

The Project

The Alaska Natural Gas Transportation System is the largest pipeline construction project in history. It will consist of approximately 4,800 miles of pipeline extending from Prudhoe Bay on Alaska's North Slope across Alaska and Canada to a point near James River, Alberta. At James River, the gasline will divide into eastern and western delivery systems to serve markets in the west, midwest, south and east United States.

Once completed, the Alaska gasline's initial capacity will allow transport of up to 2.0 billion cubic feet of Prudhoe Bay gas daily. Prudhoe Bay has recoverable reserves of natural gas estimated at 26 trillion cubic feet.

The Participants

Alaska

The 745-mile Alaskan segment of the project will be built and operated by a consortium of eleven U.S. and Canadian natural gas companies called the Alaskan Northwest Natural Gas Transportation Company. Northwest Alaskan Pipeline Company, a wholly owned subsidiary of Northwest Energy Company of Salt Lake City, Utah, is the operating partner for the consortium. Other members are subsidiaries of: Pacific Gas & Electric Company, San Francisco, California; Pacific Lighting Corporation, Los Angeles, California; InterNorth, Inc., Omaha, Nebraska; Panhandle Eastern Pipe Line Company, United Gas Pipe Line Company, and Texas Eastern Corporation, all of Houston, Texas; American Natural Resources Company, Detroit, Michigan; Columbia Gas System, Inc., Wilmington, Delaware; TransCanada PipeLines, Ltd., Toronto, Ontario; and Texas Gas Transmission Corporation, Owensboro, Kentucky.

Canada

The 2,033-mile Canadian segment of the project will be built and operated by Foothills Pipe Lines (Yukon) Ltd., of Calgary, Alberta. Foothills is jointly owned by NOVA, an Alberta Corporation, and Westcoast Transmission Company, of Vancouver, British Columbia. Southern portions of the Canadian system are currently under construction.

The Lower 48 States

In the lower 48 states, the project's 887-mile Western

Leg will be built and operated by Pacific Gas Transmission Company, a subsidiary of Pacific Gas & Electric Company. Construction has begun on portions of the western system, which are scheduled to be completed and in operation delivering surplus Canadian natural gas by mid-1981.

The project's 1,131-mile Eastern Leg will be built and operated by Northern Border Pipeline Company, a consortium of five U.S. and Canadian natural gas transmission companies. Northern Plains Gas Company, a subsidiary of InterNorth, Inc., is the operating partner for the consortium. Other members are subsidiaries of: Northwest Energy Company, Panhandle Eastern Pipe Line Company, United Gas Pipe Line Company, and TransCanada PipeLines, Ltd. Construction has begun on portions of the eastern system, which are expected to be in operation delivering surplus Canadian natural gas in 1982.



The Pipeline

Pipeline Capacity

2.0 billion cubic feet, initially, expandable by adding compression to 3.2 billion cubic feet daily.

Operating Pressures

Western Leg: 911 pounds per square inch gauge; Eastern Leg: 1440 psig; Alaska segment: 12260 psig; Canadian segments: 1080 psig to 1260 psig.

Total Mileage and Pipe Diameters

As indicated in the adjoining table, the Alaska Natural Gas Transportation System comprises nearly 4,800 miles of pipeline in diameters ranging from 36 inches to 56 inches:

ROUTE SEGMENT	DISTANCE (MILES)	PIPE (DIA.)
Northwest Alaskan Pipeline Co.		
• Alaska	745	48"
Foothills Pipe Lines (South Yukon) Ltd.		
• Alaska/Yukon Border to Whitehorse	233	48"
• Whitehorse to Yukon/B.C. Border	275	56"
Foothills Pipe Lines (Saskatchewan) Ltd.		
• Saskatchewan	160	42"
Foothills Pipe Lines (North B.C.) Ltd.		
• Yukon/B.C. Border to B.C./Alberta Border	444	56"
Foothills Pipe Lines (South B.C.) Ltd.		
• Coleman, Alberta to Kingsgate, B.C.	106	36"
Foothills Pipe Lines (Alberta) Ltd.		
• B.C./Alberta Border to James River, Alberta	395	56"
• James River, Alberta to Coleman, Alberta	186	36"
• James River, Alberta to Empress, Alberta	234	42"
TOTAL ALASKA & CANADA	2,778	Miles
Pacific Gas Transmission Co.		
• Kingsgate, B.C. to Stanfield, Oregon	257	42"
• Stanfield, Oregon to Malin, Oregon	335	36" or 42"
Pacific Gas & Electric Co.		
• Malin, Oregon to Brentwood, California	295	36" or 42"
Northern Border Pipeline Co.		
• Monchy, Saskatchewan to Dwight, Illinois	1,131	
TOTAL LOWER 48 STATES	2,018	Miles
TOTAL SYSTEM	4,796	Miles



Alaska Natural Gas Transportation System



Alaska Natural Gas Transportation System (Alaska Segment)

- ALASKA NATURAL GAS TRANSPORTATION SYSTEM
- COMPRESSOR STATIONS (C.S.)
- TRANS - ALASKA PIPELINE SYSTEM
- PUMP STATIONS (P.S.)
- EXISTING CONSTRUCTION CAMPS
- PROPOSED CONSTRUCTION CAMPS
- FLY CAMPS
- MOBILE REPEATER STATIONS
- CHILLED - PIPE TEST SITES (CPTS)
- AIR STRIPS (Over 5,000' in length)
- AIR STRIPS (5,000' in length)
- AIR STRIPS (3,000' in length)

