



Alaska Pipeline Project Report

Licensed under the Alaska Gasline Inducement Act (AGIA)



October 31, 2009

Prepared by: State of Alaska
Department of Revenue
Department of Natural Resource

Introduction

This report from the Department of Revenue (DOR) and Department of Natural Resources (DNR) is submitted as a supplement to reporting required under AS 43.90.400, the Alaska Gasline Inducement Act (“AGIA” or “the Act”).

AGIA was ratified by the legislature on May 16, 2007 to encourage expedited construction of a natural gas pipeline from Alaska’s North Slope. The Act instructed the DOR and DNR Commissioners to solicit applications for a license to receive certain inducements from the State. After review of the submitted applications, the Commissioners recommended a license be jointly issued to TransCanada Alaska Company, LLC and Foothills Pipe Lines Ltd (for purposes of this report will be jointly referred to as “TC Alaska”). The recommendation was approved by the legislature on August 1, 2008 and the license issued and signed by the Commissioners on December 5, 2008.

In June of 2009, TC Alaska announced a new alignment with ExxonMobil. Together, they will jointly advance the AGIA-licensed project, the Alaska Pipeline Project (“APP”). TC Alaska retains all of its AGIA commitments, including the commitment to apply for a FERC certificate by a date certain.

In exchange for making certain schedule, tariff and expansion commitments to advance the project, the AGIA licensee is entitled to receive certain inducements including:

1. The assistance of a dedicated AGIA Coordinator with authority to expedite permitting;
2. Fixed tax and royalty terms for a specified period of time for gas which is committed during the first Open Season of the project; and
3. Up to \$500 million reimbursement from the AGIA fund for qualified expenditures

AS 43.90.400 requires the DOR and DNR Commissioners to submit a report to the legislature on the status of reimbursements within the first 10 days of each regular session. The report must include a list of all disbursements made from the AGIA fund during the preceding fiscal year, a written justification for each disbursement and the projected amount of money that will be required for future disbursements during each of the next three fiscal years.

In addition to information required under AS 43.90.400, this report includes information related to the progress of the pipeline project, and updates on natural gas markets and capital cost expectations. Previous reports and other related information can be accessed online at <http://www.gov.state.ak.us/agia/>.

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1. AGIA Reimbursements

Under the Alaska Gasline Inducement Act (“AGIA”) license, the State’s Licensee, TransCanada Alaska (“TC Alaska”) is entitled to reimbursement of up to \$500 million for qualified expenditures incurred in advancement of the Alaska gasline project.

In early 2009, the Department of Revenue began development of an electronic information management system for monitoring and control of reimbursement requests submitted by the Licensee. The project was broken into two phases, the first focusing on the design of the reimbursement process and workflow, and the second on technical design and construction of the electronic system.

In February, the department contracted with PangoMedia, Inc. to assist in this first phase. That work is now largely complete, with more recent efforts focusing on refinement of the technical system requirements.

Over the last several months, the department has worked closely with TC Alaska on the detailed reporting standards required to meet both technical and regulatory requirements for reimbursement submissions. These standards both standardize content and allow the submissions to be accepted electronically into state systems. This process has taken more front-end work than was initially anticipated, but is critical in order for the state to efficiently review, verify and track expenditures submitted in the future.

Requests for Reimbursement are to be filed with the department once each quarter, while expenditure information will be submitted on a monthly basis. This allows the department to review expenditures in a more consistent and timely manner, rather than trying to process a large volume of information at the end of the quarter.

The AGIA statute also requires periodic audit of the Licensee. The department has contracted with Martindale Consultants Inc. to conduct the first annual audit. Initial meetings with the audit firm will take place in mid November and coordination with TC Alaska will follow. The audit will most likely begin after the first quarter of next year.

1.1 Requested Reimbursements

TC Alaska submitted an initial Request for Reimbursement in late September 2009, for work conducted in December 2008, and during the first quarter of 2009. This allowed the state to conduct its first technical review of TC Alaska’s Reimbursement Requests. The department requested additional information and is currently working with TC Alaska’s staff to complete the necessary content revisions. The department anticipates processing the Reimbursement Request in November 2009.

For December 2008 and the first quarter of 2009, the total amount of TC Alaska’s requested reimbursement from the state is anticipated to total just over \$1.3 million. For the second quarter of 2009, the state’s contribution is expected to be slightly less than \$3.8 million.

1.2 AGIA Fund Disbursements

No disbursements have been made from the AGIA fund.

1.3 Estimated Project Spending

The following expenditures are based on TC Alaska's Third Quarter 2009 Budget Report Update, and show the forecasted spending through the term of TC Alaska's commitment under the AGIA license. We expect these numbers to change again in the upcoming quarter, to reflect additional restructuring efforts associated with TC Alaska's new alignment with ExxonMobil.

Spending prior to the Open Season has been increased by approximately \$67 million, from an earlier estimate of \$83 million to roughly \$150. This increase follows TC Alaska's alignment with ExxonMobil and will allow the two companies to provide a more refined cost estimate and project schedule at the Open Season beginning in May of 2010.

Estimated Project Spending Through FERC Certification (Thousands \$)¹

Fiscal Year	Pre-License	2009	2010	2011	2012	2013	2014	TOTAL
Total Annual	5603	11,963	125,223	137,587	137,128	137,128	137,128	
TC Alaska	5603	6,891	75,416	17,608	13,713	13,713	58,818	
State of Alaska	0	5,073	49,807	119,980	123,415	123,415	78,310	
Total Cumulative	5603	17,566	142,789	280,376	417,504	554,632	691,760	691,760
TC Alaska	5603	12,494	87,910	105,517	119,230	132,943	191,761	191,761
State of Alaska	0	5,073	54,880	174,859	298,274	421,690	500,000	500,000

¹ Numbers are based on TC Alaska's Q3 Budget Report. The report was prepared in Canadian Dollars and converted to US dollars @ 1.15 FX rate (based on Dollar @ December 2008); Comparative spending after 2010 reflects a change in the state's matching contribution from 50/50 to 90/10 following the Open Season; Reflects adjustments from budget estimates included in TC Alaska's AGIA November 2007 AGIA application

2. Project Status Report

Alaska Pipeline Project

In June of 2009, TransCanada announced that it had established commercial alignment with ExxonMobil Corporation. Together, the two companies will jointly advance the AGIA-licensed pipeline project, the Alaska Pipeline Project (“APP”). ExxonMobil brings world-class expertise in project construction planning, regulatory and environmental work, as well as technical capability and prior study information to the project.

The working arrangement for the APP is established through a series of agreements, including an Interim Project Agreement (“IPA”), Project Funding Agreements (“PFAs”), and other associated materials. Under the new agreements, ExxonMobil has agreed to work jointly with TransCanada to advance the AGIA-licensed project. The AGIA Licensees will acquire work product from the joint project and then seek reimbursement from the State for work which meets the criteria of qualified expenditures under AGIA. The AGIA Licensees will maintain sole discretion over requests to the State for reimbursement of qualified expenditures. If reimbursement is made to the AGIA Licensees by the state, a portion of those reimbursements will be passed back through the PFAs to TransCanada and ExxonMobil.

The joint APP effort does not change the approved project plan set out by the AGIA Licensees. TransCanada will continue to have a lead role on pipeline and compression engineering work. ExxonMobil will draw on its own strengths by taking the lead on general project management duties, and on technical work associated with the GTP. This provides an ideal arrangement for the AGIA Licensees, who stated in their AGIA application that it would prefer not to own or develop the GTP, and that it would approach third-parties to assess interest in taking over this aspect of the project.

TC Alaska and Foothills Pipe Lines are both Affiliates of TransCanada and, as the AGIA license holders, remain obligated for ensuring compliance with all terms and conditions of the license. TransCanada will have a majority ownership interest in the joint project and will chair the joint project Management Committee. The Management Committee will oversee all aspects of the project and provide strategic guidance with respect to all work on the project that is undertaken by the joint project. If, for any reason, the AGIA Licensees feel as though the work performed by the joint project will not allow it to meet its commitments under the AGIA license, TransCanada can unilaterally withdraw from the IPA and PFAs at any time, while retaining all work done by the joint project.

Resolution of Withdrawn Partners

TransCanada's final resolution of outstanding issues regarding the former Alaskan Natural Gas Transportation Company (ANNGTC) project has also come as welcome news in recent months. Concerns had previously been expressed about future possible contingent liabilities, as part of an earlier effort TransCanada had been associated with to construct an Alaska natural gas project under the Alaska Natural Gas Transportation Act.

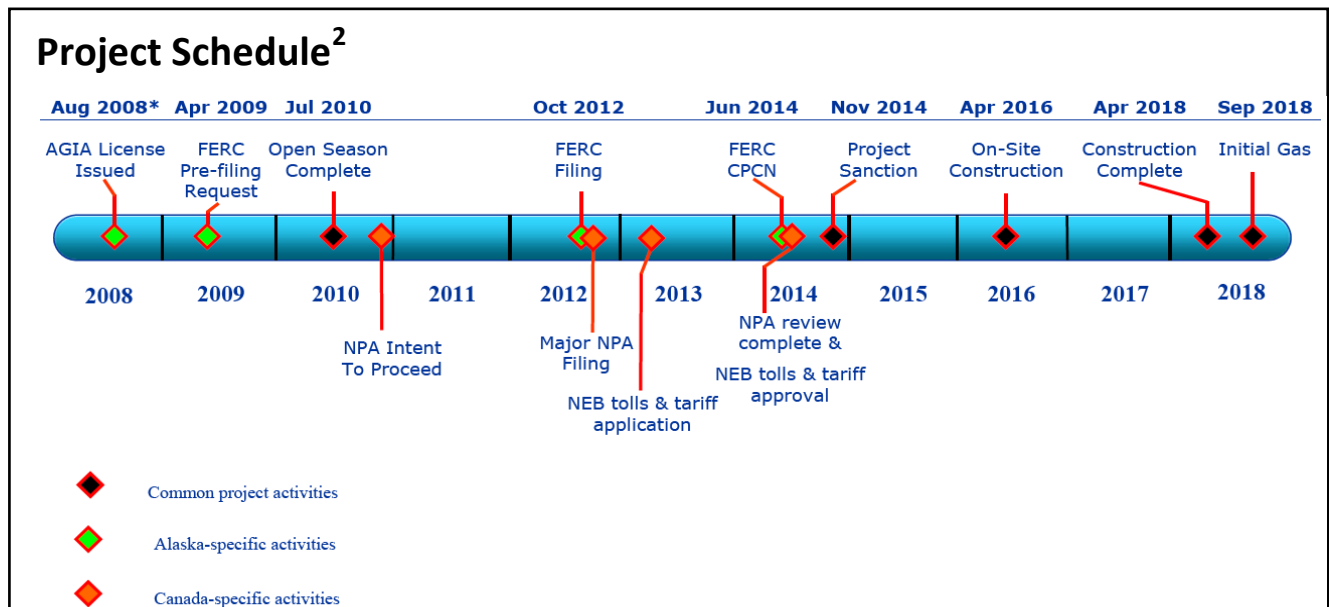
Beginning in the 1970s, the ANNGTC had involved 11 original partners, most of which withdrew from the project after collapse of the natural gas market in the early 1980s. Concerns were expressed during the AGIA hearings process that accrued interest, on future possible contingent liabilities resulting from the original investment, might be considered legitimate costs for the AGIA-licensed project, and consequently rolled into the shipping tariff.

Legal analysis conducted during the AGIA application found these concerns to have little merit. Since the issuance of the AGIA License, TransCanada has acquired full and complete releases for all potential claims from all of the ANNGTC withdrawn partners.

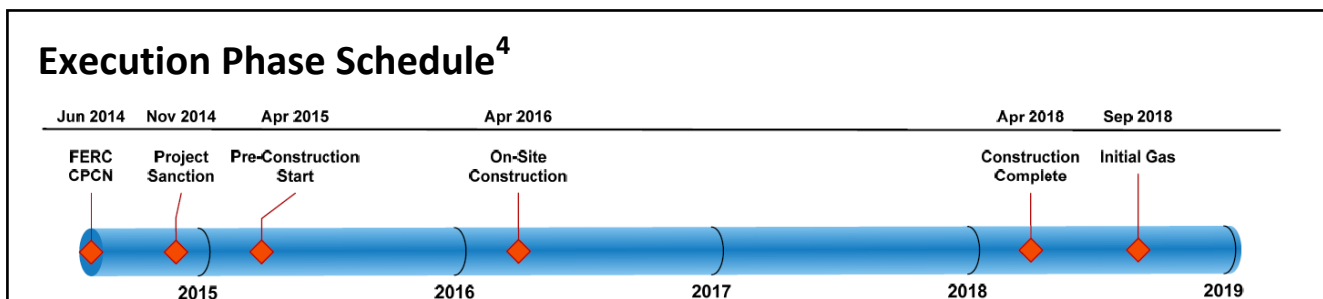
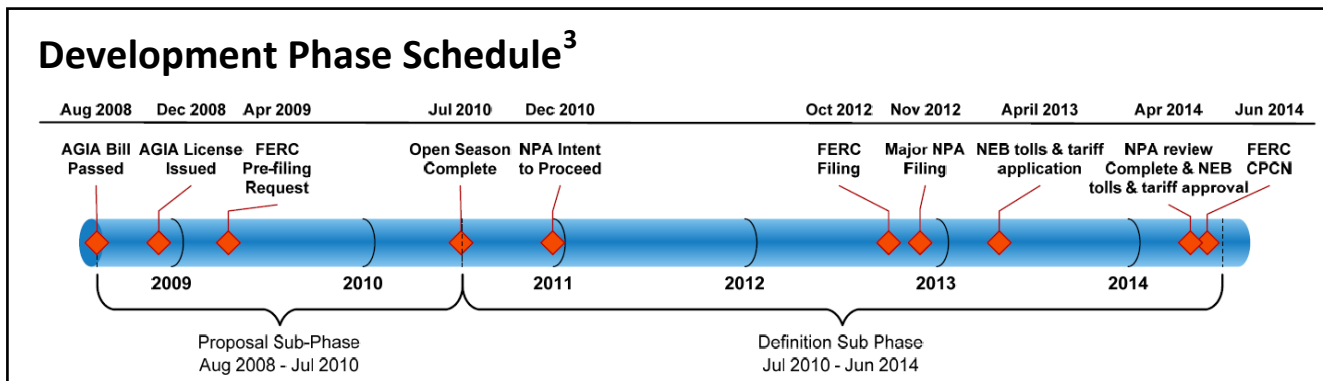
2.1 Schedule and Timeline

The overall project schedule remains unchanged. The APP team continues to target an initial Open Season commencing in May of 2010. In order to better define the project cost estimates and schedules in support of the Open Season, some work has been moved forward on the schedule from the original AGIA timeline. This work includes:

- a request for pre-filing with FERC which was approved on May 1, 2009 (originally scheduled for June 2010)
- establishing and staffing a project office in the Midtown area of Anchorage
- undertaking additional field programs including a ground-based geophysical program, acquisition of LiDAR data and Immersive Video.



² TransCanada, *Updated Project Schedules*: Submitted April 27, 2009



2.2 Major Achievements and Milestones

The following summary represents the APP’s major achievements on the project since the last quarterly update, issued April 30th, 2009.

Project Management

In June of 2009, TransCanada and ExxonMobil reached agreement to work together to jointly progress the Alaska Pipeline Project (“APP”). Both parties bring their respective and complementary skills to the venture, uniquely situating them to efficiently and effectively advance the Alaska project.

TransCanada has extensive North American pipeline construction experience, particularly in cold weather environments, and operates pipeline networks across Canada and in the U.S. Under the Northern Pipeline Act, TransCanada and its affiliates also hold existing certificates for the Canadian portion of the project, including the right-of-way in the Yukon Territory. They have proven expertise in efficiently advancing pipeline projects through the regulatory process.

ExxonMobil has proven global mega-project management experience, a long history of Arctic project successes and technological innovations, and brings its substantial financial capacity to the table. It is also the largest holder of discovered ANS natural gas resources and has proven

³ TransCanada, *Updated Project Schedules*: Submitted April 27, 2009

⁴ TransCanada, *Updated Project Schedules*: Submitted April 27, 2009

expertise in innovative gas treatment, pipeline and compression technologies. ExxonMobil also provides critical engineering expertise needed to manage the gas treatment plant (GTP) work. (TC Alaska noted in its AGIA application that TC Alaska preferred not to own or develop the GTP, and would approach third-parties to determine their interest in developing this facility.)

The integrated project team has now been established. The project has benefited from the combined experience and technical expertise that comes from the joint project team. Together both companies provide a comprehensive set of strengths that build confidence in development of the commercial offering necessary for a credible Open Season.

While the project scope and preliminary design has not fundamentally changed through this arrangement, there have been a number of adjustments as a result of the decision to jointly develop the project. These include:

- The Proposal sub-phase budget has increased from \$83 million to approximately \$150 million, to undertake the work necessary to underpin the Open Season offering and process.
- The Project Management Team has been augmented – there are approximately 100 full time equivalent positions, split approximately 50% TransCanada and 50% ExxonMobil employees
- The scope of the URS contract for engineering on the GTP was expanded to include a number of activities to improve the quality and credibility of the design and cost estimate.

This arrangement has also resulted in the ability to access and use the Alaska Gas Producers Pipeline Team (AGPPT) study that was completed in 2002, as well as the TAPS owners' information. This data has been useful in progressing work on the GTP and pipeline and will continue to add value to the project.

Correspondence and subsequent meetings with the Point Thomson and Prudhoe Bay operators has provided the project with access to information related to the potential gas supply for the project, as well as the opportunity for site visits and for validating assumptions.

Engineering

Significant progress has been made on the work to create the base design and cost estimate for the Open Season commercial offering. The APP is on schedule and on budget for submitting a plan to FERC for a 2010 Open Season that will attract potential shippers to the project.

On the GTP overall progress is on schedule and on budget to complete year-end deliverables. The expected input and output gas component specification has been evaluated and the gas handling process selection has been completed to facilitate the estimate basis. The physical layout and module basis is finalized for estimate basis. Infrastructure and logistics plans for construction are being reviewed for the cost estimate. Evaluation of GTP capacity is underway to ensure the Open Season offerings are clear.

Overall pipeline and facility planning progress is on schedule and on budget to complete year-end deliverables for Open Season in 2010. Execution planning and schedule analysis are well under way and development of the design basis and cost estimate for the Valdez LNG option is progressing on schedule.

The pipeline corridor in Alaska was defined using aerial photography, Immersive Video, site reconnaissance by helicopter and land based transportation.

Technical field programs in Alaska were executed to facilitate design and cost estimating efforts including the following activities:

- 111 bore hole samples were taken along the Alaska based corridor. These samples provide information to validate the terrain typing effort, as well as the permafrost characterization. Bulk soil samples were also collected, and these are used in an on-going program of physically checking the settlement and uplift characteristics of the soil.
- LiDAR (Light Detection and Ranging) data was acquired for the mainline and LNG pipeline corridors. This information can be used for a multitude of assessments including fault hazards, landslide hazard, permafrost, and river crossing planning in the design of the pipeline.
- A ground-based geophysical program was executed on a portion of the corridor north of Fairbanks. This data was gathered to provide greater detail on permafrost characterization and to validate design assumptions.
- Immersive Video (360 degree view) was acquired for the entire pipeline route in Alaska (Alberta mainline and Valdez LNG option) with the exception of approximately 60 miles in the Atigun Pass area. This provides additional tools for work scheduled for this winter.

Work was progressed on logistics for moving pipe, materials, equipment and manpower to the various locations during construction.

Infrastructure evaluation has been progressing. A number of meetings have been held with various Port facilities, the Alaska Railroad and the Department of Transportation in this regard.

Work has progressed on commissioning and overall asset management planning for all facilities.

Environmental, Regulatory & Permitting

The project team has continued to engage with regulatory agencies in Alaska/Canada/U.S. to advance permitting and regulatory review processes. A pre-filing request was submitted to FERC and accepted on May 1, 2009. Meetings have been held with external stakeholders including Alaska Native and Canada First Nations representatives. The APP is developing plans to expand the work and staffing necessary to achieve major NPA filings and FERC applications in 2012, including significant expansion of field work to be conducted in Alaska and Canada in the coming year.

Commercial

The project team is preparing the Open Season commercial offering. There are ongoing discussions with potential shippers in Alaska and Canada, for both the Alberta mainline and Valdez LNG options. An in-state gas study is currently underway and is expected to be completed late in 2009.

All activities lead to the filing of required documents for the FERC review of the 2010 Open Season plan package at the end of January 2010. The 90 day Open Season is scheduled to begin in May and conclude at the end of July, 2010. However, this process may be delayed for a short period if the FERC determines it needs more than 60 days to review the January 2010 filing.

Administrative

Project personnel are located where required to effectively manage their work, including Anchorage, Calgary, Whitehorse, Houston and Denver. As the project work effort has grown, additional office space has been acquired in the Midtown area of Anchorage. This will be utilized by the project team, and the current Anchorage Key Bank location will serve as the commercial and public affairs core location.

2.3 Amendments or Modifications of Project Plan

No amendments or modifications have been made to the project plan.

3. Alaska Workforce and Business Participation

3.1 Alaska Hire and Contracting

A number of full time positions in the Alaska office have been filled, including the Manager of Environment, Regulatory and Land for Alaska, and the Community Manager for Alaska. A number of additional positions will be identified and filled in the near future.

When the APP issues a Request for Proposal or Request for Quotation for third party work, evaluation criteria is derived to ensure the best selection of a service provider is made. Specific criteria and weighting is developed for work contemplated on the Alaska section, to ensure a number of factors are considered, including;

- Physical presence in Alaska (offices and /or work locations)
- Previous work completed in Alaska and in arctic environments
- Working with local communities
- Hiring practices proposed for the work, incorporating Native and non-native Alaskans

Using these factors to select third party contractors, as well as encouraging contractors to work with Alaska Natives, helps the APP to meet the Alaska business and local hiring requirements under the AGIA license.

To date the following Alaska-based service providers have performed project work for the APP:

- AECOM
- Aero-Metric
- Air-Logistics
- ASRC
- Baseline GeoConsulting
- Discovery Drilling
- Doyon Limited
- Dwayne Miller & Associates
- GCI Cable
- GeoNorth Inc.
- Golder Associates, Inc. (Alaska Office)
- Guardian Security
- Immersive Media
- ISER
- Jade North
- Lounsbury & Associates
- NANA Management Services
- Nanuq Inc.
- Northern Economics
- Northern Engineering and Scientific

- Peach Investments LLC
- R&M Consultants
- URS (Alaska Office)

3.2 Workforce Development

The Alaska Department of Labor and Workforce Development is continuing a major effort to implement the Alaska Gasline Inducement Act (AGIA) Strategic Training Plan.

The plan's overall purpose is to bring Alaska into a new era of collaboration and innovation among educators and training providers, combined with strategic investments in connected, regionally delivered and accredited programs to create world-class training and educational systems for Alaska. The plan, developed and regularly monitored by a public/private steering committee, is guiding the department and Alaska Workforce Investment Board in workforce policy development and in the allocation of funds to training activities.

The Plan identifies four broad strategies to prepare Alaskans for 113 occupations necessary for gas line construction:

1. Increase awareness of and access to career opportunities in natural resource development,
2. Develop a comprehensive, integrated career and technical education system that aligns training institutions and coordinates program delivery,
3. Increase opportunities for registered apprenticeship in skilled occupations and expand other structured training opportunities, and
4. Increase opportunities for development of appropriate training programs for operations, technical, and management workers.

State and federal funding has been appropriated toward implementation of these strategies. In FY 10, the following activities are underway:

Strategy 1: Increase Awareness of and Access to Careers

Awareness activities include investments in the Alaska Construction Academy model around the state to introduce youth and dislocated adult workers to basic construction skills; funding for school-based career guides who provide career planning services and job referral to secondary students; improvements to the Alaska Career Information System and other department web-based resources to provide career planning tools and to connect students with Alaska-based training programs. The Department has also sponsored secondary teacher externships and summer construction and engineering academies to expand teacher and student awareness of gas line related careers.

1. In FY09, the Alaska Construction Academy trained 1,645 youth and 416 adults in a variety of gas line occupations.
2. Last year the Alaska Youth First Program delivered awareness activities through career guides to 18,976 Alaskan youths.
3. In addition, the Teacher Industry Externships (TIE) program aligns with the AGIA Training Plan by increasing the awareness of and access to career opportunities in natural resource development. As many as 2,000 students in school are affected by participating teachers each year. Last year seven teachers participated in AGIA related industry occupations through externships sponsored by the Alaska Process Industry Careers Consortium. These teachers are then able to give their students first hand information about the possible types of careers in this industry as well as the types of skills needed.
4. American Recovery and Reinvestment Act funds were awarded to the Department of Transportation for their “Think Apprenticeship” awareness campaign. This campaign seeks to bring more Alaskan youth to the Heavy Highway and Construction industries and encourages employers to hire registered apprentices. The transferable skills from the construction industry will help prepare Alaskans to build the Alaska Gasline.
5. The Employment Security Division (ESD) recently completed enhancements to Alaska’s Skills Based Job Bank (ALEXsys) which allows job seekers to enter their credentials as part of their on-line resumes. This feature allows the department to better match job seekers’ skills and experiences to employers’ job requirements. The credentialing feature also allows the department to track individuals by specific credentials, providing the ability to determine job seeker employment and training needs. Credentials include professional licenses, certifications, endorsements, diplomas, and the Alaska Career Ready Certificate. The ability to search by degree types, certificates, and trades continues to be a critical component in our commitment to prepare Alaskans for jobs needed for the Alaska Gas Pipeline.
6. Another enhancement to ALEXsys is variable reporting, which enables the ESD staff to create ad hoc reports to better manage resources. Recently, this function allowed us to contact job seekers with specific skills in priority industries to advise them of training opportunities. This outreach resulted in seven individuals attending diesel mechanic training and 15 individuals attending underground mining training. Both are AGIA related occupations.
7. The Alaska Vocational Technical Center has significantly increased efforts to reach high school students across Alaska through visits to 200 schools and career fair attendance in the last two years. As a result AVTEC’s average student age is now 25 and in the last two years AVTEC has trained over 250 youth ages 17 – 21 in gasline related occupations. With a 94% job placement rate, over 235 Alaskans age 17 – 21 have entered gasline related occupations in the last two years.

Strategy 2: Aligned Career and Technical Education System

The department has coordinated several meetings between training providers in the state, including the University of Alaska, the Alaska Vocational Technical Center and regional training centers, to better align and articulate training programs. The department is also working closely with the Alaska Department of Education and Early Development toward developing a template for career plans to be completed by all high school students, establishing and implementing standards for Alaska training programs, supporting the use of the Alaska Career Ready certificate, and communications and outreach with secondary and postsecondary educators and administrators throughout the state.

Specific activities include:

1. More than 900 Alaskan youth participated in summer work experience with a focus on developing basic work skills. Pre and post tests were applied via KeyTrain's Career Ready 101, which includes an on-line assessment of work skills.
2. Twelve Career Guides located in schools and communities around Alaska are providing career and job training information to students in and out of school about Alaska career opportunities.
3. Alaska Vocational Technical Center is assisting twelve Regional Training Centers to establish outreach, recruitment, and enrollment standards and basic skills assessments to increase the number of rural residents enrolling in gasline construction related technical training programs and/or apprenticeships.

Strategy 3: Expand Registered Apprenticeship and Structured Training

The Department made a commitment to apprenticeship training by reaching out to not only the industries that have traditionally used the apprenticeship model for workers in the skilled trades – such as construction – but to other high-demand industries in Alaska including health care, manufacturing and retail trade. DOLWD's Apprenticeship Coordinator has been working in concert with the U.S. Bureau of Apprenticeship's Alaska office toward increasing awareness of the benefits of registered apprenticeship and to increase the number and scope of apprentice opportunities in the state.

Specific successes include:

1. Through a collaborative effort with the U.S. Department of Labor, Employment and Training Administration's Office of Apprenticeship, the University of Alaska's Mining and Petroleum Training Service (MAPTS), the mining industry, and the Department, a first-of-its-kind apprenticeship program for geophysical core drilling is established, setting the standard not only for the state, but also for the nation. The geophysical core driller training was conducted in Kotzebue and Bethel with 37 graduates becoming first-year apprentices. This program is helping rural Alaskans get training and then high paying jobs in their regions.

2. The department has developed a partnership with Raven Electric in Anchorage to deliver electrical apprenticeship related instruction in Anchorage. 14 new apprentices were enrolled last year.
3. Expansion of the Fairbanks Pipeline Training Center to increase the number of training opportunities for incumbent and entry-level apprentices. More than 100 apprentices participated in training last year and will do so again in November of 2009.
4. The Department conducted its second annual apprenticeship conference, "Building Alaska's Future," in Anchorage on April 30th, 2009. The conference attracted employers interested in how apprenticeship works, and educators wanting to explore the integration of apprenticeship in the educational system.
5. The Department's Employment Security Division (ESD), the state's designated One-Stop Operator, has 10 statewide registered apprenticeship specialists engaging employers on a consistent basis and working hand in hand with Career Support and Training Service case managers on wage-incentives and Individual Training Accounts (ITAs) and supportive services.
6. Ongoing ESD activity includes: funding ITA course related instruction and supportive services for the Alaska Pipeline Worker Training Project (APWTP) grant participants as required by apprenticeship sponsors, to support an apprentice's successful completion of a registered apprenticeship program; compensating employers through on the job training agreements; and providing support services including Alaska Career Ready testing, certification and registration of certificates.
7. A surveyor apprentice training was sponsored by Tanana Chiefs Conference and the Teamsters Union with support from Denali, the Alaska Gas Pipeline LLC. Twelve participants successfully completed the training course and eleven obtained work.

Strategy 4: Increase Training Opportunities

Significant investments have been made at the state and federal levels toward gas line related job training, including:

1. The University of Alaska has expanded its engineering program to double the number of engineering graduates.
2. The State Training and Employment Program provided over \$3 million in training support for a variety of gas line occupations to 1570 adults.
3. A federal pipeline-training grant is being used by the Galena City School District to train rural Aircraft Dispatchers, skills that can be transferred to transportation and logistical support for pipeline construction.
4. Alaska Works - annual Cross-country Pipeline Training Orientation, Environmental, Health and Safety Certification, Pre-pipeline and entry level training for younger workers in rural Alaska, and Train the Trainer instructional classes and support.

5. Tanana Valley Campus - Heavy Equipment and Diesel Mechanic training and apprenticeship support.
6. University of Alaska – Statewide Campuses for Interior Career Academies, Math and Sports Camp at University of Alaska Fairbanks campus and Alaska Summer Research Academy with a focus on science, robotics, engineering, and math.
7. University of Alaska – Southeast, to begin the first phase of a multi-phase project to develop a curriculum and deliver related technical instruction for first and second year registered apprentices in the occupations of Bus, Truck Mechanic and Diesel Engine Specialist.
8. Northwestern Alaska Career and Technical Center (NACTEC) in Nome conducted entry level pre-employment academic activities focused on improving fundamental math and reading comprehension and related career exploration activities including introduction to welding, engine repair, driver education, emergency medical technician, food preparation, and carpentry.
9. Alaska Vocational Technical Education Center (AVTEC) – Provided GED and academic learning support, pre-pipeline training and support for academic preparedness through distance training at Regional Training Centers.
10. Regional Training Centers – Sitka Works, NACTEC, and Galena are engaged in an effort to integrate vocational and technical education and to support academic basic education in rural Alaska.
11. Employment Security Division - Support recruitment of Alaskans through Job Centers into training and employment in pipeline related occupations.

The Alaska Gasline Inducement Act includes a provision encouraging the licensee to hire to the maximum extent possible Alaskans for the Alaska portion of the project. The department has begun discussions with the APP on a formal and regular employment reporting mechanism.

4. Market Update and Cost Expectations

The following section highlights events during 2009 which may be relevant to the Alaska natural gas pipeline, but does not constitute an analysis of the project's economic viability.

The global economic downturn has continued to impact the natural gas market and construction costs. While these variables remain the most significant to the Alaska gasline project, viability of the project will ultimately be driven by long-term expectations. Forecasts, looking out beyond 2020 when the project is slated to come online, remain supportive of the project, consistent with analysis conducted during the AGIA application process. (Black & Veatch, 2008)⁵

North American natural gas prices are generally reported in US dollars per million British thermal units (\$US/MMBtu) for transactions within the US and Canadian dollars per gigajoule (\$C/GJ) for transactions at TransCanada Pipeline Company's Alberta AECO hub in Canada. As a general rule, discussion of gas prices in this report will assume a relationship between natural gas volume and heat content as being roughly 1,000 Btu per Mcf. Subsequent references to natural gas prices in \$/MMBtu and \$/Mcf should be considered interchangeable.

While near-term or "spot" natural gas prices have fallen from their peak in mid-2008 they are expected to begin recovery next year. (EIA, 2009) Long-term price forecasts have shown little impact, with values remaining consistently above \$8.50 per Mcf at the time of first gas.⁶

The estimated project capital costs will be updated by the Licensee as part of the Open Season package. Some component parts of the project costs have shown signs of improvement. Construction cost indexes have declined, due in large part to lower material prices.⁷ Steel prices, for example, have dropped by nearly half since their peak in July of 2008.

4.1 North American Natural Gas Market Update

The price of natural gas has fallen considerably over the last year, from a high of \$10.82 per Mcf in June 2008, to under of \$3.85⁸. While oil, along with many other commodities has experienced a significant price rebound in recent months, the natural gas market has remained soft throughout the year. (Goldman Sachs, September 2009) Spot prices at the Henry Hub are

⁵ Significance of impact based on stakeholder NPV. Variable impacts are different for upstream and midstream parties. Gas price is the most significant variable for producers making gas shipping commitments, while, while capital have the greatest impact on return to gas pipeline operator. Black & Veatch, *AGIA NPV Analysis*. Overland Park: Black and Veatch Corporation, 2008.

⁶ The EIA's original forecast was published in March of 2009, with the most recent update issued in April 2009. EIA: *Updated Annual Energy Outlook* (2009), http://www.eia.doe.gov/oiaf/ieo/nat_gas.html (accessed 25 October, 2009)

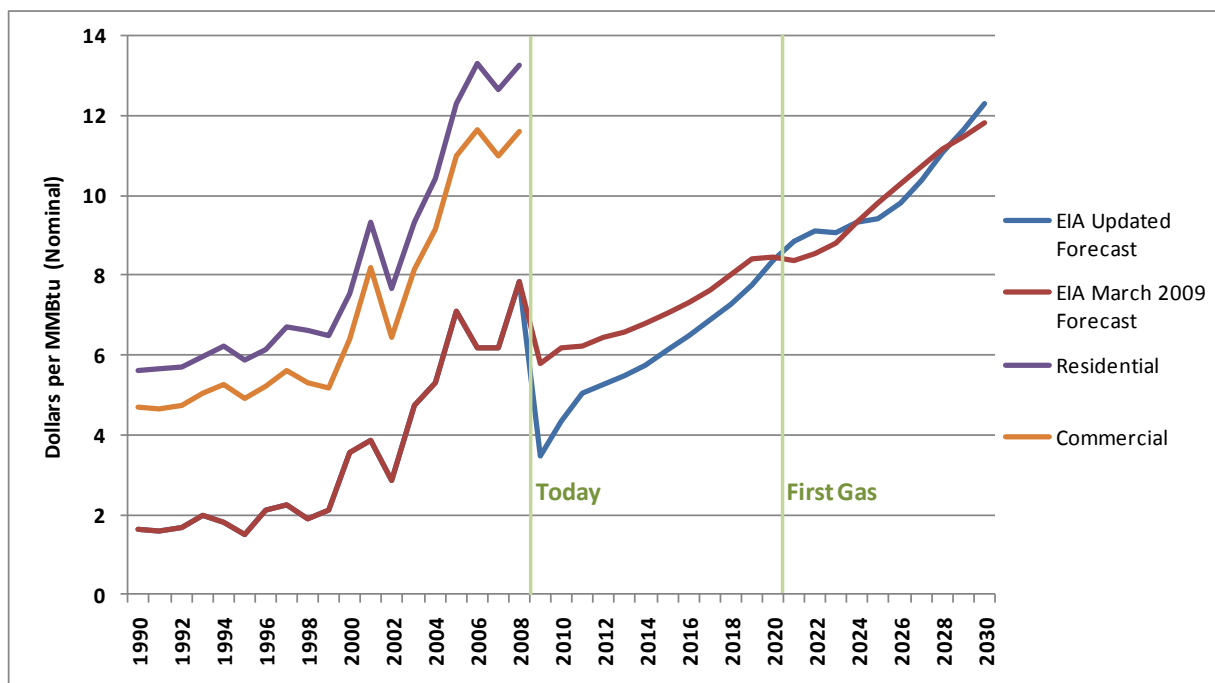
⁷ Whitestone Research, Facility Cost Indexes. 2009. <http://www.whitestoneresearch.com/indexes/newcon.htm>
Turner Construction, Cost Index. 2009. <http://www.turnerconstruction.com/corporate/content.asp?d=20>

⁸ Price reflects monthly average wellhead value

expected to average \$3.85 per Mcf in 2009, compared with an average of \$8.07 per Mcf during the previous year. (EIA, 2009)

New York Mercantile Exchange (NYMEX) natural gas futures prices currently range from roughly \$5.50 per MMBtu to \$7.00 per MMBtu for calendar year 2010, as demand for natural gas improves and as inventory levels moderate. (EIA, 2009) Long-term forecasts have been minimally impacted, with prices still expected to remain over \$8.50 after the gasline is targeted to begin operation in 2020.⁹

U.S. Natural Gas Wellhead Price - Historical and Forecast¹⁰



The drastic fall in natural gas price was a result of a supply glut which developed in the domestic market during late 2008-early 2009. (Goldman Sachs, September 2009) This was driven by two primary factors including, a collapse in natural gas demand and a surge in U.S. unconventional gas production.

The most significant of these forces has been the decline in gas demand, largely from the manufacturing sector in developed markets. This can be directly linked to the broader

⁹ EIA, *ibid.*

2020 start date is based on technical analysis of TC Alaska’s AGIA application and includes a delay of 2-years beyond the expected start date of 2018, which was stated in the application.

¹⁰ EIA Historical data through 2008 and March 2009 Forecast data from EIA 2009 *Annual Energy Outlook* (March 2009); EIA Updated Forecast data used for 2009-2010 from EIA: *Short Term Energy and Winter Fuels Outlook* (October 2009); 2011-2030 EIA Updated Forecast data from EIA: *Updated Annual Energy Outlook 2009* (April 2009) http://www.eia.doe.gov/oil_gas/natural_gas/info_glance/natural_gas.html (accessed 16 October, 2009)

economic recession, which impacted industrial production in developed markets more than any previous recession. (Goldman Sachs, September 2009)

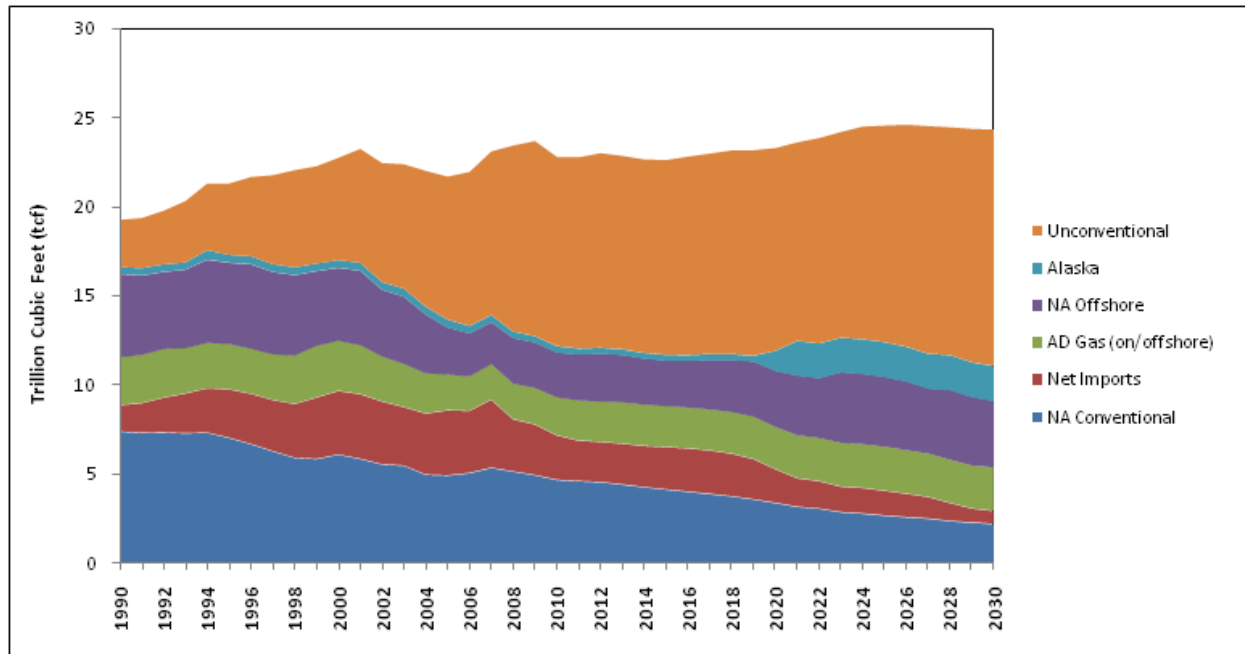
In the U.S., demand is projected to decline by 2.0 percent during 2009, and by 0.2 percent in 2010. Relatively cool summer temperatures also contributed to this demand reduction. July temperatures were 12.4 percent lower than July of the previous year, (EIA, 2009) and 14 percent below the 10-year average. (Goldman Sachs, 2009)

It is important to reiterate that the temporary weakness of North American natural gas demand is not a determining factor in establishing the economic viability of an Alaska natural gas pipeline.

The other major factor behind the lower gas prices was a surge in domestic gas supply from production of new unconventional gas resources. Shale gas in particular has received a great deal of attention lately, due to the announcement of several new large gas plays, and to the rapid rise in production from resources previously regarded as uneconomic. Much of this new growth is due to advancements in hydraulic fracturing and lateral drilling technologies, which has reduced the number of wells needed to produce from a given area.

This has allowed domestic gas production to increase steadily in recent years, despite declining production of conventional gas resources. Unconventional gas production has grown to account for the largest single source of domestic gas production in the U.S., and is expected to continue growing relative to the overall domestic supply. It is important to note that the long-term outlook for North American natural gas demand and the related price implications, have not materially changed since the release of the AGIA Findings and Determination. Further evidence of the continuing viability of efforts to commercialize Alaska's natural gas resources is provided by the ongoing efforts of the major Alaskan North Slope producers to advance a gas pipeline project.

Total U.S. Natural Gas Supply by Source (EIA, 2009)



The fall in gas prices has halted production of many of these new developments, leading to stagnant or declining short-term production growth expectations. After steady growth since 2002, the number of active drilling rigs has fallen 56% from a peak over 1600 at the end of last summer. (Goldman Sachs, September 2009) While 2009 may still show modest growth,¹¹ production is expected to decline in 2010 by 3.8 percent. (EIA, 2009)

The impact of this production decline has become visible in more recent weekly inventory builds and is expected to help prices rebound next year as demand also begins recovery. (Goldman Sachs, September 2009) This, in turn, should help to incentivize supply, bringing many suspended rigs back into operation.

4.2 Cost Estimate

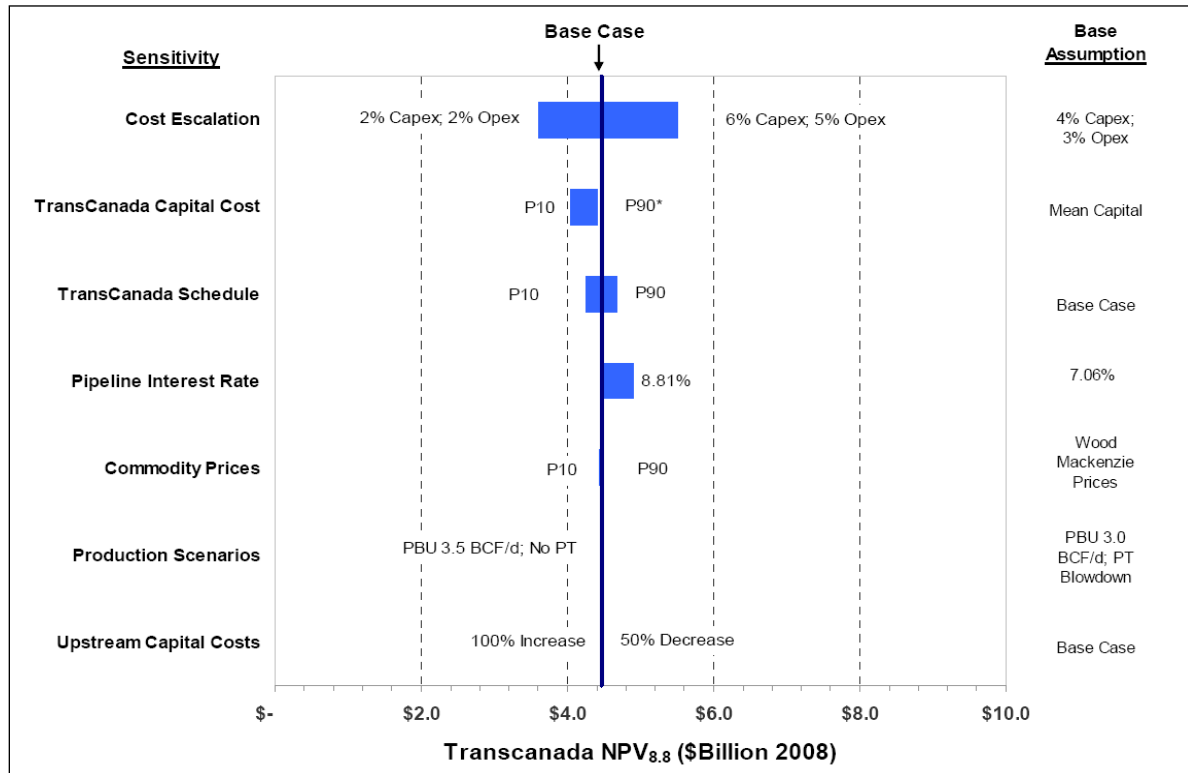
As of the date of this report, no changes have been proposed to the project cost estimate presented in TC Alaska's original AGIA application.¹² The APP team remains focused on development of a more refined Class IV cost estimate, which will be made available in the first quarter of 2010. Under the new alignment, pre-Open Season spending for the project has been increased from \$83 million to approximately \$150, in order to provide more accurate cost and

¹¹ EIA Short-Term Energy Outlook forecasts 2009 gas production to increase by 1.5 percent

¹² The State contracted for an independent analysis of TransCanada's estimated project costs during the evaluation of TransCanada's AGIA application. This analysis established a range of costs for the project under different scenarios, some of which were higher than TransCanada's estimates. The results of this analysis is included in Appendix F of the Commissioners' Findings and Determinations on the AGIA license and can be accessed online, along with TC Alaska's AGIA Applications, at <http://www.gov.state.ak.us/agia/>

schedule estimates as part of the Open Season package. As was demonstrated in the AGIA Commissioners’ Findings and Determination, the cost of construction is one of the most significant factors affecting viability of the project for the pipeline entity.

TransCanada NPV_{8.8} Tornado Diagram for 4.5 BCF/d Proposal Base Case¹³

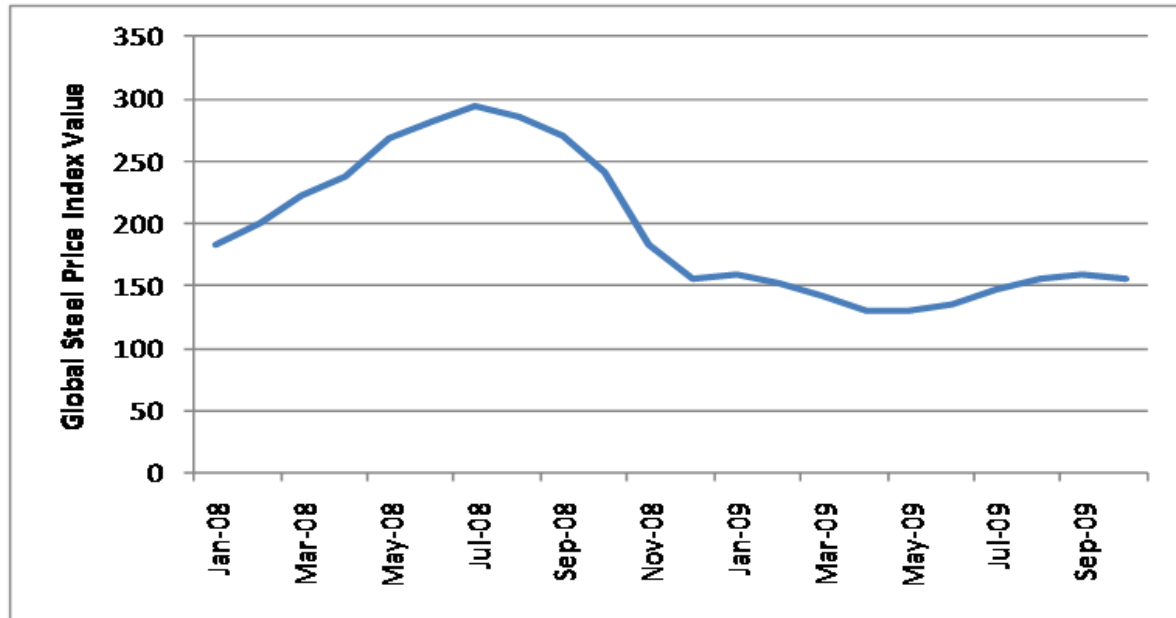


The recent economic turmoil has resulted in a tightening of financial markets and increased long-term borrowing costs. However, construction cost indexes have shown significant declines over the past year, due largely to declining materials prices. Steel prices for instance, have fallen by nearly half since May of 2008.

It is important to note, however, that the price of steel and steel pipe represent just one of the many cost components which make up the overall project cost. The cost of compressors, chillers, valves, fittings, labor, construction equipment, camps, etc., must all be considered when trying to estimate the total cost of the installed pipeline.

¹³ Black & Veatch Corporation: *AGIA NPV Analysis Report* (May 2008).

Global Steel Price Index¹⁴



Viability of the Alaska gas pipeline project will ultimately be driven by long-term capital cost and gas price expectations. Although the recent decline in material prices can be encouraging, it does not indicate that the cost of the overall project will be lower.

4.3 Capitalization Plan

TC Alaska has not submitted any updates to their Capitalization Plan to the state. The most current plan is included in section 2.8.2 of TC Alaska's Application for License under the Alaska Gasline Inducement Act.

¹⁴ CRU Prices and Data, *Carbon steel price indices* (2009)
<http://cruonline.crugroup.com/SteelandFerroalloys/CRUSteelPrices/CRUSteelPriceIndexCRUspi/tabid/143/Default.aspx> (accessed October 29, 2009)

5. Conclusion

The Alaska gasline project has continued to advance on schedule. The alignment of TransCanada and ExxonMobil has come as welcome news, providing the APP with Exxon's world-class project management and technical expertise, along with prior study information.

The APP has moved some work ahead in the schedule, increasing pre-Open Season spending by roughly \$67 million. This will help provide prospective gas shippers with a more refined project schedule and cost estimate at the time of the Open Season. The Open Season remains on schedule to begin in May of 2010.

Significant progress has been made on the project towards creation of the base design, and towards infrastructure and logistics planning. A ground-base geophysical program has been undertaken and a geotechnical drilling program was carried out with 111 bore holes being obtained along the Alaska based corridor. Aerial photograph and LiDAR have both been acquired along the right-of-way, and on May 1, 2009, a pre-filing request was approved by the FERC to begin federal permitting work.

TransCanada also announced during the current reporting period that they have reached resolution of outstanding issues with withdrawn partners of the former Alaskan Northwest Natural Gas Transportation Company.

The prevailing economic conditions have temporarily lessened domestic demand for natural gas. This, combined with increased supply from new unconventional gas resources, has driven U.S. gas prices lower in the short-term. Prices are expected to begin recovering in 2010 as demand rebounds. While construction cost indexes and material prices have also shown recent declines, viability of the project will ultimately be driven by long-term capital cost and gas price expectations. Both remain supportive of the project.

Despite recent market fluctuations, to date there has been no indication of impacts which would jeopardize the project's long-term viability.

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Monitoring of TransCanada Corporation's progress on the Alaska Pipeline Project (APP)

April 2009

Patrick Anderson of Pingo International Inc., in the company of Antony Scott and Ian Laing representing the State of Alaska, met with TransCanada Corporation (TransCanada) representatives in their Calgary offices on April 21 and 22, 2009 to obtain a status report on their efforts to develop the Alaska Pipeline Project (APP). The following are the TransCanada representatives that were met with during this visit:

- Tony Palmer-Vice President, Alaska Development
- Andy Jenkins-Vice President, Major Projects
- Vincent Lee-Director, Alaska Development
- Mel Johnson-Project Director
- Mike Quesnel-Director, Project Services
- Jack Beattie-Director, Engineering
- Robert Eadie-Director, Gas Treatment Plant (GTP)
- Karen Etherington-Manager, Environmental Planning and Permitting
- Jim Kyfiuk-Manager, Supply Chain Services
- Joe Zhou-Manager, Pipeline Engineering

Most of the TransCanada people were met individually but in some cases there were two TransCanada representatives present in the meeting. The goals of the meetings were to gather the following information:

1. Understand the progress the individual groups have made since the AGIA licence was granted to TransCanada in 2008.
2. Identify any issues that have arisen that may significantly affect the scope of the Alaska Pipeline Project, its cost or its timing.
3. Understand the organizational structure that TransCanada has established including the qualification of the key leaders, the numbers of staff working on the project as well as the number and name of consultants and contractors retained by TransCanada.
4. Review the current schedule TransCanada has developed for this project and evaluate the probability that TransCanada will be able to complete an Open Season by the end of July 2010.
5. Learn about the specific activities TransCanada plans to complete in the coming month.

The following issues were among those discussed during the above series of meetings:

1. TransCanada has established an organizational structure that is appropriate for a project of this complexity and magnitude at this phase of execution. This organization is intended to be expanded once the Open Season process is complete. The people TransCanada has assigned to the various positions in the organization appear to have the skills necessary for their responsibilities.
2. TransCanada has elected to develop a base project with alternative project being available to the shippers. The intent is the shippers will decide which version will be pursued following the Open Season. The two versions of the project are:
 - a. 48" pipeline from Prudhoe Bay, Alaska to Alberta. The project would be designed to flow 4.5 bcf/d of natural gas. There would be a GTP near the Prudhoe Bay existing facilities.
 - b. 48" pipeline from Prudhoe Bay, Alaska to Valdez where the pipeline would connect to an LNG facility to be developed by others. This version of the project would be designed to flow 3 bcf/d of natural gas. There would be a GTP near the Prudhoe Bay existing facilities.
3. The current version of the "Open Season sub-schedule" (stamped draft) for APP has the key milestones shown below:
 - a. GTP, pipeline and facility preliminary engineering and cost estimate for both Alaska and Canada will be completed by Feb 1, 2010.
 - b. A risk assessment will add appropriate contingency amounts to the above cost estimate yielding a final class 4 cost estimate by March 3, 2010.
 - c. Final pipeline shipping toll estimates for the GTP and pipelines and facilities in Alaska and Canada will be available on April 1, 2010.
 - d. The Open Season process will start on May 2, 2010 and end on July 30, 2010
 - e. TransCanada will review and validate Open Season bids during the period July 31 through September 28, 2010.
 - f. TransCanada will submit executed precedent agreements to FERC on October 18, 2010
4. Once the Legislature approved the recommendation to award the AGIA license to TransCanada in August 2008, TransCanada started work on the APP even though the State's funding would not start until December. TransCanada made the decision to

proceed partially because they did not want to lose the consultants that had been working on the project during the applications stage. Some of the work completed since August 2008 includes:

- a. The determination of the Alaska APP corridor is being done as if it were a new project. No data from ANNGTC is being used. TransCanada has obtained a significant amount of data along the proposed pipeline corridor from federal and state agencies. With this data it is possible to identify a preliminary pipeline corridor in Alaska.
 - b. TransCanada defined and implemented a borehole program in Alaska consisting of 111 boreholes. Among other things, the borehole data will be used for terrain typing of the pipeline corridor. This borehole program required that the public participation plan be launched earlier than was initially envisioned because TransCanada needed to initiate discussions with land owners along the pipeline corridor to gain access to the borehole locations.
 - c. TransCanada has established an office in Anchorage ahead of the date mentioned in the TransCanada AGIA application. TransCanada is using the Anchorage office as a base for a variety of activities including Alaska native group discussions.
5. Worley Parsons is helping TransCanada with the development of the APP pipeline and facility cost estimate for Alaska and Canada. In Alaska the cost estimating team is using publically available data plus recently acquired borehole data to develop a cost estimate basis. They have developed assumptions for the crossing type to be used at various watercourse crossings. Much of the productivity assumptions and other constructability assumptions are based on the historic data developed by Foothills for the Canadian section. Shortly the construction team will be visiting the pipeline corridors in Alaska and Canada to validate the assumptions made to date. In addition TransCanada is developing the technical specifications for the pipe steel so that the budgetary quotes received from qualified steel mills reflect arctic requirements. TransCanada is confident they can develop a class 4 quality cost estimate by Feb 2010.
 6. The TransCanada team has retained URS (Washington division), working out of Denver, to complete the conceptual design and cost estimate for the GTP. The current assumption is that the GTP will be a standalone plant (not share any infrastructure with existing Prudhoe Bay facilities). This assumption will be tested shortly when TransCanada personnel meet with the operator of the Prudhoe Bay facilities.
 7. TransCanada is in the process of hiring a company to complete an "in-state gas study" for Alaska. This contract is expected to be awarded shortly and once awarded, is expected to take about 3 to 4 months to complete.

8. The recent decision from the Canadian National Energy Board (NEB) that the TransCanada's Alberta pipelines are to become NEB regulated makes it possible for TransCanada to actively pursue the introduction of northeast BC shale gas and other gas into the Alberta pipeline system. The concept is that this shale gas and other gas in the region would be brought into the Alberta Hub using the Alberta rolled-in tolls. This concept has already been successful. TransCanada has had two Open Seasons that resulted in shipper commitments for about 1.5 bcf/d of gas shipments in two new pipelines by 2014. The initial volumes are somewhat less. These two new pipelines are smaller than the APP's 48" pipeline and are not on the same route as APP. For the purpose of planning the APP system, the Fort Nelson issue is not relevant as it would not influence the diameter or route of the pipeline. TransCanada's representative said the section of pipeline between Fort Nelson and Alberta would be owned by Foothills and the only discussion will be if a portion or all of the tolls for this section will be rolled into the Alberta tolls.
9. In their AGIA application, TransCanada said they would use a 0.72 design factor for the pipeline in Alaska but they mentioned they would consider changing to the less costly 0.8 design factor as proposed for the Canadian section. Given recent regulatory decisions by US pipeline regulators, TransCanada has elected to adopt a 0.8 design factor for both Alaska and Canada. This change will reduce the tons of steel required for the pipeline in Alaska by about 10%.
10. The current plan is that in early 2010 TransCanada will hire environmental contractors for early developmental phase (next phase after Open Season). TransCanada does not plan to engage engineering contractors for this next phase until after the Open Season. Environmental contractors need to be hired earlier than initially planned so they can plan the field work for summer of 2010.
11. On April 23, 2009 TransCanada formally requested FERC to start the pre-filing process.

Monitoring of TransCanada Corporation's progress on the Alaska Pipeline Project (APP)

May 2009

Patrick Anderson of Pingo International Inc. met with TransCanada Corporation (TransCanada) representatives in their Calgary offices on May 25 and 26, 2009 to obtain a status report on their efforts to develop the Alaska Pipeline Project (APP). The following are the TransCanada representatives that were met with during this visit:

- Tony Palmer-Vice President, Alaska Development
- Vincent Lee-Director, Alaska Development
- Mel Johnson-Project Director
- Mike Quesnel-Director, Project Services
- Jack Beattie-Director, Engineering
- Robert Eadie-Director, Gas Treatment Plant (GTP)
- Karen Etherington Piro-Manager, Environmental Planning and Permitting
- Jim Kyfiuk-Manager, Supply Chain Services
- Joe Zhou-Manager, Pipeline Engineering
- Dan Begley-Aboriginal Affairs and Community-Canada
- Gerry Kruk-Native Affairs and Community-Alaska
- Gordon Craig-System hydraulics
- Glenn Johnston- Worley Parsons coordination

All of the TransCanada people were met individually. The goals of the meetings were to gather the following information:

1. Understand the progress the individual groups have made since the April 2009 series of meetings. Also for the recent additions to the list of people being interviewed, an understanding of the progress they have made since the AGIA licence was granted to TransCanada in 2008.
2. Identify any issues that have arisen that may significantly affect the scope of the Alaska Pipeline Project, its cost or its timing.
3. Understand the organizational structure that TransCanada has established including the qualification of the key leaders, the numbers of staff working on the project as well as the number and name of consultants and contractors retained by TransCanada.

4. Review the current schedule TransCanada has developed for this project and evaluate the probability that TransCanada will be able to complete an Open Season by the end of July 2010.
5. Learn about the specific activities TransCanada plans to complete in the coming month.

This Monthly Monitoring Report is written as an update to the previous monthly reports. The basic data on things like project scope, schedule expectations and involved parties included in the previous Monthly Monitoring Reports will not be repeated.

The following issues were among those discussed during the above series of meetings:

1. The TransCanada pipeline and pipeline facilities teams are well advanced in the development of the cost estimate necessary to support the Open Season. The construction spread configurations for the pipeline sections in Canada have been preliminarily defined and they are in the process of doing the same for the pipeline sections in Alaska. As the data becomes available it is being loaded into the Worley Parsons cost estimating systems that allow quick and easy adjustments as new information becomes available. A portion of TransCanada's cost estimating team recently completed a road-based reconnaissance of the pipeline route in Alaska. A helicopter reconnaissance trip is planned for the Alaska and Canadian portions of the project this summer. TransCanada team remains confident that they can get the Open Season cost estimate completed by early 2010.

The TransCanada's GTP team is also well advanced with the conceptual engineering necessary to support the development of the cost estimate for this world scale plant. URS has identified the base case process definition for the currently assumed inlet gas composition and are progressing rapidly to identify all the major equipment necessary to support this process. Again, the TransCanada GTP team remains confident they will have the cost estimate completed by early 2010.

2. TransCanada has developed a "preliminary requirements" document that they plan to give to prospective pipe mills that could produce the pipe for the project. This document outlines what TransCanada believes would be the ideal capability of the 48" X80 pipe. TransCanada thinks that several of the Japanese steel mills and one from Europe can currently meet this target. There are a number of other pipe mills around the world (including USA) that have the potential of being able to meet the TransCanada requirements. In the next few weeks all the pipe mills that have a reasonable chance of being able to meet TransCanada's requirements are being invited individually to the TransCanada offices in Calgary. In these meeting the pipe mills will be introduced to the details behind the TransCanada requirements and discuss the capabilities of their particular mill. These pipe mills will be asked to return once they have analysed TransCanada's requirements and understand the costs, if any, to upgrade their mill to meet these requirements. Pipe mills will be encouraged to offer alternative solutions that meet or come close to meeting the TransCanada's requirements. The pipe mills will

also be asked to provide information on the major components of the cost of the pipe as well as a range of the cost of these components along with an estimate of the cost of the APP pipe.

3. TransCanada continues to meet with government regulators and relevant agencies in United States and in Canada. These meetings have been at the Federal level but also at the State/Provincial/Territorial level. In January TransCanada had multi-departmental meetings with regulators and government departments in Alaska and Washington DC. In April the NPA, with TC support, had similar multi-departmental meetings with Canadian regulators and government departments. Similar meetings have recently been completed with the BC and Yukon Provincial/ Territorial departments. Follow-up meetings were held with specific government departments.
4. TransCanada recently met with the Prudhoe Bay Unit Owners (PBU). In attendance were 2 ConocoPhillips representatives, 3 BP representatives, 2 Chevron representatives and 2 ExxonMobil representatives. Previously TransCanada had sent the PBU Owners a 10 page list of questions that they would like to review with the PBU. The purpose of the meeting was to establish contact, discuss confidentiality issues, to elaborate on the technical questions and to discuss the scope and timing of a requested site visit. It was left that the PBU Owners representatives would discuss TransCanada's requests and provide a response to TransCanada on how best to move forward.
5. The currently assumed design of the pipelines and GTP require that they both be capable of reliably processing and transporting a gas stream of 4.5 bcf/d in the summer. A pipeline that is designed for this summer capacity can transport more gas in the winter because the colder ambient temperatures in the winter makes the gas turbines at the compressor stations capable of producing more power. In addition the winter ambient temperatures make the gas temperature cooler, reducing the requirement for gas compression. There are two ways of dealing with this situation. One is to assume there is less flow in the summer and more flow in the winter so that the average gas flow is 4.5 bcf/d. The other alternative is to transport 4.5 bcf/d in the summer and transport as much gas as the pipeline is capable of in the winter. For this option to work, the GTP must be made larger to accommodate the larger winter volumes. TransCanada is in the process of evaluating these options with an aim to identify the optimum commercial/ technical solution.
6. TransCanada has completed studies that compare the relative economics of various pipe diameters and design pressures. These studies yield J curves which are an easy way to illustrate the relative economics of various pipeline options for varying pipeline gas flow rates. The cost of fuel gas for the required compressor stations is an important component of the analysis. At low fuel gas rates, smaller diameter pipelines look more attractive because the cost of the fuel gas for the compressor stations is relatively small. At high fuel gas prices, the larger pipelines look more economic because the amount of fuel gas required for the larger pipelines for the same flow rate is less because it requires fewer compressor stations. TransCanada has concluded that the 48" remains

the most viable pipe diameter based on the available data. This review of pipe diameters and pressures will continue in the preliminary engineering phase.

7. TransCanada is in the process of completing a Geohazard Assessment of the pipeline route in Alaska and Canada. This assessment includes naturally occurring geohazards such as earthquakes, landslides, floods and volcanoes as well as environmental affects which could be triggered by construction activities or operation of the pipeline. TransCanada is assessing which types of geohazards are applicable for this project and the impact if any of these geohazards were to materialize. Finally they are endeavouring to estimate the likelihood that this geohazard could occur. The results of the Geohazard Assessment will influence the design and construction methodology of the pipeline.
8. The issue of the potential impact of seismic activity on the pipeline is being actively worked on by TransCanada. This issue includes a review of the effects on the pipeline due to ground displacement at the seismic faults but it also includes issues such as liquefaction and landslides. TransCanada has recently completed a workshop with State of Alaska subject matter experts and plans to have a similar meeting with Canadian government officials. There are many historic faults along the pipeline corridor but the project will determine which ones are active and intersect the pipeline route. Some of the known faults parallel the pipeline route and intersect it multiple times. Consideration will be given to slightly changing the route to minimize the number of intersections with active seismic faults. Options for dealing with active seismic faults that could cause significant ground movement include putting the pipeline above ground as TAPs has done or to bury the pipeline in a material that has almost no shear strength (plastic balls, foam).
9. TransCanada is in the process of defining what type of work surface within the pipeline right of way the pipeline construction equipment will travel on. For winter construction the type of working surface will be influenced by the type of permafrost (continuous or discontinuous) and the slope of the right of way. Work pads can be constructed with a combination of snow, ice or gravel. In some situations it is acceptable to drive directly on the frozen ground. TransCanada is planning in the near future to have workshops with subject matter experts to define when a work pad is required and what type of work pad is optimum for a given situation.
10. One of the options for crossing a watercourse is to do it via a trenchless method (no digging in the watercourse) There are several options for this technique but the most common is the horizontal directional drill method (HDD). In this method a small pilot hole is drilled under the watercourse starting a distance back from the watercourse bank using a drill bit whose direction can be controlled. The path of this pilot hole is influenced by, among other factors, the stiffness of the pipe that will ultimately be pulled under the watercourse. For stiff pipe such as the 1" thick 48" pipeline required for this project, the angle of the pilot hole path must be very shallow as the pipe can flex only a small amount. Once the pilot hole is drilled, the hole is reamed out until it is significantly larger than the pipe that is planned to be pulled through it. In the case of

this project, the final hole will be about 5 feet in diameter. When the hole is ready, the pipe is pulled through the hole under the watercourse.

TransCanada has preliminarily determined that for the Alaska Pipeline Project (APP), the shortest credible HDD that can be accomplished is one that is about 2100 feet long.

Because of limitations on the maximum amount of force that can be used to pull the pipe through the hole under the watercourse, the maximum credible length of the HDD is 5900 feet. The feasibility of an HDD at a particular crossing is influenced by a number of other factors and will be assessed based on site specific conditions.

TransCanada estimates that because of these limitations there will be a limited number of HDDs used on the APP.

Monitoring of TransCanada Corporation's progress on the Alaska Pipeline Project (APP)

June 2009

Patrick Anderson of Pingo International Inc. met with TransCanada Corporation (TransCanada) representatives in their Calgary offices on June 22 and 23, 2009 to obtain a status report on their efforts to develop the Alaska Pipeline Project (APP). The following are the TransCanada representatives who were met during this visit:

- Mel Johnson-Project Director
- Mike Quesnel-Director, Project Services
- Robert Eadie-Director, Gas Treatment Plant (GTP)
- Karen Etherington Piro-Manager, Environmental Planning and Permitting
- Jim Kyfiuk-Manager, Supply Chain Services
- Joe Zhou-Manager, Pipeline Engineering (via conference call)
- Richard Fafara-Construction Planning and Cost Estimating
- Dan Begley-Aboriginal Affairs and Community-Canada (via conference call)
- Gordon Craig-System Hydraulics
- Glenn Johnston- Worley Parsons coordination

All of the TransCanada people were met individually. The goals of the meetings were to gather the following information:

1. Understand the progress the individual groups have made since the May 2009 series of meetings.
2. Identify any issues that have arisen that may significantly affect the scope of the Alaska Pipeline Project, its cost or its timing.
3. Review the current schedule TransCanada has developed for this project and evaluate the probability that TransCanada will be able to complete an Open Season by the end of July 2010.
4. Learn about the specific activities TransCanada plans to complete in the coming month.

This Monthly Monitoring Report is written as an update to the previous monthly reports. The basic data on things like project scope, schedule expectations and involved parties included in the previous Monthly Monitoring Reports will not be repeated.

The following issues were among those discussed during the above series of meetings:

1. ExxonMobil (EM) and TransCanada (TC) have decided to work together via the formation of a Joint Project for the development of the Alaska Pipeline Project. The structure of this Joint Project approach was presented to the State of Alaska's AGIA team. After a series of clarifications the State's AGIA team found the Joint Project approach to be acceptable and not a deviation from TC's commitments under AGIA. The basic framework of the Joint Project approach is:
 - a. TC will continue to hold the AGIA license through their affiliated companies and will chair the Joint Project's Management Committee. In addition TC will continue to be responsible for the development of the APP's pipeline and pipeline facilities in Alaska and Canada.
 - b. EM will assume the day to day leadership of the Joint Project under the direction of EM's Paul Pike. The following are the key members of the Joint Project leadership team:
 - i. Senior Project Executive (SPE) -Paul Pike-EM-Houston based
 - ii. Commercial Manager- Reports to SPE- Marty Heeg-TC-Houston based
 - iii. Government and Public Affairs-Reports to SPE-Brian Dunphy-EM-Houston based
 - iv. SHES Manager(Safety, Health and Environment)-Reports to SPE-Dave Johnson-EM-Houston based
 - v. Controller-Reports to SPE-John Postel-EM-Houston based
 - vi. Law- Reports to SPE-Jim Morse-EM-Houston based
 - vii. Technical Manager- Reports to SPE-Deborah Raught-EM-Houston based
 - viii. Gas Treating Manager- Reports to SPE-Raul Lopez (Acting Manager)-EM-Denver and Houston based
 - ix. Pipeline and Compression Project Director- Reports to SPE- Mel Johnson-TC-Calgary and Houston based
 - x. Business Manager- Reports to SPE-Rick Elder-EM-Houston based
 - xi. Pipeline and Compression Operations- Reports to SPE-Darren McLean-TC-Calgary based

- xii. GTP (Gas Treatment Plant) Operations- Reports to SPE-not named yet-EM-Houston based
 - xiii. ERL (Environment, Regulatory and Land) Canada-Reports to SHES Manager-David Montemurro-TC-Calgary and Houston based
 - xiv. ERL Alaska-Reports to SHES Manager-Myron Fedak-EM-Houston and Anchorage based
- c. The scope of work and budget for the project phase ending at the conclusion of the Open Season process has expanded. The budget for this phase has increased from \$84 million to approximately \$150 million. The largest components of this increase are the decision to define the technical and construction requirements of the GTP in more detail than was originally planned and an increased focus on Environment, Regulatory and Land matters.
- d. EM will assume responsibility for the management of the GTP including the management of URS (engineering contractor working out of Denver). In addition, the project will be expanding the Anchorage office to accommodate increased activity that will be based out of Anchorage.
- e. This Joint Project arrangement will only have a minor impact on the TC pipeline group's activities. A few examples of the minor impacts are:
- i. EM has seconded 4 individuals to the TC pipeline team. They are:
 - 1. Rick Harrelson will lead the TC construction planning and estimating team.
 - 2. Three EM engineers will become members of Joe Zhou's pipeline engineering team.
 - ii. There will be a few changes in the reporting structure for some of the TC people. Examples are:
 - 1. Robert Eadie will be reporting to the Manager of the GTP.
 - 2. Dan Begley, Gerry Kruk and Karen Etherington will report to the applicable ERL Manager.
 - iii. The account coding system will be modified to reflect EM standards as well as the work processes will aligned with the EM standards.

Attachment 3

2. During discussions with all the individuals listed above, no one saw any reason for the Project Team to not be able to produce the documents necessary to support an Open Season process ending in July 2010.
3. TC's environmental group continues to meet with the US and Canadian government regulators and concerned governmental departments regarding the project's plans. They are also obtaining an understanding of the information requirements necessary to obtain the Project's permits and approvals. The groups visited in Canada include:
 - a. DATE: May 29, 2009
Yukon Department of Environment
 - b. DATE: May 28, 2009
NPA-Yukon Govt multi-department meeting
 - c. DATE: May 28, 2009
Environment Canada (Whitehorse)
 - d. DATE: May 27, 2009
Department of Fisheries and Oceans (Whitehorse)
 - e. DATE: May 27, 2009
Parks Canada – Kluane Park
 - f. DATE: May 26, 2009
NPA-BC Govt multi-department meeting
 - g. DATE: May 26, 2009
Environment Canada (Vancouver)
 - h. DATE: May 25, 2009
Department of Fisheries and Oceans (Vancouver)

The groups visited in Alaska include:

- a. DATE: June 1, 2009
State Pipeline Coordinators Office and AGIA Coordinator's Office
 - b. DATE: June 2, 2009
Bureau of Land Management
4. In their original AGIA application, TransCanada said that the length of the pipeline in Alaska would be approximately 750 miles and the length in the Yukon and BC would approximately 965 miles. This yielded a total length of the project's pipelines to be approximately 1715 miles. TC has refined the route in a number of locations and has used

more detailed route maps to yield a project with a currently estimated length of 1700 miles (734 miles in Alaska and 966 in Canada) This total length may experience additional changes as the project's route is more accurately defined.

5. The Prudhoe Bay Unit Owners (PBU) have responded to the earlier TC request for a site visit and answers to a series of questions posed by TC. In June a number of TC, EM and TC engineering consultant staff met with the PBU's engineering group. PBU's engineering group was very helpful by answering many of the questions raised by TC. PBU is establishing a Common Information Site that would provide specific answers to all potential pipeline project proponents. They also facilitated a site visit to the Prudhoe Bay facilities.
6. TC plans to conduct a small ground based geophysical investigation program this summer in an area north of Fairbanks. The plan is to use a method that consists of two crews of two or three people per crew walking through the forest generally along the pipeline route carrying an electronic magnetic instrument. This instrument sends a signal into the ground and records the reflected signal to document the depth and extent of permafrost and its location along the route. TC will shortly send out an RFP to qualified Alaskan firms. The Project Alaska environmental contractor (AECOM) will be responsible for gaining access to the terrain they want to enter.
7. TC is in the process of expanding the size of the offices they have in Whitehorse and Anchorage to accommodate the increased amount of work planning to be conducted from these offices. TC is currently evaluating available office space options and progressing associated commercial activities.

Monitoring of the Project Team's (TransCanada and ExxonMobil) progress on the Alaska Pipeline Project (APP)

July 2009

Patrick Anderson of Pingo International Inc. (consultant to the State of Alaska) and Eric Hatleberg from the State of Alaska met with Project Team (PT) representatives in their Calgary and Houston offices on July 20,21,23 and 24, 2009 to obtain a status report on their efforts to develop the Alaska Pipeline Project (APP). The following are the PT representatives who were met during this visit:

- Paul Pike-Senior Project Executive
- Marty Heeg-Commercial Manager
- Brian Dunphy-Government and Public Affairs Manager
- John Postel-Project Controller
- Deb Raught-Technical Manager
- Raul Lopez-Engineering Manager-Gas Treatment Plant (GTP)
- Mel Johnson-Project Director-Pipeline and Compression
- Rick Elder-Business Manager
- David Montemurro-Environmental, Regulatory and Land (ERL) Manager- Canada
- Myron Fedak-ERL Manager-Alaska
- Mike Quesnel-Director, Project Services
- Robert Eadie-Director, Facilities Lead-GTP-(via phone call)
- Joe Sage-Project Controls Manager
- Harold Retzloff-Project Lead Accountant
- Rick Harrelson-Front End Execution Planning Coordinator – Pipeline & Compression
- Karen Etherington-Environmental Planning and Permitting Advisor
- Joe Zhou- Pipeline Engineering Manager
- Richard Fafara-SME-Construction, Logistics and Infrastructure
- Dan Begley-Land and Stakeholder Outreach Lead -Canada
- Glenn Johnston- Project Engineer (Worley Parsons coordination)
- Gordon Craig-System Hydraulics
- Moness Rizkalla-Worley Parson's consultant

The people were met individually in some cases and in small groups in other cases. The goals of the meetings were to gather the following information:

1. Understand the progress the individual groups have made since the June 2009 series of meetings.

2. Identify any issues that have arisen that may significantly affect the scope of the Alaska Pipeline Project, its cost or its timing.
3. Review the current schedule the PT has developed for this project and evaluate the probability that PT will be able to complete an Open Season by the end of July 2010.

This Monthly Monitoring Report is written as an update to the previous monthly reports. The basic data on things like project scope, schedule expectations and involved parties included in the previous Monthly Monitoring Reports will not be repeated.

The following issues were among those discussed during the above series of meetings:

1. Work on the gas treatment plant (GTP) is progressing according to plan. An experienced team has been mobilized by TransCanada and ExxonMobil. Main contractors are URS and ASRC Energy Services (a sub-contractor to URS). The expected inlet capacity of the GTP is approx. 5 billion cubic feet per of gas. This will be a world scale facility when completed. The unique challenges for the GTP include the arctic environment and remote location with limited infrastructure. The GTP team have selected a base case gas treating technology for the initial design basis, and are in the process of identifying major equipment and facilities, conceptual plant lay-out, number/size of the modules, and initial construction plans.
2. The PT plans to conduct a small ground based geophysical investigation program this summer in an area north of Fairbanks. The plan is to use a method that consists of two crews of two or three people per crew walking through the forest generally along the pipeline route carrying an electronic magnetic instrument. This instrument sends a signal into the ground and records the reflected signal to document the depth and extent of permafrost and its location along the route. A contract for the above program has been awarded to Golder Associates (Alaska). The final scope of the program is currently being established with a plan to start field work in August.
3. The PT is considering awarding a contract for the acquisition and processing of LIDAR data along the pipeline route in Alaska and Canada. LIDAR is a technology that employs an airborne scanning laser rangefinder to produce detailed and accurate topographic information. The request for Proposal (RFP) was sent out in mid July to 5 qualified firms. It is expected that the contract will be awarded by the end of July or early August.
4. Select members of the PT's Construction planning group have recently completed helicopter reconnaissance of the pipeline route in Alaska and Canada. The information gained from these flights help to resolve issues that have arisen from previous trips or based on studies concluded on the terrain characteristics along the pipeline route. In addition select members of the PT's Construction planning group visited the Prudhoe Bay area where they viewed the existing docks, gravel pits and surrounding area. This information is important in determining construction timing and costs.

5. The PT's Pipeline Engineering contractor (Worley Parsons) with the help of seismic experts has identified all the known active seismic faults along the pipeline route in Alaska and Canada. This information is being used in the preliminary design of the pipeline. The design for how the pipeline will cross these faults is not complete but for the purposes of the cost estimate, the PT is assuming that the pipeline will be above ground while it crosses the seismic faults.
6. The PT has completed its determination of the optimum number of pipeline construction spreads that will be required to complete the construction of the pipelines in Alaska and Canada. This work is complicated by the fact that in both countries, most of the terrain is most suitable for winter construction but there is a significant amount of terrain that allows construction in the summer. The PT is currently defining the manpower and equipment requirements of the pipeline spreads necessary to support this plan. A draft of this work is expected to be completed by the end of August.
7. The Project is developing a Construction Execution plan, which is a key deliverable in developing the execution basis for the Open Season cost estimate. Contents of the plan include assumptions on contractor spreads, logistics, productivity, execution sequence, interface with commissioning and start-up, etc. The PT is currently defining the manpower and equipment requirements of the pipeline spreads necessary to support this plan.
8. PT's environmental group continues to meet with the US and Canadian government regulators and relevant governmental agencies regarding the project's plans. They are also obtaining an understanding of the information requirements necessary to obtain project permits and approvals.

The groups visited in Alaska include:

July 15 2009, Anchorage

- Alaska State Fire Marshall, Dept of Public Safety
- Project Update presentation at Office of the Federal Coordinator Interagency Meeting.

The groups visited in Canada include:

July 6 2009, Whitehorse

- Environment Canada

July 7 2009, Whitehorse

- Fisheries and Oceans Canada
- Yukon Department of Environment

July 8 2009, Whitehorse

- Yukon Department of Tourism and Culture

July 9 2009, Whitehorse

- Yukon Interdepartmental Pipeline Committee
- Yukon Water Board

9. The PT have been having ongoing discussions with the US Pipeline and Hazardous Materials Safety Administration (PHMSA) regarding the process that is going to be followed to deal with the fact that the project is going to require a number of “special permits” to deal with the nonconventional aspects of the project. The PT is providing PHMSA with preliminary information on the types of special permits that will be required along with the reasons this arctic pipeline requires unconventional design and execution requirements.
10. The PT has been having ongoing dialogue with the NPA regarding the process and specific requirements of their regulatory process. The NPA recently appointed Chris Cuddy to the position of Assistant Commissioner. The Assistant Commissioner is responsible for the day to day operational aspects of the NPA. This is an important step in the operationalizing of the NPA. The next important step is the appointment of the NPA Designated Officer.

Monitoring of the Project Team's (TransCanada and ExxonMobil) progress on the Alaska Pipeline Project (APP)

August 2009

Patrick Anderson of Pingo International Inc. and Keith Dodson of Westney Consulting Group (consultants to the State of Alaska) and Eric Hatleberg from the State of Alaska met with Project Team (PT) representatives in their Calgary and Houston offices on August 24 through August 28, 2009 to obtain a status report on their efforts to develop the Alaska Pipeline Project (APP). The following are the PT representatives who were met with during these visits:

- Paul Pike-Senior Project Executive
- Rusty Martin-Business Development Manager
- Dave Johnson-Manager-Safety, Health & Environment
- Deb Raught-Technical Manager
- Raul Lopez-Engineering Manager-Gas Treatment Plant (GTP)
- Mel Johnson-Project Director-Pipeline and Compression
- Rick Elder-Business Manager
- David Montemurro-Environmental, Regulatory and Land (ERL) Manager- Canada
- Jack Beattie-Director, Engineering
- Myron Fedak-ERL Manager-Alaska
- Mike Quesnel-Director, Project Services
- Robert Eadie-Director, Facilities Lead-GTP-(via phone call)
- Joe Sage-Project Controls Manager
- Harold Retzloff-Project Lead Accountant
- Rick Harrelson-Front End Execution Planning Coordinator – Pipeline & Compression
- Karen Etherington-Environmental Planning and Permitting Advisor
- Joe Zhou- Pipeline Engineering Manager
- Jim Kyfiuk-Manager, Supply Chain Services
- Glenn Johnston- Project Engineer (Worley Parsons coordination)
- Gordon Craig-System Hydraulics
- Susan Kost-Senior Project Coordinator

The people were met individually in some cases and in small groups in other cases. The goals of the meetings were to gather the following information:

1. Understand the progress the individual groups have made since the July 2009 series of meetings.
2. Identify any issues that have arisen that may significantly affect the scope of the Alaska Pipeline Project, its cost or its timing.

3. Review the current schedule the PT has developed for this project and evaluate the probability that PT will be able to complete an Open Season by the end of July 2010.

This Monthly Monitoring Report is written as an update to the previous Monthly Monitoring Reports. The basic data on things like project scope, schedule expectations and involved parties included in the previous Monthly Monitoring Reports will not be repeated.

The following issues were among those discussed during the above series of meetings:

1. In all the meetings we asked the same three questions:
 - Are you aware of any significant unplanned events that have happened in the last month?
 - Are you aware of any issues in your area of responsibilities that would preclude your group from being able to provide the deliverables that are necessary to support the Open Season process that concludes at the end of July 2010?
 - Are the groups you are responsible for on budget and on schedule when measured against the \$150 million Open Season phase budget.

In every meeting with the PT we received the same answer to these questions. No significant unplanned events, no concern about being able to provide the Open Season deliverables on time and all the groups were on budget and on schedule.

2. The PT has determined that they require Light Detection and Ranging technology (LiDAR) in order to properly analyse the pipeline right of way. LiDAR is a technology that employs an airborne scanning laser rangefinder to produce detailed and accurate topographic information. The PT has awarded a contract for the provision of LiDAR data as well as associated data processing to Group PHB (Perron-Hudon-Belanger) from Quebec, Canada. This company will gather and process the LiDAR data for both the Alaskan and Canadian portions of the Project. Weather permitting; the plan is to complete the entire pipeline route this summer.
3. The PT has contracted with Golder Associates (Alaska) to conduct a small ground based geophysical investigation program this summer in an area north of Fairbanks. It has been decided the scope of the work would be about a 34 miles section of the pipeline route north of Fairbanks (this length is still tentative). The contractor currently has 2 crews working plus another support crew for things like creating access for the survey crews.
4. The PT has been asked to provide input on its existing infrastructure concerns and the Project's logistic plans to State, Territorial and Federal governmental departments in US

and Canada on the types of infrastructure spending that could occur that would benefit the Project.

The PT has said that it was too early in project planning to identify where specific Project materials would be transported but as the highways would be extensively used by the Project, any updates to the Dalton or Alaska Highway system would be helpful. The PT said that by the last quarter of 2009 the Project would be in a better position to identify a base plan for other areas (such as ports) where infrastructure work would benefit the Project.

5. The PT is in the process of increasing the number of people working out of its Anchorage office. One senior Project person is being transferred from Houston to Anchorage and the PT is in the process of hiring additional personnel for the Anchorage office.
6. The design of the Gas Treatment Plant and 48" pipeline system is well advanced. The PT is also identifying construction related requirements such as access roads, gravel requirements, stockpile sites and construction camps. This information is being passed to the cost estimating teams as it is developed so that they can include it in the estimate the cost of the material, equipment and installation contractors. The PT is in the process of obtaining budgetary information on the cost of the major materials and equipment for the Project from potential vendors.
7. In the process of advancing the design of the proposed Project, the PT has determined that it will be necessary to increase the number of compressor stations in Canada by one. This design assumption as well as all other design assumptions will be reviewed in the next phase of the Project's development.
8. The estimation of the amount of manpower and equipment required for the Canadian pipeline spreads was completed by the end of July. The estimation of the amount of manpower and equipment required for the Alaska pipeline spreads is expected to be completed the end of August. The Cost Estimating Team is currently developing the cost estimate for the identified manpower and equipment. The goal of the team is to have a draft of the cost estimates for these components by mid November.
9. The PT has met with 4 companies that are close to being able to produce the pipe required for the Project. Over the next few weeks the PT plans to meet with an additional 6 to 8 companies. These companies are being asked to provide information that will assist the PT in estimating the cost of the pipe required by the Project. The PT is currently developing a process that will allow it to assess all the information available to it to prepare an estimate for the Project's pipe.
10. The PT is continuing to work with the Canadian NPA to identify processes that will be required to clarify the scope of the conditions included with the certificate granted to Foothills. In addition the PT is developing a plan for the work necessary to comply with the conditions identified in the NPA certificate.

11. The PT is completing test welds on pipe that is similar to the Project's pipe. While these test pipes do not exactly conform to the Project's pipe specifications, they are close enough to provide an indication of the speed of welding so they can estimate the daily weld productivity of the spread. Another test weld is planned for next month.

Monitoring of the Project Team's (TransCanada and ExxonMobil) progress on the Alaska Pipeline Project (APP)

September 2009

Patrick Anderson of Pingo International Inc., Keith Dodson of Westney Consulting Group (consultants to the State of Alaska) and Eric Hatleberg from the State of Alaska met with Project Team (PT) representatives in their Calgary and Houston offices on September 28th through October 2, 2009 to obtain a status report on their efforts to develop the Alaska Pipeline Project (APP). The following are the PT representatives who were met with during these visits:

- Paul Pike-Senior Project Executive
- Vince Alberico-GTP Lead Manager
- Rusty Martin-Business Development Manager
- Dave Johnson-Manager-Safety, Health & Environment
- Deb Raught-Technical Manager
- Raul Lopez-Engineering Manager-Gas Treatment Plant (GTP)
- Mel Johnson-Project Director-Pipeline and Compression
- Rick Elder-Business Manager
- David Montemurro-Environmental, Regulatory and Land (ERL) Manager- Canada
- Jack Beattie-Director, Engineering
- Myron Fedak-ERL Manager-Alaska
- Robert Eadie-Director, Facilities Lead-GTP-(via phone call)
- Harold Retzloff-Project Lead Accountant
- Rick Harrelson-Front End Execution Planning Coordinator – Pipeline & Compression
- Karen Etherington-Environmental Planning and Permitting Advisor
- Joe Zhou- Pipeline Engineering Manager
- Grant Martin-Co-Leader of Pipe Team
- Jim Kyfiuk-Manager, Supply Chain Services
- Richard Fafara-SME-Construction, Logistics and Infrastructure
- Glenn Johnston- Project Engineer (Worley Parsons coordination)
- Susan Kost-Senior Project Coordinator
- John Umberger-GTP O&M
- Darren McLean-Pipeline O&M
- Dan Begley- Land and Stakeholder Outreach Lead -Canada

The people were met individually in some cases and in small groups in other cases. The goals of the meetings were to gather the following information:

1. Understand the progress the individual groups have made since the August 2009 series of meetings.

Attachment 6

2. Identify any issues that have arisen that may significantly affect the scope of the Alaska Pipeline Project, its cost or its timing.
3. Review the current schedule the PT has developed for this project and evaluate the probability that PT will be able to complete an Open Season by the end of July 2010.

This Monthly Monitoring Report is written as an update to the previous Monthly Monitoring Reports. The basic data on things like project scope, schedule expectations and involved parties included in the previous Monthly Monitoring Reports will not be repeated.

The following issues were among those discussed during the above series of meetings:

1. In all the meetings we asked the same three questions:
 - Are you aware of any significant unplanned events that have happened in the last month?
 - Are you aware of any issues in your area of responsibilities that would preclude your group from being able to provide the deliverables that are necessary to support the Open Season process that concludes at the end of July 2010?
 - Are the groups you are responsible for on budget and on schedule when measured against the \$150 million Open Season phase budget.

In every meeting with the PT we received the same answer to these questions. No significant unplanned events, no concern about being able to provide the Open Season deliverables on time and all the groups were on budget and on schedule.

2. The Lidar contractor has completed the gathering of the Lidar field data in Alaska and the Canadian sections of the pipeline. The contractor was able to gather field data on 100% of the pipeline from Prudhoe Bay to Alberta. Most of the route required two passes of the aircraft to obtain sufficient width of data but in select areas they did three passes. The extra width was generally completed at locations where there is a potential of a minor reroute. The processing of the Lidar data has started and is expected to be completed in Q1 2010.
3. The contractor for the ground based geophysical survey has completed its field work. The final scope of work was a survey 27 miles of the planned pipeline right of way north of Fairbanks. The processing of the data collected in the field has started. Golder Associates (Alaska) is doing the initial processing of the data, and then the semi processed data is sent to Worley Parsons in Calgary for further processing. It is expected that the processing of the data will take about 3 months but it could be longer.

Attachment 6

4. The cost information for the Canadian pipeline spreads is almost complete. The current estimates are being reviewed by a team of experts to validate the data included in the cost estimates. Once this review process is complete a similar review of the cost estimates for the pipeline systems in Alaska will be completed. APP is preparing cost estimates for the Alaska Alberta option as well as the Valdez option. The plan is to have cost estimates for the Alaskan and Canadian section completed by year end except for the necessary final management level reviews in January.

The cost information for the GTP is rapidly advancing. It is expected that the cost information for the GTP will be ready for review during December with final cost estimates ready for final management level reviews in January.

5. The current thinking is the Alaska pipeline will require 2 winter pipeline construction seasons and one summer pipeline construction season between winter construction seasons. The Canadian sections will be about the same except it may be necessary to add an additional summer season before the first winter construction season. This issue continues to be reviewed and is subject to change.
6. The conceptual design of the pipeline crossing of the Kluane Lake in the Yukon has been completed. The conceptual design concludes that best way to cross this 5 mile wide lake is for the pipeline to be buried near the shores but lie on the lake bottom once it is well away from the shore. The Project has adopted this conceptual design for this phase of the Project but it will be reviewed in the next phase of the Project. A cost estimate for the crossing of this lake is in progress.
7. The Project is well advanced in the estimation of the cost to operate the GTP and pipeline system once they are placed in service. These costs are important elements of the tariff for transporting gas on the pipeline system. The Project is drawing upon the vast experience of ExxonMobil for the operating costs for the GTP and TransCanada for the operating costs of the pipeline and pipeline facilities.