and residual fuel oil sold for \$3.22 to \$3.66/MMBtu.

The ERA concluded that while the projected composite import price of the SNG here involved for the 1979-1980 heating season of \$4.01/MMBtu is somewhat in excess of the price of the residual fuel oils in the 10-state service area, the proposed composite price compares favorably with the range of prices in which the current primary alternate fuel in the service area -- No. 2 fuel oil -- is selling.

1/ A proceeding in the FERC (CP78-237) is also going forward with respect to rates for sales and storage of the imported SNG. On 9/27/79 Northern submitted a stipulation whereby it agreed to (1) recover through its PGA rate filings the gas purchase costs based on the Canadian border export price, and (2) include in its commodity rate for jurisdictional market area sales (until the effective date of its next general rate increase) a surcharge of \$0.0092/Mcf, effective 10/27/79, to recover that portion of the cost applicable to storage service rendered by Union. In subsequent comments, the Staff and others generally supported the stipulation, although the Staff recommended that it be rejected without prejudice to a later filing after the ERA determines whether to permit the import. Alternatively, the Staff would accept the stipulation subject to a different method of computing the storage charge. (See REPORT NO. 1236, pp29-30.)

The ERA authorized import of the SNG at the base price of \$3.45/MMBtu, subject to further review and authorization for any increase. "A blanket approval of any future change in the Canadian border price for exported natural gas would be inappropriate; accordingly, the composite import price approved here must be reviewed anew if the border price is raised during the term of the import project."

Next, Opinion No. 13 discussed the \$0.56/MMBtu charge separately negotiated for specific storage services to be performed by Union for Northern. Northern contended that the current average on-system storage cost incurred to store gas in its company-owned fields is in the range of \$0.55 to \$0.60/MMBtu -- although no such storage is available for additional supplies. Northern also emphasized that its cost of obtaining lease storage services from other companies would range from \$0.90 to \$1.10/MMBtu. Hence, while the \$0.56 storage fee does not represent Union's cost to store the gas, it is a negotiated price which is consistent with, if not more favorable than, alternative storage services available to Northern.

The ERA stated that as a matter of policy, it will not approve a higher price negotiated by commercial firms where a general commodity-based border price for imported gas is established by the supplying country and approved by the U.S. However, exceptions will be made where the foreign supplier is providing a "special service that is distinct and separate from services which are a normal aspect of production, processing and delivery . . . which would therefore normally be covered in the commodity export price." In this case, the ERA said, Northern adequately demonstrated that the storage service being provided by Northern "is a distinct and separate service that is not ordinarily provided to importers of Canadian gas." First, ERA said, Northern will have the advantage of being able to withdraw the gas supply only during the peak winter months which requires that the SNG be stored during the summer months. "This is a unique service that is not ordinarily covered in the commodity export price." Second, Northern demonstrated that these same storage services would not be obtained in the U.S. at a lower cost.

However, the ERA stressed, Northern did not show that the price proposed to be paid to Union is consistent with its actual costs, and is in fact higher than Union charges its Canadian customers for storage services. Based on such charges, the ERA calculated that the charge to Northern for storing the SNG here involved could be as low as \$0.19/Mcf when assessed against the maximum yearly contractual deliveries of 10 Bcf. Furthermore, the ERA added, there is a question of the proper treatment of interest charges which Union incurs on carrying costs associated with storing the SNG which it does not incur for existing storage customers in Canada. Northern proposed to calculate this interest factor on an average unit cost of \$4.70 for each Mcf of SNG held in storage. Hence, interest would be determined on the acquisition cost of a single, isolated supply of gas -- the SNG Union purchases from Petrosar -- as opposed to the average acquisition cost of the full supply of gas purchased and placed in storage, despite the standard practice in both countries of computing interest on the average acquisition cost of all gas available for service supply.

The ERA could find "no compelling reason . . . in this case to warrant deviation from this standard." Therefore, the ERA said it will approve a separate storage service charge only on condition that it is the sum of (1) the direct storage costs calculated in accordance with Union's rate schedule applicable to its Canadian customers; and (2) a working capital allowance based on the cost of carrying the volumes of gas held in storage for this project, the average cost of gas acquired by Union for its overall system supply, and the prime bank lending rates prevailing in Ontario, Canada. Opinion No. 13 set forth a specific formula for calculating this working capital allowance.

ERA Cites Uncertainty Over Available Natural Gas Supply in Extending Period for Final Decision on Temporary Exemptions for Powerplants from the Natural Gas Use Prohibitions Under Fuel Use Act

On 1/2/80 the ERA issued notice of an extension of time to 2/15/80 for issuance of final orders respecting temporary public interest exemptions from the natural gas use restrictions of Section 301 of the Powerplant and Industrial Fuel Use Act. ERA cited uncertainty over additional natural gas supplies (due in part to the success of its exemption program and other federal programs) as the chief reason for the extension.

Section 301 of the Fuel Use Act prohibits with certain limited exceptions the use of natural gas as a primary fuel in any powerplant. However, the Act also provided DOE with discretionary authority under Section 311 to exempt certain uses of natural gas. Last April, ERA exercised its authority under that section to formulate a Special Rule establishing procedures to govern applications for temporary public interest exemptions for up to five years from the Section 301 prohibitions on natural gas use. The Special Rule was proposed as a response to the then anticipated shortages of middle distillate fuel oil, given the availability of additional supplies of natural gas at that time. (See REPORT NO. 1204, ppl-2.)

Subsequently, ERA issued notice on 5/11/79 and 6/1/79 of petitions for public interest exemptions filed by some 60 electric utility companies with respect to use of natural gas in several hundred units at over 150 generating stations, and set forth proposed orders granting special exemptions for two years (subject to extension for one to three years). The proposed orders stated that the use of natural gas is preferred over petroleum to the extent that the near-term choice of fuel is limited to these two sources, and that expanded use of natural gas in the powerplants involved would help to reduce U.S. demand for imported petroleum products, protect the nation from the effects of any oil shortages and "cushion the impact of increasing world oil prices." Under Section 701(c)(3) of the Fuel Use Act, ERA has six months after a 45-day public comment period to issue a final decision on petitions for exemptions. The applicable six-month periods would have expired on 12/22/79 and 1/6/80 absent the present extension.

As noted, ERA cited concern over the availability of additional gas supplies as a main reason for its failure to act expeditiously on the exemption petitions. Specifically, ERA declared, additional natural gas supplies are less certain at the present time than at the beginning of 1979 when the Special Rule was first proposed. "This is in large part due to the success of this and other programs over the past several months to displace as much petroleum as possible with available supplies of natural gas." Further, ERA noted some question whether the collective demand for natural gas by users of middle distillates and residual fuel oil with a sulfur content of 0.5% which have already been granted public interest exemptions, or have applications for such exemptions pending, exceeds the available supply.

In view of this uncertainty, ERA said it has thus far processed applications only for those powerplants which will displace middle distillate or residual fuel oil with a sulfur content no higher than 0.5%. No action has yet been taken on other applications, pending completion of an analysis to determine whether the granting of public interest exemptions for powerplants burning residual fuel oil of greater than 0.5% sulfur will jeopardize the ability of powerplants burning lower sulfur residual oil or middle distillates to displace them with natural gas.

ERA invited written comments through 1/30/80 to assist in this analysis. Views are particularly requested on the appropriate scope of the Special Rule in light of natural gas supplies for the foreseeable future, and on what (if any) sulfur levels should be considered in reviewing petitions to use natural gas displacement of residual fuel oil.

FERC Releases Final Draft Rule to Govern Applications for Special Relief Rates Under NGPA; On-the-Record Panel Discussion Scheduled for February 11 Before the Commission to Explore Specific Issues

On 1/16/80 the FERC issued a draft final rule (RM79-67) establishing procedures to govern applications for special relief from maximum permissible ceiling prices under Section 104, 106 and 109 of the NGPA. Written comments are invited on the draft rule by 2/1/80. In addition, an on-the-record panel discussion before the Commission has been scheduled for 2/11/80 to permit exploration of specific issues with persons representing various points of view.

The draft final rule would essentially adopt the same regulatory framework set forth in a proposed rulemaking issued last August. Under this framework, different procedures would apply to the grant of special relief where (1) operation and maintenance costs of continued production from an existing well cannot be recovered if gas from the well is sold at the applicable maximum lawful price, and (2) additional planned investment necessary for continued production or reservoir development will not be made if the producer were held to the applicable maximum lawful price. A public hearing on the proposed rule was held before an FERC Staff panel on 9/26/79, and written comments were submitted by 21 interested parties. (See REPORT NO. 1229, pp12-17.)

The draft final rule would incorporate various modifications and clarifications in response to the comments. However, the draft order would continue to exclude "sunk" costs from DCF and other cost computations on which special relief rates would be based. This exclusion of "sunk" was widely opposed by producer parties.

The Commission indicated that four major issues concerning the special relief rulemaking proposal had emerged in the course of deliberations, and that further public comments are requested on these issues.

The four issues relate to: (1) whether any limits should be placed on special relief rates granted by the Director of the Office of Pipeline and Producer Regulation or by the Commission (and, if so, at what levels); (2) whether producers should be allowed to switch from a special relief rate to another incentive rate under the NGPA, or whether such switching should be limited; (3) what procedures should be used for reviewing initially proposed special relief rates on the basis of actual expenditures; and (4) whether a fixed or indexed rate of return should be adopted for planned investment projects.

As noted, the Commission will convene an on-the-record panel discussion on 2/11/80 to explore the above issues. The draft rule has been chosen by the Commission as a vehicle for experimenting with use of the panel discussion technique to obtain public input. Commissioner Hall has been designated to select a panel of representatives with different points of view. Requests to participate in the discussion should be submitted by 2/1/80. Persons wishing to participate should attempt to group themselves on the basis of commonality of interests or provide information that would help in structuring a panel discussion. In addition, Commissioner Hall has been authorized to request the participation of persons whose views may not otherwise be represented but who are not filing written comments. Each

participant in the discussion may present a "very" brief prepared statement on the specified issues and will be asked to respond to questions from the Commission and from other panelists.

The draft final rule will be summarized in a subsequent REPORT.

FERC Schedules Prehearing Conference for February 28 on Proposal by Mobil Oil to Build Own Plant to Process Gas Currently Delivered to Getty Oil for Processing

On 1/14/80 the FERC consolidated -- and scheduled a prehearing conference for 2/28/80 -- applications by Mobil Oil Corp. (CI78-497 et al.), American Petrofina Co. of Texas, Joseph I. O'Neal, Jr. and Walter Duncan et al. to abandon their sales of casinghead gas produced from the Reincke and Von Roeder Fields, Borden County, Texas to the East Vealmoor gas processing plant in Howard County, Texas owned by Getty Oil Co., which delivers the residue gas to El Paso Natural Gas Co.

The producers' behind-the-plant percentage-type sales contracts with Getty have terminated (although the gas is still being delivered to Getty for processing) and Mobil now proposes to build its own gas processing plant to handle the volumes for direct sale to El Paso near the same delivery point used by Getty. The four producers and El Paso have agreed to new contracts covering the proposed direct sale of gas to El Paso.

In support, Mobil stressed that its plant will have a lower fuel consumption rate than Getty's plant, which will result in delivery of an additional 95,000 MMBtu per year to El Paso. Mobil also contended that additional competition in the processing industry in this area could stimulate further economic activities which would benefit the public.

In a petition to intervene and request for hearing, Getty responded that the proposed new plant of Mobil will remove about 12% of the input of the Getty plant, which will substantially reduce its economic life, cause premature abandonment, and will constitute an unnecessary duplication of facilities. Furthermore, Getty said, Mobil has no existing arrangements, plants or gathering facilities which would enable it to continue these interstate gas deliveries if the Getty plant fails. Also, Getty stressed, Mobil may intend to justify a higher price for its gas through the abandonment procedure. Getty added that the proposed new plant may not be economically feasible and the fuel efficiencies of both plants would be reduced if either operates at less than capacity.

In its order, the Commission concluded that a hearing should be held to determine whether the proposed abandonments are in the public interest.

Energy Information Administration Reports Only Slight Increase in U.S. Energy Consumption During First Three Quarters of 1979

On 1/4/80 the Energy Information Administration released the second in a new report series entitled "Quarterly Energy Indicators" which revealed that U.S. energy consumption (stated in equivalent amounts of crude oil) during the first three quarters of 1979 was 0.3% higher than during the same period of 1978. Consumption in the third quarter of 1979 averaged 33.9 million b/d or 2.4% lower than consumption during the third quarter of 1978.

The publication contains summary statistics on U.S. energy consumption, production and net imports during the third quarter of 1978 and the first three quarters of 1979, plus information on total energy consumption and shares of energy consumption by fuel type and major economic sector from 1973 through the third quarter of 1979. The first in this new report series was released by EIA on 1/15/79. (See REPORT NO. 1194, p36.)

During the first three quarters of 1979, the EIA report showed: (1) domestic energy production averaged 4.2% more than the same period of 1978 (natural gas production decreased by 3.4%); (2) net imports were 6.3% lower; and (3) natural gas consumption remained about the same. In the third quarter of 1979, gas consumption decreased 1.5% compared with the third quarter 1978 rate.

The natural gas share of total U.S. energy consumption -- expressed in terms of 12-month moving averages of annual rates -- declined from 30.2% in 1973 to 27.3% in 1976, 26.0% in 1977, 25.5% in 1978 and 25.1% in the first three quarters of 1979.

California PUC Terminates Long-Standing Proceeding to Determine Whether Certain California Gas Producers Should Be Regulated as Public Utilities

On 12/18/79 the California Public Utilities Commission terminated, effective 1/17/80, a show cause proceeding instituted in 1976 to determine whether California gas producers supplying Pacific Gas & Electric Co. should be regulated as public utilities. The PUC cited enactment of the Natural Gas Policy Act of 1978 as the prime reason for its determination that "the public interest will not be adversely affected if this proceeding is discontinued without prejudice to its being reopened at a later time should circumstances so require."

The show cause proceeding stems from a CPUC order dated 7/1/75 which granted PG&E a \$36.4 million interim rate increase needed to offset increased costs (from 45¢ to 75¢/Mcf) for purchases of California gas. However, because of the lack of "meaningful evidence" regarding California wellhead production costs, the CPUC simultaneously directed its Legal Division to prepare an order to show cause to be served on all California gas producers serving PG&E. PG&E was also warned against further renegotiation of gas contracts during pendency of the proceeding. The show cause order was issued on 5/18/76, and subsequent orders prohibited PG&E from including any price escalation clauses which would provide for a higher price prior to 6/30/80 in renegotiated contracts. (See REPORT NO. 1010, pp23-24.)

No hearings were ever held in the proceeding.