June 6, 1988

MR THEODORE J GARRISH FEDERAL INSPECTOR FOR THE ANGTS 1000 INDEPENDENCE AVENUE SW WASHINGTON DC 20585

Dear Mr. Garrish:

Enclosed is a copy of a press release and a brochure on the revised capital cost estimate and economics for the Alaska Natural Gas Transportation System. The revised estimate, which is approximately 45% less than previous projections, results in an economically viable system for transporting Alaskan gas to the lower 48 United States in the mid to late 1990's.

At your convenience, Northwest Alaskan Pipeline Company is available to discuss in detail the revised cost estimate and economics. Please contact me at (801)584-7082 or Barry Roth at (202)872-0280.

Very truly yours,

Cuba Wadlington, Jr.

b1

**Enclosures** 

Contact Cuba Wadlington, Vice President, Regulatory Affairs Tel.: (801) 584-7082

FOR IMMEDIATE RELEASE

# ON MAJOR PIPELINE PROJECT TO SERVE U.S.

Salt Lake City, June O6--The estimated cost of building the Alaska Natural Gas Transportation System (ANGTS) from Prudhoe Bay to serve the lower 48 states has been reduced by \$11.5 billion, Northwest Alaskan Pipeline Company today announced.

Capital costs for the entire project, as expressed in January 1, 1988 dollars, have been reduced 45%, from \$26.1 billion to \$14.6 billion.

The new figure is the result of a reassessment of the project design and re-estimate of the capital costs. This latest study was ordered in early 1987 by Northwest Alaskan Pipeline Company, operator for the Alaskan Northwest Natural Gas Transportation Company partnership—sponsor of the Alaskan segment of the project—and Foothills Pipe Lines (Yukon) Ltd.—sponsor of the Canadian segment.

The ANGTS project is the subject of a 1977 Agreement on Principles among the United States and Canada regarding transportation of gas from Prudhoe Bay on the Alaskan North Slope to the lower 48.

The new, dramatically lower cost estimate took into consideration:

Advances in pipeline design.

# **ANGTS RELEASE**

- Information gathered from extensive field testing programs conducted by the project sponsors.
- Significant changes in the economic climate from the basis for estimates prepared in the late 1970s and early 1980s.

The capital cost reduction could result in an estimated annual average transportation cost of \$3.05 per MMBtu to the lower 48 states over the first 10 years, as figured in 1988 dollars.

Northwest Alaskan Pipeline Company believes that gas supplies on ANGTS will be required in the lower 48 states by the mid to late 1990s. The company is convinced that gas on the ANGTS system can be delivered at a market clearing price at that time.

The ANGTS system also appears promising because it could reduce the nation's reliance on 400,000 to 600,000 barrels of imported oil per day via secured gas supplies.

Substantial construction progress has been made. The southern one-third of the system already is in service, delivering Canadian gas to U.S. markets throughout the lower 48 states. Also, the U.S.-Canada agreement and enabling legislation and major regulatory approvals are in place in both countries. Given the advanced status of the project, completion of the northern sections of the line could be undertaken in the most expeditious time frame possible, according to Northwest Alaskan Pipeline Company.

Northwest Alaskan Pipeline Company is a unit of Northwest Energy Company, a subsidiary of The Williams Companies, Inc. of Tulsa, Oklahoma. The Williams Companies is engaged in pipeline transmission of natural gas and petroleum products, and in interstate digital telecommunications.

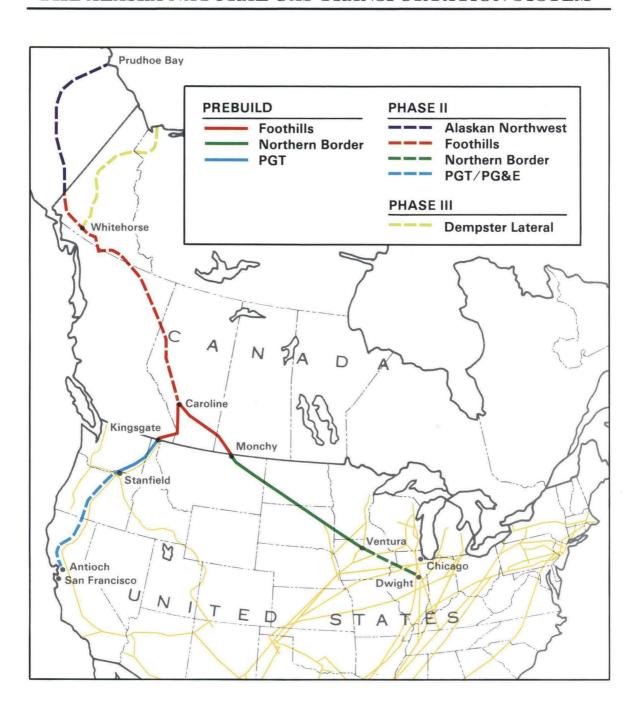
# NEW TRANSPORTATION ECONOMICS

**FOR** 

**ALASKAN GAS** 



Operator For Alaskan Northwest Natural Gas Transportation Company



# **OVERVIEW**

- Alaskan Northwest Natural Gas Transportation Company (ANNGTC) is the
  U.S. sponsor for the Alaskan segment of the Alaska Natural Gas Transportation
  System (ANGTS), and Foothills Pipe Lines (Yukon) Ltd. is the Canadian
  sponsor of ANGTS, a project selected in both the United States and Canada as
  the most effective and environmentally sound means to deliver Alaskan gas
  reserves to the lower 48 United States. The ANGTS is the subject of a bilateral
  agreement between the United States and Canada and legislation in both
  countries which provides for the expeditious approval and construction of the
  project.
- In the early 1980's, the Phase I or Prebuild portion of the ANGTS was constructed and placed into operation for the delivery of Canadian gas in advance of the transportation of Alaskan natural gas. This represents completion of approximately one-third of the ANGTS.
- The project sponsors remain committed to the timely construction of the northern or Phase II portions of the system. The securing of governmental/regulatory approvals to date in combination with the completion of a substantial portion of project engineering design and the technical knowledge acquired from pre-construction field studies will enable the ANGTS sponsors to construct the remaining portion of the project in the most expeditious time frame possible.
- In early 1987 ANNGTC and Foothills decided to conduct a reassessment of project design, capital cost estimates and related cost of service. The reestimate has resulted in significant reductions in the cost of transporting Alaskan gas to lower 48 markets. These lower costs incorporate advances in pipeline design and information gathered from extensive field testing programs conducted by the project sponsors as well as the significant changes in the economic climate from earlier estimates.
- The information concerning the capital cost re-estimate and cost of service provided in the remainder of this document indicates why the project sponsors believe that the ANGTS will be completed in accordance with the Agreement on Principles between the United States and Canada.

# COMPARISON OF CAPITAL COSTS FOR PRUDHOE BAY **GAS**

(BILLIONS OF \$'s)

	<u>1982 \$</u>	<u>January 1, 1988 \$</u>	
	1982	1982	1988
ALASKAN SEGMENT	\$14.2	\$15.6	\$ 7.2
CANADIAN SEGMENT	7.9	8.2	5.6
LOWER 48 STATES	2.1	2.3_	1.8
TOTAL	<u>\$24.2</u>	<u>\$26.1</u>	<u>\$14.6</u>
% Reduction from 1982 estimate (expressed in			45%

<sup>1988</sup> dollars)

# 1982 VERSUS 1988 ASSUMPTIONS

GENERAL	1982 BASELINE ESTIMATE	1988 RE-DESIGN ESTIMATE
Flow	2100 MMCFD	2300 MMCFD
Pipe diameter	48"/56"	42"/48"
Pressure	1260/1080 psig	2160/1680 psig
Mainline provision for future Delta flow	Yes	Yes
Economic forecast	High interest and inflation rates beyond 1982	More modest rate of inflation and steady interest rates

# KEY FACTORS CONTRIBUTING TO REDUCTION IN CAPITAL COSTS ESTIMATE

(1988 ESTIMATE FROM 1982 ESTIMATE)

- Reduced construction schedule.
- Incorporation of results from project test sites.
- Advancements in pipeline design.
- Improved welding productivity.
- More traditional owner/contractor functions.
- Use of existing communication systems.
- Reduced contingency.

# COMPARISON OF COST OF SERVICE

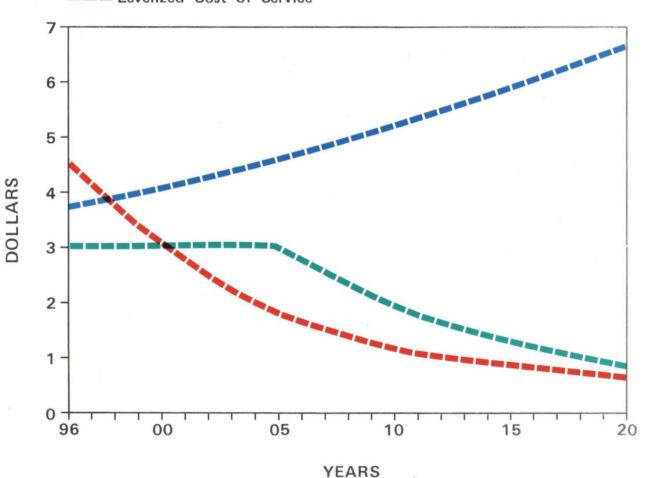
# 1988 \$/MMBTU - PRUDHOE TO LOWER 48

	1996 In-Service	
	Full Cost	Levelized Cost
ALASKAN SEGMENT	\$2.33	\$1.48
CANADIAN SEGMENT	1.76	1.06
LOWER 48 STATES	51	51
TOTAL COST OF SERVICE TO LOWER 48 STATES	<b>\$4.60</b>	<u>\$3.05</u>

# COMPARISON OF COST OF SERVICE

1988 \$/MMBTU - PRUDHOE TO LOWER 48





# PROGRESS TO DATE — ACCOMPLISHMENTS

- Alaska Natural Gas Transportation Act of 1976 enacted by Congress and signed by the President.
- Agreement on Principles between the United States and Canada applicable to the ANGTS was executed in September, 1977 for a minimum term of 35 years.
- ANGTS approved by Presidential decision and ratified by Congress in 1977.
- Certificates of public convenience and necessity granted to Foothills and conditional certificates to ANNGTC following public hearings before the National Energy Board in Canada and the Federal Power Commission in the United States.
- Northern Pipeline Act enacted by the Canadian Parliament in April, 1978 formally granting Canadian certificates to Foothills.
- Thirty-year federal right-of-way for Alaskan segment granted in 1980.
- Congressional waiver of U.S. laws in 1981 to assist project financing.
- In 1981 and 1982, respectively, the Western and Eastern Legs of Phase I of the ANGTS were completed.
- In 1983, Foothills granted a right-of-way in Yukon by easement agreement with the Government of Canada for a period of 25 years with an option to renew for 24 additional years. Easement conditional upon receipt of ministerial consent to commence initial construction, recently extended to November, 1992.
- A substantial portion of major pipeline engineering design has been completed.

# NORTHWEST ALASKAN PIPELINE COMPANY

Operator For Alaskan Northwest Natural Gas Transportation Company

295 Chipeta Way Salt Lake City, UT 84108-1281