



Application of
TransCanada Corporation ("TransCanada") and
Alaskan Northwest Natural Gas Transportation Company ("ANNGTC")
Submitted to the Alaska Department of Revenue
Pursuant to AS 43.82.120
For Approvals under the Alaska Stranded Gas Development Act

June 1, 2004

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Introduction

TransCanada Corporation (“TransCanada”) welcomes the opportunity to work with the State of Alaska to commercialize the State’s stranded gas reserves. Through various subsidiaries, TransCanada has been working for more than 25 years to bring Alaskan gas to market, and we are determined to play a constructive role in bringing the project to fruition. Our U.S. and Canadian certificates and permits, as well as a substantial body of project-specific technical analysis place TransCanada in the best position to develop the Alaska Highway Pipeline Project. In addition, TransCanada’s extensive pipeline network, northern expertise and project management skills, as well as multi-jurisdictional regulatory experience provide unparalleled access to major North American markets, ensure the timely construction of a technologically sophisticated and environmentally sound transportation system, and mitigate the risk of delays.

This project is complex and entails significant risk. Its success – and similarly the future well-being of the Alaskan economy – will depend upon the goodwill and cooperation of many stakeholders, including oil and gas producers, transportation service providers, downstream customers, local businesses and Native Corporations, not to mention local communities, U.S. Government and the State of Alaska itself. It is essential that the interests of key stakeholders be aligned in order to share the significant risk that a project of this size and scope presents. Given the expected growth in natural gas demand over the next 25 years, the continuing decline in continental gas supply and the simultaneous rise in natural gas prices, now is the time for all stakeholders to coalesce and make this project a reality. We believe the Alaska gas pipeline could be in-service by the first quarter of 2012 if shipping contracts for the full pipeline capacity are executed by mid 2005.

To this end, in March 2004, TransCanada renewed discussions with the State of Alaska regarding the Alaskan portion of the Alaska Highway Pipeline Project. TransCanada announced that it was prepared to assume a leadership role with respect to the development of an independently-owned pipeline project in Alaska, in addition to TransCanada’s long-standing leadership of the Canadian portion of the project. Subsequently, TransCanada signed a Memorandum of Understanding (“MOU”) with the State under which the State agreed to resume processing TransCanada’s long-pending application for a right-of-way lease for the project and TransCanada agreed to file an application under the State’s Stranded Gas Development Act.¹ This document constitutes the latter application.

This application is being submitted jointly by TransCanada and the Alaskan Northwest Natural Gas Transportation Company (“ANNGTC”), a wholly-owned subsidiary of TransCanada. TransCanada and ANNGTC (“the Co-applicants”), submit this application to the Alaska Commissioner of Revenue for review and approval, pursuant to AS 43.82, the Alaska Stranded Gas Development Act, of the Co-applicants’ plan to construct an Alaska gas pipeline.

¹ For details, please refer to the news releases in Appendix A.2.

The Co-applicants request determinations by the Commissioner of Revenue under AS 43.82.140(a) that the Co-applicants' project constitutes a "qualified project," as defined in AS 43.82.100 and that the Co-applicants are a "qualified sponsor" as defined in AS 43.82.110. Furthermore, the Co-applicants request a determination by the Commissioner, and the concurrence of the Commissioner of Natural Resources, pursuant to AS 43.82.140(b), that the project plan proposed in this application constitutes a "qualified project plan" as defined in AS 43.82.130.

The Co-applicants request that the Commissioner direct all enquiries and other communications regarding this application to:

Anthony (Tony) M. Palmer
Vice-President Alaska Business Development
TransCanada PipeLines Limited
450 – 1st Street S.W.
Calgary, AB
Canada
T2P 5H1
Telephone: (403) 920-2035
Fax (403) 920-2451
e-mail tony_palmer@transcanada.com

A. Project Qualification

1. Description of the Project

TransCanada has prepared a natural gas pipeline development plan to facilitate the commercialization of the Alaska North Slope (“ANS”) stranded natural gas reserves. TransCanada proposes to construct a 1,710-mile natural gas pipeline from Prudhoe Bay, Alaska to a major pipeline infrastructure system in Alberta, Canada. For planning and design purposes, TransCanada is analyzing a pipeline to a point at Boundary Lake, Alberta, Canada. The selection of Boundary Lake is consistent with the original routing of the Alaska Natural Gas Transportation System (“ANGTS”). The pipeline being proposed by TransCanada is a 48-inch diameter (“NPS 48”), high-pressure (2,500 psig) pipeline that has an initial design capacity of 4.5 Bcfd and can be expanded very efficiently to approximately 5.9 Bcfd by adding incremental compressor units. Final details regarding the pipe size, operating pressure and the number and location of compressor stations will be confirmed following discussions with producers, the results of an open season and detailed design work.

The pipeline will receive pipeline quality gas² at Prudhoe Bay from where it will proceed southward along the existing Trans Alaska Pipeline System (“TAPS”) right-of-way until near Fairbanks where it turns southeast along the Alaska Highway to the international border between Alaska and Yukon. Another wholly owned subsidiary of TransCanada, Foothills Pipe Lines Ltd. (“Foothills”), will construct the Canadian portion of the pipeline that will connect with the Alaskan section at the Yukon border. The Canadian section of the pipeline will continue to follow the Alaska Highway to the Alberta border at Boundary Lake. An extension by Foothills of the existing Prebuild facilities³ to connect with the Project at Boundary Lake would provide shippers with access to existing and expanded downstream pipeline infrastructure, which will provide more than sufficient take-away capacity for ANS gas to most major U.S. lower-48 and Canadian markets. TransCanada’s proposed pipeline route is the certificated ANGTS route that has been sanctioned by both the U.S. Congress and Canadian Parliament.

TransCanada’s analysis concludes that by extending Foothills’ Prebuild facilities north to Boundary Lake and maximizing the spare capacity offered by the existing natural gas infrastructure downstream of Boundary Lake, ANS gas supplies would attract the best netback price. This enhanced netback value stems primarily from the market diversification provided by the existing infrastructure.

² Pipeline quality gas is obtained by removing most of the heavy hydrocarbons, moisture, CO₂ and other impurities from the natural gas stream.

³ The phrase “Prebuild facilities” refers to those segments of the ANGTS that were constructed by Foothills within Canada prior to the construction of the remainder of the ANGTS.

Figure 1: Proposed Pipeline System



2. Stranded Gas Production Estimates

AS 43.82.100 stipulates the conditions that must be met in order for a proposal to be considered a “qualified project.” TransCanada’s proposed project satisfies these requirements based on the following information:

- i. According to AS 43.82.100(1)(A), a proposal is considered to be a “qualified project” if it “principally involves the transportation of natural gas by pipeline to one or more markets.” TransCanada’s proposed project is a 1,710-mile natural gas pipeline from Prudhoe Bay, Alaska to Boundary Lake, Alberta. At Boundary Lake, the pipeline will interconnect with an extension by Foothills of the existing Prebuild facilities through which the ANS gas will have access to every market in North America.
- ii. In addition, a proposal is considered to be a “qualified project” under AS 43.82.100(2) if it “would produce at least 500,000,000,000 cubic feet of stranded gas within 20 years from the commencement of commercial operations.” TransCanada’s proposed project has a design capacity of 4.5 Bcfd and engineering studies show that it could be expanded efficiently to 5.9 Bcfd. However, even if never expanded, the system still would be capable of transporting approximately 32,850 Bcf of gas over the course of 20 years of operation. This volume greatly exceeds the minimum Alaska production of 500 Bcf required under AS 43.82.100(2).

- iii. Finally, AS 43.82.100(3) requires that the proposed project be “capable...of making gas available to meet the reasonably foreseeable demand in this state for gas within the economic proximity of the project.” The project proposed by TransCanada will be capable, subject to required regulatory, technical and commercial considerations, of delivering gas to distribution systems to serve communities in the State of Alaska that lie within the economic proximity of the project.

In light of the preceding information, TransCanada’s proposed pipeline constitutes a “qualified project” within the meaning of AS 43.82.100.

3. Project’s Ability to Meet Intrastate Gas Demand

TransCanada recognizes the State of Alaska’s desire to provide access to gas in order to meet the “reasonably foreseeable” demand for gas in various areas of the State that may be in the “economic proximity” of the project. TransCanada is committed to working cooperatively with the State of Alaska, municipalities and potential downstream investors such as local distribution companies, utilities and industrial users to identify economically viable markets and off-take points along the pipeline route.

It will be the responsibility of investors in the lateral facilities to assess the economic feasibility of such laterals by preparing the necessary market research, engineering studies, and capital cost estimates. TransCanada will work cooperatively with potential developers by supplying the necessary technical information and design parameters, in order to facilitate the developers’ efforts to construct transportation or distribution laterals.

TransCanada’s pipeline design already contemplates several points of interconnection for transportation or distribution laterals to serve communities within Alaska. These points as currently contemplated are discussed in more detail in Section C.4. TransCanada would look for long-term shipping contracts with creditworthy shippers to underpin the cost of facilities at in-state delivery points. TransCanada will provide non-discriminatory transportation services to all creditworthy downstream shippers.

B. Sponsor Qualification

1. Identity of Sponsor

This application is submitted by TransCanada and ANNGTC. TransCanada is a leading North American energy company. Created in 1951, TransCanada is focused on natural gas transmission and power services with employees who are expert in these businesses. TransCanada's network of approximately 39,000 kilometers (24,200 miles) of pipeline transports the majority of Western Canada's natural gas production to the fastest growing markets in Canada and the United States. TransCanada owns, controls or is constructing nearly 4,700 megawatts of power – an equal amount of power can meet the needs of about 4.7 million average households.

ANNGTC is a partnership that was formed on January 31, 1978 and is organized under the laws of the State of New York. The partnership was formed for the purpose of constructing and operating a natural gas pipeline and related facilities from Prudhoe Bay, Alaska to the Alaskan-Canadian border as part of the ANGTS to transport Alaskan natural gas for use in the lower 48 states. The pipeline segment in Alaska is referred to as the "Alaskan Segment" of ANGTS.

The partnership's role is to plan, design, finance, construct and place the line in service as soon as practicable, and subsequently to own and operate it safely and efficiently. The current partners of the partnership are two wholly-owned subsidiaries of TransCanada: United Alaska Fuels Corporation and TransCanada PipeLine USA, Ltd.

TransCanada and its subsidiary, ANNGTC, have worked diligently for more than 25 years to further the development of Alaska's stranded gas reserves by developing the Alaskan Segment. Until now these efforts have been hampered by unfavorable economics related to the remote location of Alaskan gas supplies relative to other North American natural gas supplies. However, recent lower-than-expected production performances in the lower-48 and Canadian natural gas basins, combined with significant growth in natural gas demand over the last decade, have created favorable market conditions for the commercialization of ANS natural gas.

TransCanada's network of pipeline assets provides Alaskan gas with unparalleled access to growing markets across the continent: the Pacific Northwest and California⁴; the U.S. Midwest, including the Chicago hub; eastern Canada; and the U.S. Northeast, including New England and New York City.

⁴ TransCanada's recent agreement to acquire National Energy & Gas Transmission's Gas Transmission Northwest Corporation (formerly Pacific Gas Transmission), which is anticipated to close in June of 2004, provides shippers with access to the robust markets of the Pacific Northwest and northern California.

Below are brief descriptions of TransCanada's natural gas transmission assets in North America. Please refer to TransCanada's system map in Appendix A.6 for the location of these assets.

- **Alberta System** – TransCanada's 100 percent owned natural gas transmission system in Alberta gathers natural gas for use within the province and delivers it to provincial boundary points for connection with the Canadian Mainline, BC System, Foothills System and other pipelines. The 14,100-mile system is one of the largest carriers of natural gas in North America.
- **Canadian Mainline** – TransCanada's 100 percent owned natural gas transmission system in Canada extends 9,300 miles from the Alberta/Saskatchewan border east to Québec/Vermont and connects with other natural gas pipelines in Canada and the U.S.
- **BC System** – TransCanada's 100 percent owned natural gas transmission system extends 125 miles from Alberta's western border through B.C. to the U.S. border, serving markets in B.C. as well as the Pacific Northwest and California.
- **Foothills System** – TransCanada's 100 percent owned 650-mile natural gas transmission system in western Canada carries natural gas for export from central Alberta to the U.S. border to serve markets in the U.S. Midwest, Pacific Northwest and California. These are the Canadian ANGTS Prebuild facilities.
- **Ventures LP** – Ventures LP, 100 percent owned by TransCanada, owns a 75-mile pipeline and related facilities which supply natural gas to the oil sands region of northern Alberta, and a 17-mile pipeline which supplies natural gas to a petrochemical complex at Joffre, Alberta.
- **Great Lakes Gas Transmission** – Great Lakes connects with the Canadian Mainline at Emerson, Manitoba and serves markets in central Canada and the eastern and Midwestern U.S. TransCanada has a 50 percent ownership interest in this 2,100-mile pipeline system.
- **Trans Québec and Maritimes Pipeline** – TQM is a 360-mile natural gas pipeline system which connects with the Canadian Mainline and transports natural gas from Montréal to Québec City and to the Portland system. TransCanada holds a 50 percent ownership interest in TQM and is the operator of these facilities.
- **Iroquois Gas Transmission** – Iroquois connects with the Canadian Mainline near Waddington, New York and delivers natural gas to customers in the northeastern U.S. TransCanada has a 41 percent ownership interest in this 420-mile pipeline system.
- **Portland Natural Gas Transmission System** – Portland operates a 300-mile pipeline that connects with TQM near East Hereford, Québec and delivers natural

gas to customers in the northeastern U.S. As at December 31, 2003, TransCanada had a 61.7 percent ownership interest in Portland.

- **Gas Transmission Northwest Corporation (GTN)** – GTN, formerly known as Pacific Gas Transmission, connects with TransCanada’s system in British Columbia and runs 1,356 miles south to the Oregon-California border. It also includes the North Baja pipeline system, an 80-mile system that operates in Arizona and California, connecting with a system in Mexico. TransCanada’s recent agreement to acquire GTN is expected to close in June of 2004.
- **Northern Border Pipeline** – Northern Border is a 1,250-mile natural gas pipeline system which serves the U.S. Midwest from a connection with the Foothills System. TransCanada indirectly owns approximately 10 percent of Northern Border through its 33.4 percent ownership interest in TC PipeLines, LP.
- **Tuscarora** – Tuscarora operates a 240-mile pipeline system transporting natural gas from Malin, Oregon to Wadsworth, Nevada with delivery points in northeastern California. TransCanada owns an aggregate 17.4 percent interest in Tuscarora, of which 16.4 percent is held through TransCanada’s interest in TC PipeLines, LP.
- **CrossAlta** – CrossAlta Gas Storage & Services Ltd. (CrossAlta) is an underground natural gas storage facility connected to the Alberta System and is located near Crossfield, Alberta. CrossAlta has a working natural gas capacity of 40 billion cubic feet (Bcf) with a maximum deliverability capability of 410 million cubic feet per day (MMcfd). TransCanada holds a 60 percent ownership interest in CrossAlta.

2. Statement Regarding Sponsor Qualifications

AS 43.82.110(1) of the Stranded Gas Development Act defines a “qualified sponsor” as a person who “intends to own an equity interest in a qualified project, intends to commit gas that it owns to a qualified project, or holds the permits that the department determines are essential to construct and operate a qualified project.” TransCanada constitutes a “qualified sponsor” within the meaning of this subsection in two respects.

First, TransCanada intends, either directly or through affiliates, to own an equity interest in the project. The nature and size of that interest will be determined later as the commercial structure of the proposed pipeline project becomes better defined. TransCanada reserves the right to assign all or a portion of its interest to other qualified sponsors, including Alaska Native Corporations, who wish to own an equity interest in the Alaskan Segment of the ANGTS. A condition of transfer would be that the transferee would agree that the Alaskan Segment would interconnect with the Foothills system at the Yukon border as contemplated in the Agreement on Principles between Canada and the United States for the Alaska Highway Pipeline Project.

Second, ANNGTC and Foothills, both wholly owned subsidiaries of TransCanada, possess permits that “are essential to construct and operate” the pipeline. The genesis of ANNGTC’s permit dates back to 1976 and the passage of the Alaska Natural Gas Transportation Act (“ANGTA”).

In order to avoid the inter-agency cross-jurisdictional issues that significantly delayed and increased the cost of the TAPS, ANGTA established, among other things, a streamlined process to reach an expedited decision on the selection and construction of a transportation system for delivery of Alaskan gas to lower-48 markets. The statute also provided for the establishment of the Office of Federal Inspector (“OFI”), to which were transferred certain authorities of the Departments of Interior, Transportation, Agriculture, Treasury, Labor, and Energy, the Environmental Protection Agency, the Army Corps of Engineers, and the Federal Energy Regulatory Commission (“FERC”). The OFI has primary responsibility for the coordination of federal permitting, enforcement of permit conditions, and facilitation and oversight of the construction and initial operation of the U.S. portions of the ANGTS.

Under ANGTA, President Carter issued a *Decision and Report to Congress on the Alaska Natural Gas Transportation System* (“Presidential Decision”), which officially designated ANNGTC’s predecessor (Alcan Pipeline Company) as the entity to construct and operate the Alaskan Segment of the ANGTS. The Presidential Decision also officially designated ANGTS as the pipeline to ship Alaskan gas to the lower-48. The Presidential Decision was formalized by a Joint Resolution of Congress on November 2, 1977, after which the FERC issued conditional Certificates of Public Convenience and Necessity (“CPCNs”) authorizing construction of the Alaskan Segment of the ANGTS. Moreover, as recently as 1999, the FERC indicated that they would fully honor their commitment to the ANGTS. Consequently, ANNGTC (and its parent company, TransCanada) remain the sole and rightful holder of U.S. government-sanctioned, FERC certificates to construct the Alaskan Segment of the ANGTS.

On the Canadian side, TransCanada, through its wholly owned subsidiary, Foothills, is the sole and rightful holder of the Canadian government-sanctioned certificates to construct the Canadian Segment of the ANGTS. These certificates were first granted to Foothills in April 1978 when the Canadian Parliament enacted the Northern Pipeline Act (“NPA”) which, following a competitive hearing at the National Energy Board (“NEB”), authorized a single, independent pipeline through Canada to transport Alaskan gas to market.

The NPA also established the Northern Pipeline Agency as a single-window regulatory authority designed to expedite the project, establish consultation with stakeholders and review and approve design, construction and environmental protection plans. The NPA, which remains in full force and effect, has proven to be an effective regulatory structure, providing a comprehensive, rigorous, flexible and streamlined project review process. This process was used to approve the construction by Foothills of the Prebuild facilities and, since completion of those facilities in 1982, the NPA process has been used for five system expansions, the most recent being in 1998. As recently as October

2003, the Government of Canada once again reaffirmed its support for the NPA framework to transport Alaskan gas across Canada.

Given that TransCanada intends to own an equity interest in the project and, through its wholly owned subsidiaries, already holds U.S. and Canadian government-sanctioned permits to construct the ANGTS in both Alaska and Canada, TransCanada clearly satisfies the definition of a “qualified sponsor” within the meaning of AS 43.82.110(1).

3. Qualification Criteria

The Stranded Gas Development Act also stipulates that, in order to be considered a “qualified sponsor,” a project sponsor must satisfy at least one of the criteria listed in AS 43.82.110 (2), which measure a sponsor’s access to gas resources and financial strength.

TransCanada meets the net worth requirement under AS 43.82.110(2)(D), which requires that a project sponsor have “a net worth equal to at least 10 percent of the estimated cost of constructing a qualified project.” The estimated capital cost of the Alaskan Segment of the ANGTS is approximately US\$6.8 billion in 2004 dollars. The book value of TransCanada’s equity is approximately US\$4.6 billion (Cdn\$6.1 billion), and the current market value of TransCanada is approximately US\$9.5 billion, which far exceeds 10 percent of the estimated cost of the project, i.e. US\$680 million. Evidence of TransCanada’s net worth can be found in Appendix A.1, which presents TransCanada’s First Quarter 2004 Quarterly Report to Shareholders and 2003 audited Annual Report.

C. Proposed Project Plan

1. Work Accomplished to Further the Project

TransCanada, directly and through its subsidiaries, has expended thousands of person-years and hundreds of millions of dollars to advance the Alaska Highway Pipeline project. Over the last 25 years, TransCanada, ANNGTC and Foothills collectively have spent approximately US\$500 million developing engineering designs, detailed route maps, drawings and surveys, as well as geotechnical and environmental-related data specifically for the ANGTS. In addition, Foothills has invested more than US\$1.2 billion constructing and expanding the Prebuild facilities in preparation for the arrival of Alaskan gas.

These technical, environmental and regulatory efforts have generated substantial tangible and intangible assets which significantly reduce regulatory and permitting risk. Consequently, TransCanada enjoys a timing advantage of at least two years over any greenfield project along a similar route under the existing ANGTA and NPA legislations. The Alaskan segment of TransCanada's proposed project could also be built under other legislation such as the Enabling Legislation which is being considered in the U.S. Congress as part of the comprehensive Energy Bill.

TransCanada's efforts can be grouped in the following eight categories, which are discussed in more detail below:

- Certificates / Permits;
- Right-of-way ("ROW");
- Regulatory;
- Commercial;
- Downstream;
- Technical Work Accomplished;
- Technology; and
- Alaska Native Groups/Canadian First Nations.

Certificates / Permits

Together, ANNGTC and Foothills hold the existing certificates to construct and own the ANGTS and, in addition, hold other valuable permits and authorizations, which remain in full force and effect and are as valid today as when issued. Possession of these regulatory assets increases regulatory certainty and therefore the time advantage enjoyed by TransCanada.

Specifically, the U.S. and Alaska certificates and permits held by ANNGTC include the following:

- FERC Conditional Certificate of Public Convenience and Necessity (1 FERC ¶61,248 (1977)), issued: December 16, 1977
- Two Clean Water Act Section 404 Wetland Permits
 - Beaufort Sea Permit (File No. Beaufort Sea 176), originally issued: July 25, 1983 (effective date)
 - Sagavanirktok River Permit (File No. Sagavanirktok River 120), originally issued: January 4, 1984 (effective date)
- Two Clean Water Act Section 401 Certifications (issued in conjunction with the Section 404 Wetland Permits)
- Two Coastal Zone Management Act / Alaska Coastal Management Program Certifications (issued in conjunction with the Section 404 Wetland Permits)

The Canadian certificates were granted under the NPA, for the construction of the Canadian Segment of the Alaska Highway Pipeline Project.

Right-of-way (ROW)

Of the 745-mile pipeline route in Alaska, TransCanada has acquired approximately 434 miles of right-of-way for the pipeline across federal land and state land that has been transferred by the federal government. TransCanada is re-activating its application for right-of-way for the project across state-controlled land as per the April 19, 2004 MOU between the State of Alaska and TransCanada under which the State agrees to expeditiously resume processing TransCanada's ROW lease application. It is estimated that 85% of the land crossed by the proposed Alaska pipeline is state- or federally-owned and the remaining 15% is privately held.

TransCanada, through its subsidiaries ANNGTC and Foothills, holds land tenures in both the United States and Canada, which provide a significant advantage over any greenfield gas pipeline project.

ANNGTC holds a longstanding and continuing land tenure in the United States, including: a right-of-way across Federal lands for the construction, operation, maintenance, and termination of the Alaskan Segment of ANGTS, which was granted in December 1980; and a State right-of-way lease application which originally was submitted in 1981 and is being refreshed and re-activated in order to be resubmitted in June 2004.

Similarly, Foothills holds longstanding and continuing land tenures in Canada along the ANGTS route, including: an easement for the entire pipeline route through the Yukon; registered map reserves in northern British Columbia (under Order in Council); a

Consultative Notation for Crown lands in Alberta; and an established consultation program with affected communities and First Nations.

Regulatory

Unique regulatory regimes have been established in both the U.S. and Canada to expedite the review and approval of the ANGTS.

The regulatory regime in the United States, which was established under ANGTA and the President's Decision, and which remains valid today, provides significant regulatory, permitting and timing advantages to reduce risk and expedite the transportation of ANS gas to North American markets. In addition to giving effect to the "Agreement Between Canada and the United States of America on Principles Applicable to a Northern Natural Gas Pipeline" ("Agreement on Principles" September 20, 1977), it results in increased coordination between federal and state agencies, in the expeditious issuance of federal authorizations needed for the ANGTS, and in enhanced regulatory certainty with respect to the ANGTS.

Similarly, the ANGTS regulatory regime in Canada, which was established under the NPA, is valid today and provides significant advantages for design and construction of the ANGTS. In addition to giving effect to the Agreement on Principles, it provides for a "single window" regulatory agency to oversee the expeditious construction of the ANGTS. Moreover, the regime provides significant flexibility with respect to the final design for the Canadian sections to allow for modernizing to meet the standards and requirements of the day. This flexibility and ability to modernize has been proven through five expansions of Foothills' Prebuild facilities over the last 20 years with the most recent one in 1998 under the NPA.

Moreover, under the ANGTA and the NPA, both ANNGTC and Foothills have officially been designated as the entities to construct the ANGTS.

TransCanada has extensive experience dealing with energy regulatory bodies and an excellent record of managing our projects based on timely and favorable regulatory approvals.

In the United States, we have expertise with both the FERC and the Office of Pipeline Safety (OPS), as well as with regulators in the states of the northern tier of the country. In Canada, we are very familiar with the requirements and modus operandi of the Northern Pipeline Agency, National Energy Board ("NEB"), the Alberta Energy Utilities Board ("EUB"), and other provincial and territorial energy regulators.

Our expertise in the regulatory arena extends throughout the company and across the jurisdictions in which we are active – federal, state, provincial, and territorial. It is reflected in our ongoing contribution to regulatory and public policy development, in our facility and rates applications, and in the tools that we have developed to ensure compliance with regulatory and legislative requirements. We have expertise in both

Canadian and American administrative law, and legal staff who specialize in commercial, environmental, First Nation, land law and policy.

Commercial

TransCanada understands the importance of developing a commercial structure that benefits all project participants and stakeholders. An essential feature of any successful commercial structure would be the allocation of risk among those project participants best able to absorb such risk.

In early 2002, TransCanada, through its subsidiary Foothills, presented a detailed, three-volume commercial proposal to the Alaska North Slope producers, outlining the merits of the ANGTS as the preferred vehicle for commercializing stranded ANS gas. The proposal sought discussions with the ANS producers to coordinate the development of a definitive project scope that would satisfy the needs of producers and pipeline companies alike and include the following features:

- System design, capacity offerings, timing and other capabilities fitting ANS production requirements;
- Negotiated tolls and risk sharing mechanisms; and
- Timing and cost advantages of ANGTS over a greenfield project.

TransCanada is also examining alternative commercial structures and continues to work toward maximizing the commercial viability of the ANGTS. In this regard, TransCanada resolved Foothills' Special Charge with Foothills' shippers and the Canadian Association of Petroleum Producers; the NEB approved the resolution in March 2003. The resolution waives Foothills' obligation to repay all past and future Special Charge collections when Alaskan gas starts flowing on the Foothills system.⁵

Downstream

The desire to develop and commercialize stranded ANS gas supplies, as expressed in the U.S. / Canada Agreement on Principles, resulted in the construction of three successful pipeline systems: Foothills' Prebuild, Northern Border and an expansion of National Energy & Gas Transmission's Gas Transmission Northwest (formerly Pacific Gas Transmission). Since Foothills' original Prebuild construction in 1981-82, there have been five expansions, including as recently as 1998. TransCanada is prepared to further expand the existing Foothills Prebuild system and to extend the system to Boundary Lake in order to ensure sufficient downstream take-away capacity for Alaskan gas.

⁵ The Special Charge was imposed on Foothills shippers in order to pay for part of the pre-1981 development cost of the Canadian section of ANGTS.

The construction of additional pipeline capacity out of the Western Canadian Sedimentary Basin (“WCSB”) has resulted in spare capacity on several Canadian pipelines. TransCanada’s Alaska pipeline proposal represents an opportunity to make effective use of that spare capacity. Foothills’ Pre-build System is integrated with Western Canada’s pipeline grid which reduces the risk of underutilizing existing pipelines. The Foothills system provides market diversity because Alaskan gas can continue on an extension of the Foothills system south of Boundary Lake, Alberta and from there can be shipped to markets in British Columbia, Alberta, the Pacific Northwest, California, the U.S. Midwest, Eastern Canada or the U.S. Northeast, including New York City. It is precisely this ability to optimize Canada’s existing pipeline infrastructure that sets the ANGTS apart from a bullet line to Chicago.⁶ And, unlike a bullet line, optimizing the use of existing Canadian infrastructure will reduce costs for all shippers and end-users.

TransCanada’s analysis, which has been shared with the producers, concludes that the key benefits of integrating Alaskan gas with the existing pipeline infrastructure as compared to a stand-alone, bullet pipeline are as follows:

- Consistent with existing legislations;
- Higher netbacks at Prudhoe Bay and Boundary Lake;
- Lowest risk of capital cost overruns;
- Reduced capital cost;
- Greatest diversity of market access;
- Spreading of downstream risk;
- Lower and more stable tolls;
- Access to the Alberta hub (AECO/NIT);
- Staged construction, with shorter lead times; and
- Shortest lead time for capital decisions.

Technical Work Accomplished

TransCanada has developed a significant amount of engineering, field data, and technical information that gives TransCanada significant cost and timing advantages over a greenfield project, and which results in greater certainty going forward. This information comes from field test programs, field data gathering programs, and other programs and surveys that have been conducted with respect to the ANGTS. In

⁶ A “bullet line” means a natural gas pipeline that is dedicated to transporting ANS natural gas from Prudhoe Bay, Alaska through Canada to a terminus near Chicago, Illinois without interconnecting with any existing natural gas transportation system in Canada or the U.S. lower-48 along its route.

addition, pipeline alignment sheets and draft manuals are advantageous technical information held by ANNGTC. While most of these data remain current, even data that might need to be updated are valuable as they provide a basis upon which to update, which will result in less cost and time spent than if starting at the beginning.

A sample of the engineering, field data and technical information compiled to date for the Alaska portion of the ANGTS includes the following:⁷

- Field Test Programs
 - Frost heave
 - Fairbanks frost heave test site
 - Chilled pipe test sites
 - Differential heave test sections
 - Heat pipe test site
 - Soil uplift resistance program
 - Surface disturbance test sites
 - Full scale pipe burst and bend tests
- Field Data Gathering Programs
 - Geotechnical field program
 - Bore hole drilling programs for pipeline centerline, mineral material sites, and compressor station and other sites
 - Mapping programs
 - Geophysical studies, including soil resistivity, slope stabilization reconnaissance, fault studies, pipeline centerline studies, and seismic refraction
 - Laboratory testing programs
 - Geotechnical databases
 - River and stream surveys, including stream entry studies and disturbance of stream and wetland crossings
- Technical Information
 - Technical reports based on integration of data and engineering

⁷ Similar engineering, field data and technical information have also been compiled for the Canadian portion of the ANGTS.

- Design criteria manuals for all components of the pipeline, compressor and meter stations, operations control center and supervisory control systems, and telecommunications, for example:
 - o Frost Heave Design Criteria and Methodology
 - o Geotechnical/Geothermal Analysis
 - o River, Stream, and Wetlands Crossings
- Technical and environmental plans, pursuant to Stipulation 1.6.1 of the Federal Grant of Right-of-Way
- Pipeline alignment sheets, as revised
- Mineral Material Acquisition Plan
- Authorization to Proceed (“ATP”) Application Plan
- Notice to Proceed (“NTP”) Application Plan

In 2000, as part of its ongoing efforts to further the project, TransCanada re-examined various route alternatives for developing Alaska’s stranded gas and delivering it to market. In preparing these analyses, TransCanada analyzed different pipe configurations and prepared detailed cost estimates for each scenario. The Alaska Highway route was determined to be the most cost-effective option.

Technology

Since the 1960s, TransCanada has led and participated in numerous technical and economic studies and proposals for Arctic and sub-Arctic pipeline projects. In the process, TransCanada has analyzed, in considerable detail, large-diameter pipeline design and construction. Armed with almost half a century of experience operating large-diameter, high-pressure natural gas pipelines, compressor stations and measurement stations in regions where winter temperatures can drop below -40°F, TransCanada has the expertise to develop the Alaska pipeline.

TransCanada has continuously improved upon its cold climate expertise by incorporating learnings into the operating procedures of existing facilities and into the design criteria for new projects. TransCanada’s active research program has focused on material, strain-based design and structural reliability; fracture behavior and control; frost heave and thaw settlement in permafrost and discontinuous permafrost areas; trenching techniques; horizontal drilling methods; buoyancy control and advanced software development.

The application of many of these technological advancements has increased efficiencies, safety and environmental protection while decreasing costs. A sample of technological advancements is listed below; additional details can be found in Appendix A.5.:

- **High-strength pipe materials**
 - **X80 (Grade 550)** – TransCanada first installed X80 pipe on its system in 1994. Since that time, TransCanada has installed approximately 300 miles of large-diameter X80, including projects dealing with discontinuous permafrost in northwestern Alberta. The use of X80 continues to lower pipeline material and construction costs by reducing pipeline weight and reducing construction impacts on the right-of-way.
 - **X100 (Grade 690)** – TransCanada has installed two X100 sections. TransCanada continues to work with various partners, including producers and steel companies, on the implementation of X100. X100 has the potential to reduce considerably the costs of pipeline projects, allow higher operating pressures (and higher flows) while continuing to maintain the structural integrity and reliability of the system. All of the required work to validate the use of the technology has been completed, including several full-scale fracture tests that have been conducted at high pressures and low temperatures. X100 is an approved material in section Z245.1 of the Canadian Standard Association and is currently under approval by the American Petroleum Institute and the International Standard Organization.
 - **X120 (Grade 825)** – Recently TransCanada, in collaboration with ExxonMobil, installed a short section of X120 pipe in TransCanada Alberta System. This new high-strength steel has been under development for many years and is currently being evaluated for application in high pressure pipe designs.
- **Fracture control plans** – Such plans are now an integral element of any regulatory application in support of new projects. TransCanada has developed fracture control plans for a northern pipeline. TransCanada engineers have applied and upgraded their knowledge and experience to control the propagation of longitudinal fractures, and to understand the gas decompression behavior that is a key aspect of this phenomenon. These approaches have been validated through some full-scale fracture tests.
- **Frost heave and thaw settlement** – Frost heave and thaw settlement are unique northern pipeline design challenges. Numerous transitions to and from permafrost and the related frost heave and thaw settlement can induce excessive stress and strain on the pipe. Northern Alberta's discontinuous permafrost, where TransCanada operates several hundred miles of gas pipelines, has given TransCanada the experience it needs to design pipelines for Alaska.
- **Strain-based design** – This concept specifies the pipe material characteristics required to meet expected strain loads. TransCanada is a leader in the development and application of strain-based design methodologies. We have an in-depth understanding of material and structural behavior, an extensive operations database, and advanced analytical models to support design innovations.

- **Mechanized welding** – Mechanized welding will be essential for mainline welding of any northern pipeline project. Automated and higher productivity welding, with minimum intervention by the welder, will be a distinct advantage in harsh conditions and short construction seasons. TransCanada and BP Exploration are developing a new, fully automated pipeline welding system. Advanced mechanized welding has been accompanied by the introduction of mechanized ultrasonic inspection. TransCanada has led the industry in the application of this technology. Advanced welding design, processes and inspection ensure the structural integrity of the field weld.
- **Advanced monitoring, control and communication systems** – TransCanada operates one of the largest and most sophisticated gas pipeline systems in the world. We use leading-edge software to operate our SCADA system, employing a variety of telecom options to communicate with our remote sites, which allows us to choose the right telecom solution based on site requirements and cost.⁸ Our systems are highly available (99.9 percent), fully redundant with a remote hot standby contingency site. By applying new technology, TransCanada has gone from 14 control centers with a supervisory gas control center down to a single gas control center.

Alaska Native Groups / Canadian First Nations

TransCanada places a significant emphasis on building and maintaining relations with First Nations communities and peoples. We currently have gas transmission facilities on 12 Indian Reserves and Métis Settlements. In addition, we liaise regularly with about 150 First Nations communities situated within 31 miles of our facilities. We also communicate with numerous other Alaska Native Groups, including Alaska Native Corporations.

We have created capacity within our company to manage the diversity of the First Nations community. Our ability to build and maintain productive relationships with First Nations communities is unsurpassed in the industry. Our success in this area is the result of a number of key factors, which include providing business opportunities to First Nations businesses, training, mentoring and education programs, community agreements and First Nations liaison officers. TransCanada will bring its experience and expertise in building and maintaining productive relationships with Native Groups to its engagements with Alaska Natives and Alaska Native entities.

TransCanada, through its subsidiary Foothills, has maintained positive relationships (through consultation and negotiation) with affected First Nations in Canada along the Alaska Highway pipeline route since the 1970s. For example, in January 2004 these negotiations culminated in Foothills and the Kaska First Nation signing an Agreement-in-Principle that provides the framework for a future participation agreement. The

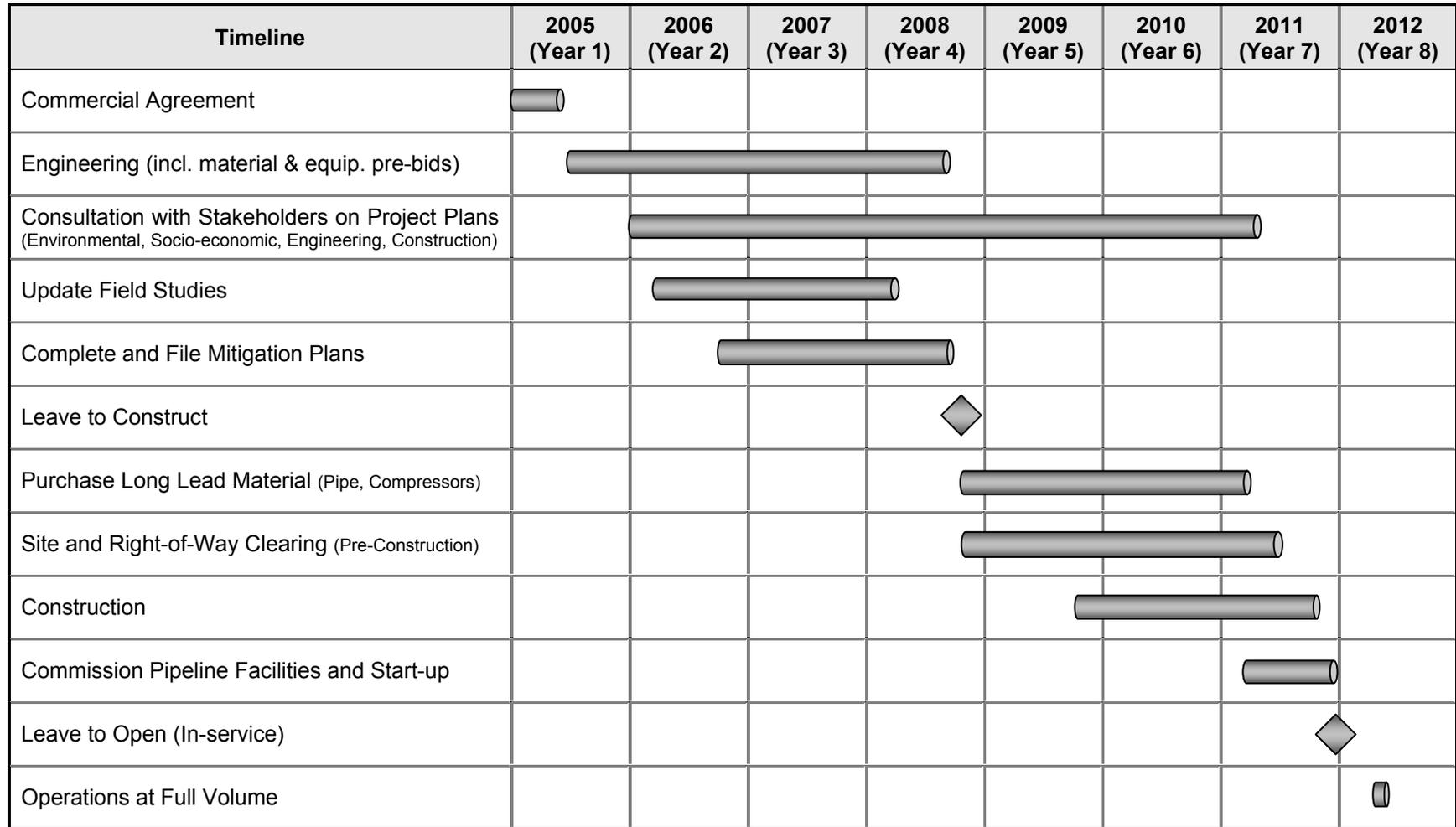
⁸ “SCADA system” means the supervisory control and data acquisition system.

Agreement-in-Principle marks the completion of the second stage of negotiations that is expected to lead to a participation agreement for the Alaska Highway Pipeline Project.

2. Proposed Project Schedule

TransCanada has prepared a plan to develop successfully an NPS 48 pipeline system over a period of approximately seven years following the execution of commercial arrangements with shippers. The proposed schedule depends on the timely commitment of producers, downstream markets and other key project stakeholders. If delays were to arise, the schedule would be modified accordingly. The preliminary schedule is shown below followed by brief descriptions of the key activities and milestone decision points for each of the seven years.

Figure 2: Proposed Development Activity Schedule



Description of Development Activities

- Year One:** Secure commercial agreement and finalize Precedent Agreements with shippers. Begin detailed planning for the project. Begin comprehensive updates of the EIS and other permit applications to federal, state and provincial regulatory agencies in the United States and Canada. Commence agency and other stakeholder consultations. Initiate discussions with prospective lenders on project, and begin basic engineering work.
- Year Two:** Continue with consultations and right-of-way issue resolution. Continue with field studies to support the NPA and FERC approval processes. Continue discussions with prospective lenders on project financing. Commence the procurement process for major material and compressor equipment orders. Complete basic engineering and commence detailed engineering and design work.
- Year Three:** Complete socioeconomic consultation and planning. Continue procurement activities for major contracts, materials and equipment. Continue detailed engineering and permitting work.
- Year Four:** Receive Canadian Leave to Construct. Receive final FERC Notice to Proceed and obtain Project Sanction. Execute financing agreements. Release major material and compressor equipment purchase orders. Execute pipeline and compressor station construction contracts. Begin pre-construction activities on pipe yards, construction camps, access roads and compressor station yards. Complete detailed engineering and design work for initial construction.
- Year Five:** Manufacture and ship major materials and equipment. Begin pipeline and compressor station construction activities.
- Year Six:** Complete compressor module fabrication. Continue pipeline and compressor station construction during winter and summer months.
- Year Seven:** Complete pipeline and compressor station construction and obtain Leave to Open. Purge and pressurize the pipeline. Perform start-up and commissioning of the compressor stations. Place the facilities into service (January 2012), assuming commercial agreement reached by mid 2005. Build volumes to reach full volume flow in May 2012.

3. Description of Leases and/or Properties

TransCanada has reviewed publicly-available reserve estimates and has determined that there is sufficient supply within the region to support the project proposal. These reserve estimates, presented in Appendix A.3, show that proven natural gas reserves on

state lands in the North Slope total approximately 34 Tcf, the vast majority of which is located in Prudhoe Bay.⁹

TransCanada envisions that the proposed pipeline would gather supply from the following sources:

- Prudhoe Bay Unit – Gas reserves in this field are estimated at 24 Tcf;
- Point Thomson Unit – This field is estimated to contain reserves of 8 Tcf;
- Duck Island Unit – This field is estimated to contain reserves of 843 Bcf;
- Kuparuk River Unit – Gas reserves in this field are estimated at 611 Bcf; and
- North Star – This field is estimated to contain reserves of 450 Bcf.

Assuming a 4.5 Bcfd pipeline, reserves of this scale would last approximately 21 years. However, the life of the project would no doubt be extended because this reserve figure does not include reserves on other Alaska North Slope lands. With respect to undiscovered fields, the Minerals Management Service indicated in a January 2001 study, that undiscovered, technically recoverable, conventional natural gas resources in Arctic Alaska could be as high as 156 Tcf of gas. This volume of gas is broken down roughly as follows: 64 Tcf in Northern Alaska (onshore), 32 Tcf in the Beaufort shelf, and 60 Tcf in the Chukchi shelf.

4. Method to Satisfy Intrastate Natural Gas Demand

TransCanada recognizes the State of Alaska's desire to ensure that Fairbanks and other communities in the "economic proximity" of the pipeline have access to gas from the pipeline. TransCanada is committed to working cooperatively with the State of Alaska and municipalities in the vicinity of the pipeline, as well as potential investors to identify economically viable markets and points of interconnection along the pipeline route that would enable regional communities to purchase gas through local distribution companies.

TransCanada's Alaska pipeline design currently provides for several intermediate points of interconnection along the pipeline route, but their number and location have not yet been finalized. It should be emphasized that the locations of these delivery points remain subject to commercial feasibility. Given that TransCanada will only provide transportation services and does not intend to own the gas, construction of the laterals would have to be underpinned by long-term shipping contracts with creditworthy shippers.

⁹ Table III.1, Oil and Gas Reserves, Division of Oil and Gas 2002 Report, Alaska Department of Natural Resources and Department of Revenue.

TransCanada would work within the FERC's regulatory framework of fair and open access to ensure the non-discriminatory treatment of all potential shippers. Local distribution companies, community governments, industry and marketers will all be able to contract for capacity on terms at least as favorable as those available to other shippers.

5. Options to Mitigate Project Impacts on Municipalities

TransCanada recognizes that, in the course of constructing the pipeline, additional demands will be placed on public services. TransCanada is committed to working closely and cooperatively with the State of Alaska and its resource agencies to develop ways to mitigate the potential adverse economic, social and environmental effects of the project. Our experience developing, constructing and operating pipelines throughout Canada, the United States, Latin America and Asia, has taught us the importance of tailoring mitigation plans to the needs of local communities. This process rests on a foundation of proactive and meaningful consultation.

In order to address the impacts on "affected municipalities,"¹⁰ TransCanada, in consultation with the State, Alaska Native groups and local communities, will develop programs designed to mitigate any negative socio-economic and environmental impacts. These programs will form part of a comprehensive Environmental Management Program (EMP) that will guide all aspects of planning, design, construction, operation and maintenance, and, if needed, eventual decommissioning.

In accordance with the existing federal regulatory process, TransCanada envisions conducting socio-economic assessments and consulting with Alaska Native groups during the permitting and preliminary engineering phases in order to identify specific community concerns, impacts, needs and mitigation options. TransCanada would solicit and consider input from affected communities to improve mitigation plans where feasible. In addition, TransCanada would conduct periodic information sessions with leaders and members of communities to discuss the progress of the project and address concerns as they arise.

While the State is responsible for implementing certain mitigation measures,¹¹ TransCanada recognizes the State's desire to provide work opportunities for Alaskans during construction of the project and the related obligations imposed on the project sponsor under AS 43.82.230. TransCanada intends to comply fully with all valid federal, state, and municipal laws relating to hiring Alaskan residents and contracting with Alaskan businesses to work in the State on the project.

¹⁰ "Affected municipality" means an economically affected municipality or a revenue-affected municipality as defined under AS 43.82.900.

¹¹ AS 43.82.500 and AS 43.82.505 oblige the State to share payments with municipalities in accordance with the principles of AS 43.82.520.

It must be emphasized that a project of this scope and scale will place significant demands on worldwide resources for materials, equipment and skilled labor. The availability of skilled labor is an issue that must be addressed at the outset. TransCanada would work cooperatively with the State and local colleges and universities to help establish a plan to promote the development of a skilled Alaskan workforce, prior to the commencement of field activities in the State.

TransCanada could work with local universities and high schools to help anticipate the future need for a qualified workforce as the project moves towards the procurement and construction phases. Moreover, Alaska has a number of training and development programs currently in place that facilitate the development of a skilled workforce. TransCanada recognizes the benefits of these programs and would work with the State to develop and enhance these and other programs in order to increase the availability of skilled Alaskan labor.

6. Options for the Safe Management and Operation of the Project

TransCanada conducts its business so that it meets or exceeds all applicable laws and regulations and minimizes risk to our employees, the public and the environment. It is these principles that guide TransCanada during all phases of project development, including engineering design, field studies, construction, operation and maintenance, and eventually decommissioning.

TransCanada is committed to maintaining its position as an industry leader in health, safety and environmental (HS&E) practices, to maintaining a safe and healthy workplace and to protecting environmental quality. We believe excellence in HS&E practices is vital to the well-being of all people everywhere and essential to all aspects of our global business.

It is TransCanada's intention to design, construct and operate the pipeline to meet or exceed all applicable safety standards, building on half a century of experience in cold weather pipeline design and construction. Specifically, the FERC will have jurisdiction over the pipeline. FERC regulations applicable to certification of pipelines under Section 7 of the Natural Gas Act and U.S. Department of Transportation ("USDOT") pipeline safety regulations require, among other things, that the design, construction and operation of the pipeline comply with the USDOT safety standards and regulations applicable to natural gas pipelines found at Title 49 C.F.R. Parts 191 and 192. Therefore, TransCanada will, at a minimum, be in compliance and follow the USDOT's pipeline safety regulations for the design, construction and operation of the pipeline.

Details of TransCanada's qualifications are presented in Appendices A.4 to A.6. Appendix A.4 describes TransCanada's administrative and technical qualifications, which the fact sheets in Appendix A.5 summarize. Appendix A.6 offers a map illustrating TransCanada's pipeline assets.

The following factors would be addressed in the design of the pipeline:

- Material, strain-based design and reliability-based design;
- Fracture behavior and fracture control;
- Frost heave and thaw settlement in permafrost areas; and
- Advanced design software development.

Construction and environmental focus areas would include:

- Trenching techniques in permafrost areas;
- Horizontal directional drilling techniques in permafrost areas; and
- Buoyancy control in permafrost areas.

Ultimately, the goal of the project is to provide safe and reliable delivery of natural gas to customers without adverse effect on employees, contractors, the public, or the environment. Managing the integrity of a gas pipeline system is key to accomplishing this goal. Operational excellence is achieved by implementing a comprehensive system of integrity management that includes, among others, the following items:

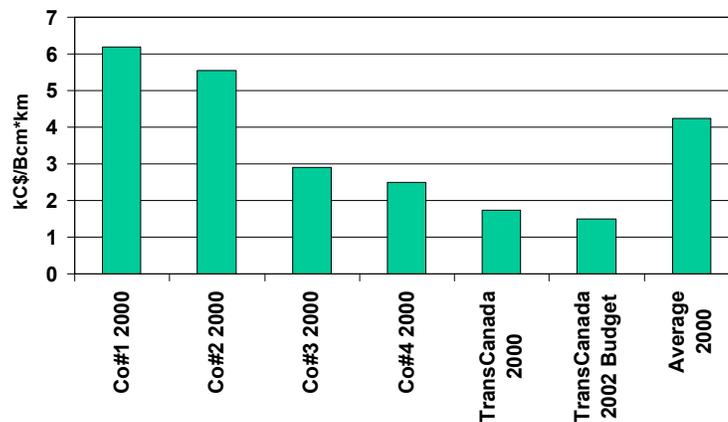
- **Operating procedures** – TransCanada’s operation and maintenance activities are governed by over 650 individual procedures that promote safety, environmental protection and efficiency in the operation of the pipeline. These procedures are known as TransCanada Operating Procedures (“TOPs”). TOPs are developed and revised in conjunction with our pipeline and plant maintenance plans, safety and environmental protection programs, and in response to legislated requirements in all applicable regulatory jurisdictions in which we operate.

TOPs are maintained electronically and are accessible at all locations across the organization. Electronic links with our state-of-the-art computerized maintenance management system allows for efficient access to the TOPs for field technicians at the same time as they are reviewing and issuing maintenance work orders. Results and findings from the execution of maintenance tasks are captured and trigger reviews and updates to the TOPs, thus facilitating continuous improvement. Finally, a change-management program ensures that legislative amendments that may impact the TOPs are communicated, analyzed and incorporated into the TOPs when appropriate, and that staff receive timely notifications when TOPs are revised.

- **Advanced monitoring, control and communication systems** – TransCanada operates one of the largest and most sophisticated gas pipeline systems in the world. We use leading-edge software to operate our SCADA system, employing a variety of telecom options to communicate with our remote sites, which allows us to choose the right telecom solution based on site requirements and cost. By applying new technology, TransCanada has gone from 14 control centers with a supervisory gas control center down to a single gas control center.

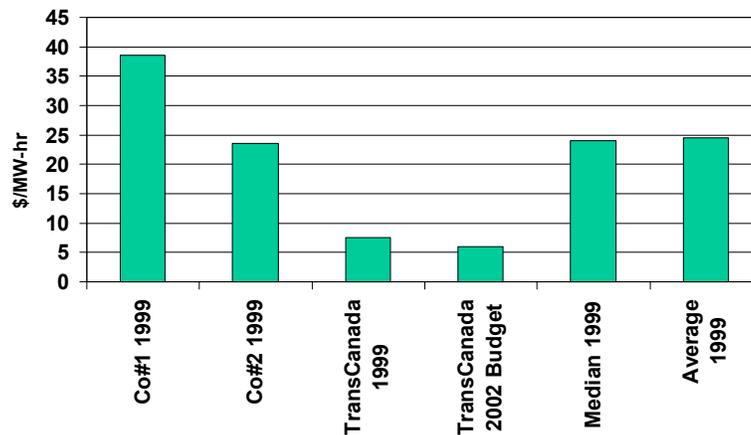
- Pipeline integrity and maintenance** – TransCanada uses an industry-leading integrity management program to ensure pipeline integrity and the safety of employees and people who live near the pipeline system. The program uses advanced inspection and mitigation technologies applied within a comprehensive risk-based methodology. Risk assessment is used to identify potential integrity threats for initiation of inspection or mitigation activities. Results from the inspections for known or suspected integrity threats are then fed back into an information database to plan future programs. Our integrity management programs have led to a reduction in costs such that, on a volume-distance basis, our operations costs are less than half the industry average, as illustrated in the graph below.

Figure 3: Pipeline Operational Performance



- Compression operation and maintenance** – TransCanada is the lowest-cost operator of gas compression facilities in North America. Our compression maintenance costs (capital and expense) are approximately one-third of average industry costs. We continue to look for improvements that will lower costs and improve the efficiency of our compressor fleet.

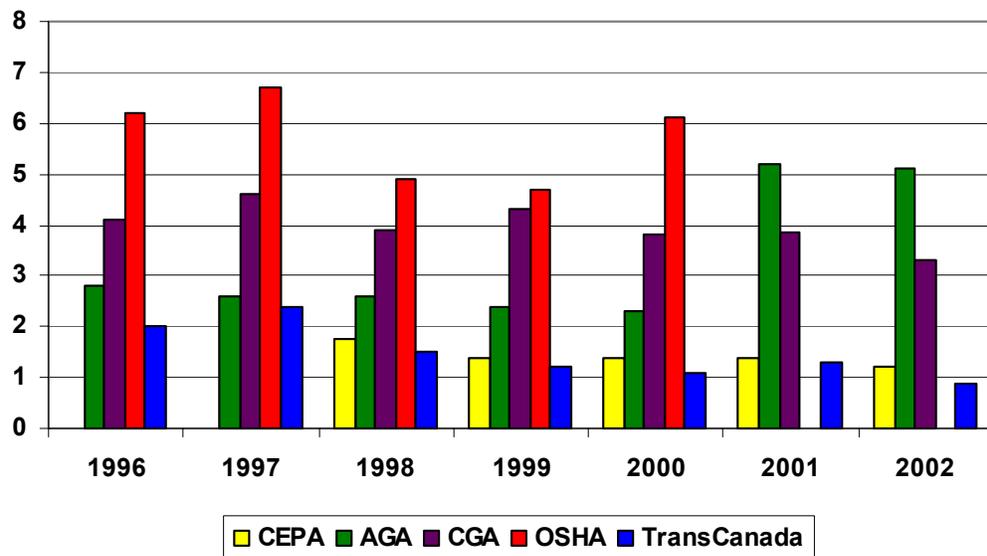
Figure 4: Compression Operational Performance



- **Geographic information systems** – TransCanada leads North America’s gas transmission industry in the integration of facility and environmental data to achieve operational efficiencies and support sophisticated maintenance planning. In fact, TransCanada received the 2001 Excellence Award from the Geospatial Information Technology Association; TransCanada was recognized for exceptional design and application of GIS technology, the first in the industry to receive such an award.
- **HS&E Management System** – TransCanada’s integrated HS&E Management System captures, organizes, and documents the company’s commitment and expectations for effectively managing HS&E responsibilities and risks. There are two major aspects of the system: the framework and the continuous improvement cycle. It is modeled after ISO 14001, an international standard for environmental management systems. Our approach is risk-based, the same as our pipeline integrity program. By considering the likelihood, frequency and consequence of events, we are able to place our first priorities on those areas which show the greatest exposure.

Our record in safety is among the best in our industry. The following chart shows our total recordable case rate, i.e., a summary of all safety incidents, based on 200,000 hours worked, that required medical treatment and/or time lost from work.

Figure 5: Total Recordable Case Rate



The graph illustrates that, in terms of total recordable case rate, TransCanada performs better, and in most cases significantly better, than the average firm in the Canadian Energy Pipeline Association (CEPA), the American Gas Association (AGA), the Canadian Gas Association (CGA), and the Occupational Safety and Health Administration (OSHA) of the U.S. We show similar superior performance in our contractor-related statistics, as well.

7. Reservoir, Production and Regulatory Impacts

The Alaskan pipeline project contemplated in this application would transport 4.5 Bcfd of stranded ANS gas supplies. TransCanada believes volumes of this size should not interfere with current oil recovery operations but acknowledges that this assumption is based upon limited information available regarding reservoir performance and production projection. TransCanada will work closely with the ANS producers and Alaska Department of Natural Resources to ensure that project development activities do not impinge on the ongoing oil production operations of the North Slope producers.

8. Plans for Offering and Granting Access to Pipeline Capacity

The Alaska gas pipeline will be subject to FERC regulation under the Natural Gas Act. Service on the proposed pipeline therefore will be governed by the FERC's open access requirements. TransCanada will comply fully with the FERC's regulations. These regulations are designed to ensure that the procedure for allocating pipeline capacity is fair, transparent, and non-discriminatory.

Depending on the stage of development and operation of the proposed pipeline, there are three separate, but similar, procedures for allocating pipeline capacity:

- Open season to underpin the initial installation;
- Open season to support future expansion; and
- Unsubscribed and secondary capacity market.

Those potential shippers wishing to secure pipeline capacity could include the producers, downstream buyers, the State of Alaska, municipalities and gas marketers, among others. TransCanada contemplates offering and contracting all pipeline capacity (initial, future expansion and secondary market) in a non-discriminatory manner and in full compliance with FERC-approved tariffs, policies and regulations. While the timing and size of future expansions will be dictated by market conditions and the demand for capacity, such capacity, when required, will be marketed and contracted according to the same FERC regulations and policies that will apply to the pipeline's initial capacity.

All TransCanada services will be available on the same non-discriminatory basis to all customers, regardless of their relative size, interests in gas reserves, or amount of contracted capacity, provided they meet the required creditworthiness provisions specified in the tariff.

The tariff being contemplated by TransCanada includes a rolled-in, distance-based toll structure. TransCanada supports such a toll structure in the firm belief that it will accommodate the State of Alaska's needs by encouraging further development of the basin. As opposed to an incremental toll, rolled-in tolling methodology for expansions provides toll certainty to new shippers by averaging the tolls among all shippers.